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Factors of Avoidance in Thai Higher Education Students’ Intent to Use University Counselling Services

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Abstract

While most Thai higher education institutes now provide counselling services, Thai students rarely use them. Research has shown that the mental health of Thai youth is of growing concern. It will improve the well-being of higher education students if strategies can be developed to increase the chances that a student in distress will seek the help of a counsellor. This paper explores culture in relation to Thai students’ intention to seek counselling (help-seeking), through the lens of factors of avoidance, which are those factors that discourage students from seeking counselling. While there is a substantial body of literature on Asian-Americans regarding help-seeking and factors of avoidance, little of that literature concerns Thai culture. Furthermore, within the English literature on Thai culture, none focuses entirely on factors of avoidance. This paper adds to the inadequate body of English literature on help-seeking and Thai culture, and, most importantly, suggests methods appropriate to Thai culture for increasing higher education students’ use of counselling services. Additionally, it provides culturally specific knowledge to those Western based counsellors whose work concerns Thais, and initiates a conversation on methods to promote university counselling services in Thailand.

Keywords: Counselling, Higher education, Thailand, help-seeking, Avoidance factors
1. Introduction

University can be a particularly stressful time in peoples’ lives (Ross, Neibling, Heckert 1999). There are the pressures of academic performance, the freedom and responsibility of being away from home for the first time, formation of new social relationships, and future planning (i.e., careers). In America, mental health problems are of increasing concern as they are “highly prevalent among college students” (J. Hunt and D. Eisenberg, 2010). For modern Thai students there is the additional stress of the ongoing and rapid transformation of their country from an agrarian nation to a modernized member of the global economy, and the cultural change that entails. Similar to their counterparts, it is likely that Thai university students experience a significant amount of mental health issues. There is in English literature little data on the mental health situation of Thai college students; however, according to the Thai Ministry of Public Health, “[Thai] Teenagers are at the crossroads of numerous changes that pose the serious risk of incurring behavioral and emotional problems.” A nationwide survey reported that 5.1% of Thai teenagers (13-18 year olds) “experienced an ‘irregular level’ of mental and behavioral disorders, such as anxiety, depression, suicidal tendencies . . . law breaking, aggression, and sexual problems” (Ministry of Public Health, 2005-2006). Due to Thai cultural factors (e.g., stigma) causing under-reportage of mental health problems that statistic is likely higher. It is reasonable to assume that Thai college students, who are transitioning into adulthood and are responsible for themselves for the first time, and must plan for their post-college life and careers, experience similar, perhaps even greater, mental health issues as teenagers. Given these issues, the need for Thai universities to provide students with quality counseling service is imperative (Prathomtong & Baker, 1983). However, even though modern Thai university students are likely experiencing more stress, they are not seeking, nor receiving, the help they need. As Christopher, Kirkhart, Skillman and D’Souza (2006) state, there is “widespread underutilization of mental health resources on college campuses in Thailand.” A helpful way to analyze this situation is by exploring Thai culture through the lens of factors of avoidance.

1.1 Factors of Avoidance

Factors of avoidance are defined as factors that lessen a person’s intent to seek help (Vogel, 2003). Factors that have been researched include: A) not recognizing a need for help B) stigma C) self-disclosure, which is the level of comfort an individual has with revealing personal, private matter to a target person D) emotional openness, which is the level of comfort an individual has with intense and distressing emotions and E) self-concealment, which is an individual’s desire to hide personal matter from others (Cauce, 2002; Cepida-Benito & Short, 1998, Fischer & Turner, 1970; Hinson & Swanson, 1993; Komiya, 1999; Vogel, 2003). Counselling inherently involves the revealing of personal matter by the client (i.e., self-disclosure), and the emergence of disturbing and intense emotions through the course of therapy (i.e., emotional openness). Thus, an individual’s levels of comfort with self-disclosure and emotional openness have been linked to people’s intention to seek help (Fischer & Turner, 1970, Hinson & Swanson, 1993, Komiya, 1999, Vogel, 2003). While some individuals are uncomfortable with self-disclosure and emotional openness, they do not seek to hide personal matters from others. On the other hand, self-concealers try to conceal their personal matters. It has been shown that self-concealment is a predictive factor in
peoples’ intentions to seek counselling; that is, people who are inclined to conceal private matters are less likely to seek counselling (Cepida-Benito & Short, 1998, Masuda, 2011). How do these factors of avoidance relate to Thai culture?

2. Literature Review

2.1 Recognition of the Need for Help

The first step in the therapeutic process is the recognition of the need for help (Fischer & Turner, 1970). This initial step might be difficult for Thais. From the point of view of Buddhism (the Thai population is 94% Buddhist), according to the beliefs of karma and reincarnation, personal problems tend to be perceived as presently occurring effects of past negative karma (Pinyuchon & Reese, 1998). As consequences of karma they are often allocated to an external locus of control. Since it therefore might seem little can be done to solve them, the significance of problems can be downplayed. Patience and tolerance in the knowledge that all is change, and the problem should eventually pass, is usually favored. Furthermore, if one’s problems lie outside of one’s control, attempting to fix them could even compound the situation by making one’s self more distressed. According to Pinyuchon, for Thais the belief in karma could develop an attitude that “hinder[s] any effort to make changes in their lives” as they do not necessarily believe that “things can be changed” (Pinyuchon & Reese, 1998).

Education is another aspect to this dimension. The traditional model of Thai education focuses on rote memorization, a direct method of instruction and obedience to authority, methods which have in part led to the underdevelopment of critical thinking skills (Mathew, 1959; Richmond, 2007; Wiriyachitra, 2002). Inquisitiveness and introspection are generally undervalued in Thai education. Given this educational background, Thais might be less inclined toward self-analysis, thus might be less aware of a problem’s existence; if they are aware, not being inclined toward self-analysis, the extent of the problem and its effects upon them might not be self-examined.

2.2 Interpersonal Openness: Fear of Self-Disclosure

Self-disclosure is often very difficult for Thais (Phratomtong & Baker, 1983). From a Buddhist perspective, it is extremely important for Thais not to impose on others. Since personal problems naturally entail distressing matter, Thais would prefer not to disclose their problem for fear of burdening the listener. Another challenge to self-disclosure is the value of ‘face’ and honor, both of the self and of the family. Maintaining ‘face’ is a deeply embedded value in Thai society (Komin, 1990). This makes the negative feelings associated with personal problems hard to disclose, for fear of loss of face. Furthermore, to maintain the family name, it is a Thai social norm that problems are kept within the family and not shared with outsiders (Pinyuchon & Reese, 1998, Phratomthong & Baker, 1983).

2.3 Interpersonal Openness: Fear of Intense Emotions
Emotional control is a core value of Thai society. Thais “manifest a well-regulated interpersonal style that maintains a consistent outward display, thus not revealing one's inner emotions” (McCarty et. al., 1991). This is represented by the phrase “jai yen,” cool of heart, which expresses staying calm even in stressful situations, and is a fundamental Thai value (Knutson, Komolsevin, Chatiketu & Smith, 2003). Despite counsellors being professionally trained in techniques to help clients cope with intense emotions, and counselling being an ideal situation for distressing emotions to be shared and processed, it is not Thai culture to seek this type of situation; even if the Thai student might understand what counselling is and does, and how it can improve their well-being, they are likely to be put off by the intense emotions involved.

2.4 Self-Concealment

Thais’ often held fears of self-disclosure and emotional openness link to the avoidance factor of self-concealment. Thais have a strong tendency to conceal any matter potentially causing loss of face. As Pratomthong & Baker (1983) state: “Most Thais do not easily admit to having problems.” Concealing a problem is dissimilar from both not recognizing a problem, which can arise from a lack of self-awareness and a disinclination toward inquisitiveness, among other factors, and from being uncomfortable with self-disclosure; concealment implies that the individual is aware of the problem, and desires to keep it secret. Maintaining the appearance of happiness, success and cordial neutrality (non-threateningness) are values in Thai society and may lead to the covering up of embarrassing or otherwise undesirable information. Self-concealment seems to be a facet of Thai culture.

2.5 Stigma

As in other Southeast and East Asian cultures, there is in Thailand pervasive stigma toward the mental health profession. Poonyakanok & Tuicomepee (2011) state bluntly: “Stigma of seeking help was [is] one of the factors that make people do not seek psychological help [sic].” Distressed people will often avoid seeking counselling for fear of being called crazy, as well as for bringing shame upon their family. For university students, stigmatization might be an even greater problem because of the importance of forming new social relationships, effects of peer pressure, and the need to ‘fit in.’ College students’ egos are fragile, and being called crazy by one’s peers is shameful.

3. Analysis and Discussion

3.1 Relational Marketing

Promoting counselling through marketing that emphasizes relational-collectivistic rather than individualistic aspects could be more effective for Thais (Christopher, Kirkhart, Skillman and D’Souza, 2006). The literature would explicate the idea that ultimately one’s loved ones (e.g., parents, relatives, friends) hold one’s best interests and well-being to be the most important thing. This message would be intended to trump the stigma and shame expected to be felt by one’s intimates.
Another type of message would convey the individual’s role within the group, explaining that seeking to get well would be beneficial for the group; that is, seeking to alleviate one’s distress through therapy, rather than bringing shame to the group, could in fact help the group. In this way, for example, for a student who is in danger of dropping out of school from depression, in the long run the shame of seeking the help of a counsellor so that they will be able to finish school will be much less than the shame of avoiding counselling, but then not graduating. A third type of message would relate to hierarchy. The status and position of the professional counsellor in Thai society would be explicated, highlighting the counsellor’s expertise, authority and status. Thais have much respect for doctors, and the professional counsellor’s role could be equated with it and explained as being another type of doctor; that is, the trust and respect allotted to medical doctors can be allotted to counsellors as well.

3.2 The Counselling Setting

The counselling office should have a relaxed interior, conducive to interpersonal openness. A quiet, unobtrusive place for the counselling center, with the avoidance of a large sign displaying the term “mental health” is best, along with a waiting room that is behind closed doors so that those waiting are afforded privacy. If allowed the time and resources, the university counsellor could work in less formal outreach settings, such as a client’s family home, or some type of community center (Pratomthong & Baker, 1983, Tapanya, 2000). However, an alternative setting does not mean a public setting where the person could, even if only a remote possibility, be seen by her/his peers, a situation which would invite fears of stigmatization. It has also been recommended that Thai clients be allowed to attend the first sessions with a trusted person (Pratomthong & Baker, 1983, Pinyuchon & Reese, 1998). This works well in Thai culture, as Thais often prefer to do things collectivistically, that is, supported by a friend or family member. At the same time, given Thais’ sensitivity to any hint of loss of face, interpersonal openness could be difficult for the client in the presence of their intimate person, no matter how trusted that person is.

3.3 Karma, the Present and Presenting Problems

The patience, tolerance and acceptance of life’s vicissitudes developed through Buddhism and karma are virtues which Westerners would do well to practice more. However, if a higher education student is experiencing a problem and the severity of the problem is negatively affecting the well-being of the student, it might be best for the student to seek a counsellor’s help to alleviate the duress and cope with the problem. The idea to promote would be that one can accept one’s problems while at the same time proactively seeking to resolve them. This message entails a joint emphasis on the karmic acceptance of things as they are (patience is a virtue) and the individual’s ability to take actions to improve their health. This could link to face and pride. It could be explained in the way that if a person’s mental health issue is having a negative effect upon one’s life, it might be making one look badly, and if one treats that problem, then one will look happier to one’s friends, thus maintaining (or regaining) face and status in the social sphere.

3.4 Implication and Suggestions
Accepting the emphasis on external appearances as a part of Thai culture, at the same time the development of a deeper level of self-awareness, of understanding one’s own emotions and feelings and thoughts and the effects that they can have on one, could be cultivated as well. This would be an inward turning. Perhaps the idea could be discussed that if one understands one’s own self better, then one will be able to understand others better; turning inward, while being an individual act, is also an act that can improve social harmony. Therefore, if someone notices signs of un-wellness in others, instead of stigmatizing them, ignoring it, or waiting to act, seeking to help them can be a good, compassionate thing to do, that enhances the well-being of everyone, of the collective.

The suggestions made can be clarified as follows:

Relational Marketing:

A. One’s loved ones truly have one’s best interests at heart; therefore, the shame in the short term of attending counselling outweighs the continued suffering of the distressed student.

B. While seeking counselling might be stigmatizing, in fact improving one’s mental health benefits the collective, and is thus actually a socially positive act.

C. One does not look one’s best when experiencing distress, which might be causing a loss of face; if one seeks counselling and improves one’s mental health, one’s appearance and behavior should correspondingly improve, thus regaining face.

D. Counsellors are akin to doctors, and can be accredited the same level of respect, trust and authority.

Counselling Setting:

E. The counsellor’s office is best placed somewhere that affords privacy to potential help-seekers.

F. Similar to (E), the counselor’s door should not have a phrase such as “Mental Health” written in bold upon it.

G. The office should be designed in a comforting, relaxing, and more informal manner, conducive to reducing barriers to interpersonal openness.

H. Similar to (G), if deemed necessary, alternative counselling settings can be explored that may appeal more to the student than a university counselling office.

Karma, the Present and Presenting Problems:

I. Tolerance, patience and acceptance are beautiful virtues, at the same time, it is good to take proactive steps to ensure one’s mental health. Proactiveness can peacefully coexist with the karmic virtues of patience and tolerance.
Recognizing Symptoms in One’s Self and Others:

J. While not interfering in other people’s affairs is a virtue, if one notices that a friend or another student is suffering, then taking proactive steps to help them (e.g., helping them to seek counselling) is good.

K. Although helping another who is in distress can be interfering, if the person is successfully treated and their problem is resolved, it benefits the collective.

L. Taking into account one’s own internal states, seeking to understand the roots and causes of one’s distress, rather than repressing them, is good.

4. Conclusion and Discussion

This discussion of Thai culture in relation to seeking counselling is intended to help Thai society’s well-being, by aiding the young people, the higher education students, who today face many pressures and challenges, to get the help that they need. It must be noted that as globalization is changing Thai culture, many Thais middle aged and over feel that the youth are more open and more questioning than in the past. Also, Thailand is a diverse nation and the suggestions made above might not be suitable for every Thai; for example, Muslims, Thai-Chinese or Thai-Indians might be best served by either different emphases on the above recommendations, or by different approaches. Since the focus of this paper was on ways of encouraging college students in distress to seek counselling, it was not within its scope to discuss methods of counselling aligned to Thai culture. Due to the space constraints inherent to a journal article, it was necessary to give a brief overview of only the most relevant points of Thai culture.

It is hoped that by initiating a discussion of avoidance factors in Thai higher education students’ decision to seek counselling, this paper can benefit Thai counsellors, and Thai university counselling services. Counsellors in America who might be serving Thai-American clients can benefit from this knowledge as well. A next step in continuing this conversation would be developing methods to disseminate and educate the suggestions made. The most obvious channels are via informational literature, university courses such as Psychology For Daily Life and various health courses, faculty wide professional development programs and teacher education programs. Finally, this paper offers multiple points of departure for future studies. These points can be phrased as research questions, to cite a few possibilities: What are Thai higher education students’ perceptions of university counsellors? Is self-concealment a predictive factor in the decision of Thai higher education students to seek counselling? Is the concept that improving one’s own well-being in fact benefits one’s family and friends attractive to Thai higher education students? If research found it be so, how could literature be developed to best communicate it to students?
References


A study on relationship among organizational trust, organizational justice and organizational spirituality

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Abstract

Enterprises must stand from a perspective of human resources management to create the difference in the present fierce business environment of competition. The member is enterprise's most important assets; the more important thing is an administrator should grasp the staff's psychology. This study explores the relation of organizational trust, organizational justice and organizational spirituality, further compare someone is powerful to organizational spirituality. Use questionnaire investigation, it supposed and then study with the statistics technology of structural equation modeling, there is apparent prediction strength forward on organizational spirituality to find organizational trust and organizational justice. The meaning of the conclusion offers the industry to make as strategy, offer better human resources management, create and organize it with staff's win-win wishing the scene.

Keywords: Organizational trust, Organizational justice, Organizational spirituality
1. Introduction

Modern all enterprises need to satisfy customers to survive in the society. However, at the highly competitive pressure, good service quality and products are no longer the best method, so the route that enterprises want to have advantage of competitiveness to look for innovation.

The human resources are the most important assets in organization, only people cannot lack the advantage that cannot replace in enterprises either. The thinking of internal marketing has become the business administration important tactics recently. The executives of enterprises know that there are satisfactory staff that can increase the satisfactory customer. The staff's idea and attitude are questions that the administrator needs to understand.

Many scholars carry on research to satisfaction, commitment and identification, the purpose is to understand whether member's positive view on enterprises has influenced performance and efficiency. Organizational trust received the psychologist's attention in the 1990s. Define it is the staff that, to the colleague, executive and trust of the organization, if the higher the intensity of trust is, can infer that there is contribution to organizing even more. In addition, organizational justice theory is paid attention to the literature in most recent ten years, can be from distributive, procedural, and interactional justice comes to assess, the member feel correct or not to all activities then pay more suspicious strength to enterprises.

Organizational spirituality is a new topic, originated from the religious group, explained the staff's inner life, meaningful work and community, would like to devote it to enterprises with diligent spirit. There was not discussed organizational trust at the same time at present, research of organizational justice and organizational spirituality, so an article will take this as the focal point to discuss their relevance.

2. Literature review

2.1 Organizational trust

When conceptualized as a psychological state, trust has defined in terms of several interrelated cognitive processes and orientations (Blau, 1964). It characterized trust as a set of socially learned and socially confirmed expectations that people have of each other, of the organizations and institutions in which they live, and of the natural and moral social orders that set the fundamental understandings for their lives.
Several organizational researchers have argued the usefulness of conceptualizing trust in terms of individual choice behavior in various kinds of trust dilemma situations (Meyer, 1994). From the social-capital perspective, the accumulation of social capital requires a significant amount of trust has established in and between all levels of an organization (Sashittal, 1998).

2.2 Organizational justice

Organizational justice is a concept that described at first by Greenberg (1990) and defined as an individual’s perception of, and reaction to, fairness in an organization. According to Adam’s (1965) equity theory, it has proposed that conditions of unfairness will create tension within a person, which he or she will attempt to resolve. The concept of justice is one of the important variables in organizational behavior, Organizational justice has defined as the processes and procedures has measured, regular and that the staffs find their leaders impartial, sincere and that they find the deeds logical (Niehoff et al, 1993).

2.3 Organizational spirituality

Interest in spirituality and religion has grown considerably in scientific and professional communities over the past three decades. While the bulk of that interest has found expression in research focusing on the relation of religion and spirituality to general health and well-being (Ashmos & Duchon, 2000). Inner life is the strength that individual produces from inside, surmount in personal life, through the values perceived oneself. Meaningful work is that the staff fined the meaning of the work and contribution to the society and affirm value and meaning of the life from working experience. Community linking with each other between the work groups and cooperate each other and encourage the mutual consciousness.

2.4 Organizational trust, organizational justice and organizational spirituality

Through the literature review that can get the better organizational trust and organizational justice are will improve as to organizational spirituality. Many research found the staff's organizational trust can make the whole enterprise have better performances after improving (Liu et al, 2012; Mitchell et al, 2012; Nambudiri, 2012; Wong et al, 2012). This research address below hypothesizes:

H1: Organizational trust has forward significant influence on organizational spirituality.

H2: Organizational justice has forward significant influence on organizational spirituality.
3. Research design

3.1 Research structure

The structure chart of this research is drawn and shown as follows.

![Organizational structure chart]

3.2 Participant

Small and medium-sized enterprises are research objects in Taiwan, the questionnaire investigation used, send 500 questionnaires and retrieve 210 successful samples; the rate of recovery is 42%.

3.3 Research tool

There are two dimensions in organizational trust, Cognitive and affective trust. Organizational justice has three parts: distributive, procedural, and interactional justice. In addition, it is inner life, meaningful work and community in organizational spirituality. In order to examine each assumption, use AMOS version 20.0, and verify reliability and validity.

4 Finding and discussion

4.1 Confirmatory factor analysis

Three main constructs are organizational trust, organizational justice and organizational spirituality. Through the analysis of CFA (confirmatory factor analysis), composite reliability is 0.8673 of organizational trust, average variance extracted is 0.7657; Composite reliability is 0.8294 of organizational justice, average variance extracted is 0.6214; Composite reliability is 0.9154 of organizational spirituality, average variance extracted is 0.7836. Show convergent validity of three
constructs are very good, compare the square root of average variance extracted and all correlations represents discriminant validity. Refer to Table 1 and Fig. 2.

Table 1 AVE & correlation

<table>
<thead>
<tr>
<th></th>
<th>Organizational Justice</th>
<th>Organizational Trust</th>
<th>Organizational Spirituality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Justice</td>
<td>0.7882</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Trust</td>
<td>0.6081</td>
<td>0.8750</td>
<td></td>
</tr>
<tr>
<td>Organizational Spirituality</td>
<td>0.6511</td>
<td>0.5693</td>
<td>0.8852</td>
</tr>
</tbody>
</table>

Note: The diagonal number value is the square root of AVE.

![Confirmatory factor analysis](image)

**Fig. 2 Confirmatory factor analysis**

4.2 Structure model and hypothesis examined

Further hypothesis examined after Confirmatory factor analysis, finds structure model fit is good. Chi-square is 20.692, GFI is 0.978, AGFI is 0.952, CFI is 0.978, NNFI is 0.994, IFI is 0.997 and RMSEA is 0.032, all indicators reach the standard number value. In addition, use bootstrap to estimate standardized regression
coefficients reaches statistically significant too, show all hypothesis gets support. Refer to Table 2 and Fig. 3.

Fig. 3 Structural model

Table.2 standardized regression coefficient & significance

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Lower</th>
<th>Upper</th>
<th>P</th>
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<tbody>
<tr>
<td><strong>Organizational Spirituality</strong></td>
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<td>Organizational Justice</td>
<td>.4839***</td>
<td>.2889</td>
</tr>
<tr>
<td>Organizational Spirituality</td>
<td>&lt;---</td>
<td>Organizational Trust</td>
<td>.2750*</td>
<td>.0619</td>
</tr>
<tr>
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<td>&lt;---</td>
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<td>.8335</td>
<td>.7330</td>
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<tr>
<td>procedural justice</td>
<td>&lt;---</td>
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<td>.6585</td>
<td>.5573</td>
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<tr>
<td>interactional justice</td>
<td>&lt;---</td>
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<td>affective trust</td>
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<td>cognitive trust</td>
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<td>.7931</td>
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<td>inner life</td>
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<td>Spirituality</td>
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</table>
5. Conclusion

Originally finding organizational trust, organizational justice has forward significant influence on organizational Spirituality, hypothesis gets support. The function of organizational justice is more important, so enterprises should pay attention to organizational justice more, make the staff think in enterprises that there is fair treating. In order to improve the competitiveness, enterprises should combine the strategy, human resource management and concern staff, strengthen organizational trust and organizational justice make organizational spirituality better. Propose looking for mediator or moderator to make research framework intact in the middle of main relationship in the future.
References


In-Service Teachers Perspectives on Inclusive Education in India

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Abstract

The regular schools of India are turning into inclusive ones following the directives of the Government of India, but for inclusive education to be successfully implemented, knowledge of teachers’ attitude is important as they need to transform their teaching styles in order to cater to the needs of all children. This study explores the perspectives of in-service school teachers towards acceptance of students with special needs in regular classrooms, and teachers’ concerns towards implementing inclusion. The sample comprised of 100 in-service teachers of mainstream Government schools of the city of Kolkata (India) selected through random sampling technique. A comparison was made between the perspectives of 50 teachers of primary section and 50 teachers of secondary section. The Sentiments Attitudes and Concerns towards Inclusive Education Revised (SACIE-R) Scale (Forlin, Earle, Loreman, & Sharma, 2011) and a structured questionnaire made by the investigators were administered. Factors affecting attitude towards inclusive education and training needs of the teachers were also studied.

Results revealed moderate positive attitude among the teachers towards acceptance of students with special needs in their classes. The teachers of secondary section were found to have higher concern levels than the teachers of the primary section with regard to implementing inclusive education. Besides some demographic factors, educational qualification, level of confidence in teaching children with special needs, training and teaching experience had significant influence on teachers’ attitude towards inclusive education. Results indicate a significant difference in the two groups with regard to their training needs. Analysis reveal that teachers of both the sections were facing various problems in implementing inclusion and were in favour of partial inclusion rather than full inclusion. Findings indicate the need of more in-service teacher training and increased availability of resources for the teachers to successfully teach in inclusive settings in India.
Keywords: Inclusive education, In-service teachers, Attitudes, Concerns, Training needs

1. Introduction

In the last few decades the world has changed the way it educates the children with special educational needs (CWSN). From the earlier practice of placement in segregated special schools the focus is now to ensure that “those with special educational needs must have access to regular schools which should accommodate them within child centred pedagogy capable of meeting these needs” (UNESCO, 1994). This concept called Inclusive Education was introduced at the ‘World Conference on Special Needs Education: Access and Quality’ in Salamanca, Spain in 1994. India was a signatory to the Salamanca Statement.

1.1 Policies and Programmes to Promote Inclusive Education in India

As in most developing nations, in India, inclusive education has been the centre of attention for policy makers in recent times and the need to provide equal opportunities to all children is now seen as a priority than necessity. The Persons with Disabilities (PWD) Act 1995 and the Rights of Persons with Disabilities (RPWD) Act 2016 are significant steps by the Government of India in this regard. The law mandates that schools should ensure that education of students with disabilities should take place along with their peers without disabilities, whenever possible. Also, the Right to Education Act – 2009 makes education free and compulsory for all children from 6 - 14 years of age.

The Ministry of Human Resources Development (MHRD) of Government of India introduced Sarva Shiksha Abhiyan (SSA) (English: Education for All Movement) and Rashtriya Madhyamik Shiksha Abhiyan (RMSA) (English: National Secondary Education Campaign), their flagship programmes for achievement of universalization of elementary education and secondary education respectively. By following the ‘zero rejection policy’ the SSA programme ensures that every child with special needs, irrespective of the kind, category and degree of disability receives meaningful and quality education and since 2001 varieties of interventions such as identification, assessment, appropriate placement, in-service teacher training, resource and infrastructural support etc are being provided under this scheme. (Ministry of Human Resource Development, 2010). A characteristic result to the enactments of these legislations and schemes are that the teachers would be expected to have positive attitudes, skills and expertise to teach a variety of students as they need to commit to the transformation of the school system to perform their new roles and responsibilities.

1.2 Status of Inclusive Education in Kolkata, India
The status report of Unified District Information System for Education (Kolkata) for the year 2015-16 states that of the estimated 26,482 children identified with special needs (aged 0-19 years) only 7,104 children were enrolled in different classes (class I to class XII) of 2,139 mainstream government schools (Ministry of Human Resource Development, 2016). In the city of Kolkata, Sarva Shiksha Abhiyan (SSA) started from 2002-03 and the enrolment of children with special needs in mainstream schools is done with the help of Integrated Education for The Disabled (IED) Unit. Under the district IED coordinator, special educators work as itinerant teachers (Nanda, 2008: 95). In order to facilitate inclusion of children with special needs SSA organises two to five days sensitization workshops for in-service teachers on various topics such as curriculum adaptation techniques, Braille, and sign language training techniques. However, till date, there is no provision for compulsory training or orientation programmes for all in-service teachers for handling the needs of students with any sort of special educational needs.

1.3 Teachers Perceptions towards Inclusion

Previous researches regarding teachers perception towards inclusive education suggests that teachers’ attitudes are primary determinants of the successful implementation of any inclusive policy (Avramidis & Norwich, 2002). Attitudes of teachers affect the inclusion of children with special needs in mainstream schools (Aradhana, 2014). While some studies indicated that teachers had negative views about both handicapped students and inclusion (Bigham, 2010; Forlin & Chambers, 2011; Sharma, 2012) other studies reported their positive dispositions (Hill, 2009; Khan, 2011; Mdikana, 2007). Studies indicate that though teachers support the philosophy of inclusion, most of them have concerns about implementing the same (Das, Gichuru & Singh, 2013). The major barriers to success of inclusion in India are lack of knowledge and skills, lack of training and competencies, insufficient infrastructure and resource, lack of awareness and discriminatory and negative attitudes (Dhillon, 2015; Dutta & Banerjee, 2013; Singh & Agarwal, 2015).

1.4 Background of the Present Study

Indian teachers are aware of the desirability of inclusive education but still there is need of spreading awareness (Chopra, 2008) as many teachers know little about legislation and policies (Arora & Sahu, 2015). The empirical research conducted so far is also not sufficient in the field. Thus there is a need to study the perspectives of teachers towards implementing inclusive education in order to analyse the reason of its slow pace of implementation in India. The specific objectives of this study were:

1. To study in-service teachers’ attitudes towards acceptance of students with special needs in regular schools, their concerns about implementing inclusion and perceptions towards benefits of and barriers to inclusive education for students with special needs.
2. To find out if any significant difference exists between the in-service primary school teachers and the in-service secondary school teachers regarding their attitudes, concerns and perception towards benefits of and barriers to inclusion of children with special needs in regular schools.

3. To explore the demographic and teaching factors that influence in-service teachers’ attitudes, concerns and perceptions regarding inclusive education.

2. Method

2.1 Hypothesis

Hypothesis 1. There is no significant difference between the attitudes, concerns and perception of teachers of primary section and of teachers of secondary section towards inclusion of children with special educational needs in regular schools.

Hypothesis 2. There is no significant association between demographic and teaching factors and attitudes, concerns, and perceptions of the in-service teachers towards the inclusion of children with special educational needs in regular schools.

2.2 Sample and Participant Selection

Stratified random sampling method was used. The area of Kolkata city was divided into 23 circles from which 5 circles were randomly selected. Then two primary schools and one secondary school (having 5 or more students with special educational needs enrolled in the current session) were chosen from each circle randomly. The total sample comprised of 50 in-service primary school teachers from 10 government primary schools and 50 in-service secondary school teachers from 5 government secondary schools. All the teachers were permanent staff, within 20-60 years and were teaching at either primary level (class I to IV) or secondary level (class V to X).

2.3 Tools Used

Part I - Information schedule. The Information schedule contained questions regarding demographic factors, and factors relating to the teaching of students with special educational needs.

Part II - Standardised questionnaire. The Sentiments Attitude and Concern towards Inclusive Education Revised (SACIE-R) Scale (Forlin, Earle, Loreman, & Sharma, 2011) was used. For the present study only the subscale of attitude and concern were taken into consideration. The SACIE-R Scale is a forced-choice 4 point Likert Scale from 1 (strongly disagree) to 4 (strongly agree) and consists of 5
statements in each of the subscales. A total possible score range in each subscale is 5 to 20. A higher score in the scale is indicative of a more positive disposition toward inclusive education. The items of the attitude subscale are positive in nature while the items in concern subscale are negatively geared and need to be reverse-coded before the analysis (Forlin, et al., 2011). Cronbach’s alpha reliability for the whole scale and for individual subscales of Attitudes and Concerns is .74, .67 and .65 respectively.

**Part III - Structured Questionnaire.** A structured questionnaire was prepared by the investigators by consulting the experts and the related literature in the area. The scale has 10 closed-ended questions eliciting the respondent’s perception towards inclusive education. Five statements are on perception towards benefit of inclusion and five statements on barriers towards implementing inclusion. The scale is a forced choice 4 point Likert scale. The statements on barriers to inclusion are negatively geared and need to be reverse-coded before analysis. The Cronbach’s alpha for the scale is .80. The possible score range is 10 to 40.

2.4 Procedure

The Head of the chosen schools were contacted and after seeking their permission the teachers were briefed about the purpose and aim of the study. Participation was voluntary. Data was collected through the questionnaire method at the selected school premises.

2.5 Statistical Analysis

Item-wise raw scores were summed up to obtain the scores for the individual domains – sentiments, attitude and concern and perception. The means and standard deviations for the items and the domains were calculated. T-tests were calculated to find out if any difference exists between primary and secondary teachers. Chi- square tests were performed to analyse the association of the independent variables i.e. demographic factors, and factors related to the teaching of CWSN on the dependent variables, namely, sentiment, attitude, concern and perception of teachers. Percentages were calculated to identify training needs of the teachers.

3. Results and Findings

3.1 Teachers’ Attitudes Concerns and Perceptions towards Inclusive Education

In the attitude domain, the mean total score of the teachers was 12.94 (SD = 2.84) and the overall mean item score was 2.59 (SD = .57), indicating that the participants agreed with the statements. The respondents were most positive about inclusion of students having attention problems (M = 3.04, SD = .84) and least favourable to the inclusion of students who require communicative technology (Braille/sign language) support (M = 1.97, SD = 1.03). The teachers of primary
section (M = 13.70, SD = 2.91) held more positive attitudes [t(98) = 2.770, p < .05] than the teachers of secondary section (M = 12.18, SD = 2.57).

After re-coding the items in the concern subscale, the mean total score of the respondents was 12.20 (SD = 2.75) and the overall mean item score was 2.44 (SD = .55). The mean item score was closer to the value 2 which indicate that respondents had high level of concern. Analysis of items in the concern subscale revealed that the respondents were most concerned about giving appropriate attention to all students (M = 1.84, SD = .65) and lack of their knowledge and skills (M = 1.86, SD = .82) and were least concerned about the peer acceptance of children with special needs (M = 2.80, SD = .74). The concern level of the teachers of the primary section (M = 13.68, SD = 2.42) were lower [t(98) = 6.382, p < .05] than that of the teachers of secondary section (M = 10.72, SD = 2.21).

With regard to perception about benefits of inclusive education the mean total score of the respondents was 15.71 (SD = 3.48) and the mean item score was 3.14 (SD = .70), indicating that the teachers agreed with the benefits of inclusion. The teachers were most positive about inclusion promoting true friendships among students with and without special educational needs (M = 3.35, SD = .66) and least agreed that the challenge of being in a regular classroom will promote the academic growth of special needs students (M = 2.84, SD = .83). The teachers of primary section (M = 15.84, SD = 2.57) and teachers of secondary section (M = 15.58, SD = 2.64) had similar perception about benefits of inclusion [t(98) = .499, p > .05].

With regard to perception towards barriers to inclusion, after recoding the items the mean total score of the respondents was 12.68 (SD = 3.83) and the mean item score was 2.54 (SD = .77). The mean item score being closer to the value of 3 indicated that the respondents agreed that there are barriers to inclusion. The analysis of the items revealed that the least important barrier was lack of infrastructure (M = 3.49, SD = .63) while difficulty in modifying the instruction and teaching style to meet the needs of every special needs student (M = 1.98, SD = .77) served as the biggest barrier to inclusion. The teachers of primary section (M = 12.50, SD = 1.68) had similar perception levels [t(98) = -.992, p > .05] to that of the teachers of secondary section (M = 12.86, SD = 1.94).

Therefore, the null hypothesis (Hypothesis 1) was rejected for the domain of attitude and concern which means that there exists a significant difference between the attitudes and concerns of teachers of primary section and teachers of secondary section towards inclusion of children with special needs in regular schools. However for the domain of perception of benefits and perception of barrier the null hypothesis was accepted i.e. there exists no significant difference between the teachers of primary section and teachers of secondary section regarding these constructs.

3.2 Factors affecting Teachers’ Attitudes Concerns and Perceptions towards Inclusive Education

A significant association was found between the teacher’s attitude towards acceptance of children with special needs and their educational qualification [$X^2(6) = \ldots$]
14.04, p < .05], class where they taught \[X^2(2) = 8.74, p < .05\] and their perceived level of stress in teaching children with special needs \[X^2(8) = 17.19, p < .05\]. Therefore, teachers’ with higher educational qualification, teaching in primary sections and with lower levels of stress were more likely to have positive attitudes towards inclusion.

Teacher’s concerns were significantly associated with their gender \[X^2(2) = 7.18, p < .05\], class where they taught \[X^2(2) = 20.55, p < .05\], training in relation to teaching special needs students \[X^2(2) = 6.67, p < .05\] and their perceived level of confidence in teaching children with special needs \[X^2(10) = 19.69, p < .05\]. Teachers who taught in secondary section, had no training and have low confidence in teaching children with special needs are likely to have higher levels of concern towards inclusion.

Teacher’s perception of the benefits of inclusion was significantly associated with their interaction with the disabled \[X^2(2) = 6.96, p < .05\] indicating that teachers who have significant interaction with the disabled were more likely to be positive about benefits of inclusion.

Teachers perception of barriers to inclusion were significantly associated with their age \[X^2(6) = 13.18, p < .05\], educational qualification \[X^2(6) = 14.17, p < .05\], teaching experience \[X^2(10) = 20.03, p < .05\] and their knowledge of legislation \[X^2(8) = 23.86, p < .05\]. Teachers with higher levels of educational qualification and teaching experience and who had knowledge about legislation were more likely to have lower levels of perception of barriers to inclusion.

Therefore, the null hypothesis (Hypothesis 2) was partially rejected in favour of alternative hypothesis. That is, there exists a significant association between the independent variables (i.e. demographic and teaching factors) and the dependent variables (i.e. attitudes, concerns and perception of teachers) in relation to inclusion of children with special needs in regular schools.

### 3.3 Training Needs of the Teachers

Only 30% of the teachers surveyed had attended the workshop training that the government provides in order to adapt the teachers to work in inclusive settings. However, the attendance rate was significantly higher \[t(98) = 3.18, p < .05\] among the teachers of primary section (M = .44, SD = .5) than in the teachers of secondary section (M = .16, SD = .37). Majority (83%) of the teachers surveyed argued that they needed more training to effectively teach in inclusive settings. The need of training was higher \[t(98) = 3.03, p < .05\] among the primary teachers (M = .94, SD = .24) than in the secondary level teachers (M = .72, SD = .45). However, 71% of the teachers surveyed were not interested to work in a full-inclusive school. In this regard, there was no significant difference \[t(98) = 1.10, p > .05\] between the primary teachers (M = .34, SD = .48) secondary teachers (M = .24, SD = .43).

### 4. Discussion
The study results revealed that the primary and secondary in-service teachers in the government schools of Kolkata (India) have moderate positive attitudes and high concerns towards inclusive education. These findings are in agreement with previous studies which showed that in-service teachers were not negatively disposed to the concept of inclusive education (Bhatnagar & Das, 2014a; David & Kuyini, 2012; Mukherjee, Neogi & Sikdar, 2015). The teachers of primary level were found to hold more positive attitudes and lesser concerns than the teachers of secondary level. Previous research indicates that kindergarten and elementary teachers had more positive perceptions of inclusion than the secondary education teachers (Chiner & Cardona, 2013; McGhie-Richmond, Irvine, Loreman, Cizman & Lupart, 2013). In India, the workload of the teachers considerably increases in the upper primary - secondary level (Class VII to X) from the primary level (Class I to V). Inclusive education results in extra-work and intra-class problems for the teacher-on-duty (Gökdere, 2012) and as the subject content becomes more complex in the higher classes the secondary classrooms present greater challenges to teachers (Yadav, Das, Sharma & Tiwari, 2015). Mandal, Nanda & Hajra (2014) found that teachers find it more challenging to handle older children with special needs than their younger counterparts, large class size was also a concern (Bhatnagar & Das, 2014b). The teachers in the present survey reported high level of concerns regarding their inability to give attention to all children and their lack of knowledge and skills. Bhatnagar & Das (2013) reported that an overwhelming majority of Indian teachers were concerned that they had not received any training in special education. Previous studies have also pointed out that professional skill training for teachers is important to teach successfully in inclusive settings (Forlin & Sin, 2010). In this regard, training that addresses specific needs of the teachers can be helpful to reduce their concerns and reluctance (Mukherjee, Sikdar & Neogi, 2016).

Teachers are aware of benefits of inclusion and agreed that inclusion enhances social interaction and minimizes negative attitude towards students with special needs. Haider (2008) reports similar findings. Tiwari, Das & Sharma (2015) point out that teachers accepted inclusion only in theory and ignored the policy on inclusion due to lack of support on institutional level. In the present study it was found that the teachers perceived it as challenging to implement the inclusion in the classroom.

In this study variables such as teacher’s educational qualification, perceived level of stress, gender, level of confidence and training and extent of interaction with the disabled were found to have associations with their attitudes, concern and perception levels. These findings are in corroboration with earlier studies such as Chattopadhyay, Bera & Nanda (2014), Ahsan, Sharma & Deppeler (2012), Forlin et.al. (2009) and Parasuram (2006).

The respondents of this study argued for provision of more specific and detailed training in handling of children with special needs. Dutta and Banerjee (2013) found that the most pressing problem of inclusive schools in Kolkata was insufficient infrastructure and resources and lack of training and competencies in in-service general educators. Das, Kuyini & Desai (2013) reported that majority of teachers did not have any training nor any access to support services in the schools. Analysis of the impact of Sarva shiksha Abhiyan in West Bengal indicated a crucial need of a modified teacher education program for in-service educators to achieve the goals of universalization of elementary education (Ghosh, 2013).
5. Conclusion

Research throughout the world has pointed out that teacher’s willingness and positive attitude is a fundamental pre-requisite of success of any inclusive programme. Though teachers of Kolkata (India) have moderately positive attitudes towards acceptance of children with special needs in their classrooms, but there are a lot of barriers that need to be overcome before the dream of a total inclusion in education can be achieved in India. The recent legislation in the form of the Rights of the Persons with Disabilities Act, 2016 and Government’s focus on arranging training programmes for in-service and pre-service teachers, removal of architectural barriers may have influenced the perception of the teachers in a positive way but there is need of more teacher training and increased availability of resources and infrastructural facilities to help the teacher to cope more effectively with diverse learning in classrooms. The present study have implications for policy makers, professionals to train staff and plan future programmes to control factors that still serve as an obstruction for successful inclusion.
References


**Education of Women as the Key to Achieve the Millennium Development Goals: The Case of India**

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**Abstract**

Just as boys acquire sound knowledge and culture by the practice of Brahmacharya and then marry girls of their choice, who are young, well-educated, loving and of like temperament, so should a girl practise Brahmacharya, study the Veda and other sciences and thereby perfect her knowledge, refine her character, give her hand to a man of her own choice who is young, learned and loving.”

**Keywords:** Education, Millennium development goal, Women
Introduction

The empowerment, equality and independence of women are globally recognised as key factors to achieve progress in all spheres of life. Rightly this is considered as one of the eight Millennium Development Goals to which the world leaders too have agreed at the Millennium Summit held in New York in 2000 AD. The Universal Declaration of Human Rights affirms that everyone, irrespective of their gender, caste, creed or colour, has the right to participate and achieve success proportionate to their merit and ability in matters related to social, economic, political, and educational and public services without discrimination. This is quite logical and is in the interest of all as women population comprise approximately half of the total population of the world. But, unfortunately, the hegemonic masculine ideology forced the women folks to suffer a lot as they were denied proportionate opportunities in the various spheres of life and work. The following is a brief discussion on how women education can successfully and effectively achieve Millennium Development Goals.

a. Women education and Universal Primary Education: Given that most of the out of school children are girls, the importance of reaching more and more girls and increasing their enrolment and completion rates is at the core of achieving the education MDG. The target for achieving universal primary education is explicitly mentioning girls’ education and reads: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling. The 2007 Millennium Development Goals Report states that 57% of the 72 million children not in schools worldwide in 2005 are girls and it also expresses concern that this might underestimate the real figures.

Studies have shown that the influence of mother’s education in the family holds on the children and especially daughters attending school (Kambhapamti and Pal, 2001). Educating women today is also an investment in the education of future generations of women. Although the overall survival rate to last grade is almost the same (86% for girls, compared to 87% for boys), the specific dropout rates for each of the grades from one to five is always higher for girls, with a difference of more than 1% in most cases.

One of the main reasons for this increased dropout rate for girls is the quality of education received by girls worldwide. The EFA Global Monitoring Report 2008 highlights the need to strengthen efforts in five major areas most concerned with creating a truly egalitarian studying environment for boys and girls: safe and supportive school environments, female teachers and unbiased teacher-pupil dynamics, learning contents that promotes real gender equality, greater gender
equality of learning outcomes and equal opportunities for men and women in subject choice. These areas are particularly crucial in increasing overall completion rates and decreasing the number of such phenomena like dropouts and repetition, which, especially the former, affect girls to a great extent.

b. Girls’ education and Women empowerment: Another MDG self-explaining the importance of girls’ education and directly connected to the previous is the third Goal, the target of which reads: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015. As known, the gender target for parity in primary and secondary education has been missed in 2005 with only 59 out of 118 countries achieving it on time. According to the EFA Global Report 2008, the world’s average GPI (Gender Parity Index) for primary schools is still 0.94 with sub-Saharan Africa and West and South Asia having reached only an average of 0.92. Given that many countries reached parity and others have a disparity favoring girls, the situation is less bright when looking at disaggregate numbers by country.

Gender disparities increase directly proportionate to the level of education. Although there is no significant difference in the survival rate of boys and girls until the last grade of primary schooling, enrolment for secondary education registers a GPI of 0.94 with both boys and girls leading the ratio in a largely equal number of states. When reaching tertiary education, the gender gap deepens and surprisingly so in favor of women with a world average of 1.05, an impressive progress from the 0.96 of 1999. This figure hides however great regional disparities and the small percentage of girls worldwide who actually do enroll in tertiary education. The average gross enrolment ratio for girls in higher education for developing countries is 43% with the Arab States, East Asia, West and South Asia and sub-Saharan Africa scoring less.

Adult literacy rates are heavily imbalanced gender-wise across the globe. Women still accounted for 64% of all illiterate adults in 1995-2004 and there has been no real progress in remediating this in the last decade, with a mere improvement of 1% since 1985-1994. The average global GPI in adult literacy is 0.89. Educating not only girls, but women of all ages is therefore clearly the key to achieving mass literacy.

In addition many researchers have expressed concern over the formulation of the gender equality goal. (Johnson, 2005; Kabeer, 2005) Some have shown that “Gender equality in education may be a necessary condition for improving gender equity in political and economic relations, but it is not a sufficient for doing so”( Johnson, R. (2005). p. 56) by looking at the situation of women in countries where gender parity has already been attained. And most of them agreed that translating gender equality into the sole action of eliminating gender disparities in education is “disappointingly narrow”. (Kabeer, N. (2005). p. 13)

c. Girls’ education and health-related targets: The direct impact of education on maternal mortality and other health-related issues has been widely documented. Maternal mortality deals directly with women’s awareness and knowledge of the condition and health of her own body. Given the women’s crucial role in bringing up children, their knowledge of even basic prevention and remediating measures such as administering oral rehydration salts in case of diarrhoea, together with their hygiene
and nutrition habits have a huge impact on the physical wellbeing of their offspring. Moreover, the 2007 MDGs Report estimates that more than half of those living with HIV in the worst hit areas are women, so health education of young girls plays an important part in both raising awareness and spreading knowledge of how to prevent infection.

Initiatives such as FRESH (Focusing Resources on Effective School Health) which include basic notions of hygiene and health education have turned out to be important incentives for parents to send their children to school, as reported by the EFA Report. Women literacy programmes are also increasingly including health education, health-related benefits being more often than not the major reason why these campaigns are initiated and extended.

The world is far adrift in achieving the goals of reducing by two thirds the under-five mortality ratio and by three-quarters the rate of maternal mortality. The under-five mortality ratio per one thousand live births was 83 in 2005, a drop of 23 units since 1990. This aggregate number does not show the wide regional disparities, with regions such as sub-Saharan Asia still registering ratios even twice as high. Maternal morbidity is equally high and progress has been uneven across the globe. A number of more than 500,000 women are dying annually from treatable and preventable complications of pregnancy and childbirth and the chances that a woman in a developing country does so are 1 in 16 compared to 1 in 3,800 in developed countries. The proportion of deliveries attended by skilled health personnel is particularly low in South Asia (38%) and more so in rural areas. The importance of education on the women’s maternal health is clearly recognised by the MDGs Report: “84% of women who have completed secondary or higher education are attended by skilled personnel during childbirth, more than twice the rate of mothers with no formal education” (Millennium Development Goals Report 2007. p. 17). While basic education does not seem to have a direct impact on improved maternal healthcare, it is a prerequisite of reaching further levels of education and therefore its role cannot be denied. Similar findings concerning the role of female literacy on child health (Gokhale et al., 2004) and contraceptive use (Moursund and Kravdal, 2003) were reported by a number of region-specific studies.

Even though formulated as including malaria and other diseases, Goal 6 is focusing to a great extent on HIV/AIDS, with one of the two targets specifically and exclusively dealing with halting and reversing the spread of the disease by 2015. The generally weaker role of women in most societies and its being viewed as mainly reproductive in many developing countries makes them an easier target for such sexual behaviours as rapes and prostitution, mainly responsible for spreading HIV/AIDS. Furthermore, the MDGs Report states that married women are also becoming increasingly exposed, the main reason being their husbands who contract the disease, many times by means of unprotected sex with sex-workers. Women represent 59% of the total infected population in both Oceania and sub-Saharan Africa. Due to its sexual implications, raising awareness and educating women about the pandemic encounters difficulties in surpassing social and religious beliefs and taboos. However, as with the other health-related goals, education has proved to be one major factor in granting women access to in-depth information regarding the methods of transmission and inherently, preventing infections. (Aggarwal and Rous, 2006) In addition, considering once again women’s role in the general wellbeing of the
household and in caretaking for all its members, educating women on the preventive 
measures of other diseases such as using mosquito nets for malaria or improved 
hygiene and nutrition for tuberculosis can turn out to be an efficient investment in 
saving out many lives, especially those of children.

d. **Girls’ education and Reducing poverty and hunger:** The impact of girls’ 
education on the next three goals is less direct and more difficult to assess. However, 
in terms of its influence on reducing poverty and hunger, a wide number of studies 
concerned with stating the concrete benefits of education and literacy development 
are looking into the economic outcomes of the participants once they enter the labour 
market. Women are more often than not engaged in unpaid labour and their work 
goes unrewarded and unrecognised most of the times, so empowering women through 
education can transform them into active bread-earners within their societies, thus 
contributing to tackling poverty and hunger.

Considering that more than half of the world’s population are women, it is clear 
that allowing women to gain and use the skills to participate in employed labour can 
only help halve the proportion of people living with less than 1$ a day and suffering 
from extreme hunger. Discrimination against women in the labour market is a 
widespread phenomenon to which even developed countries such as Japan are far 
from being immune. However, in many developing countries women are paid much 
less than men although they often work twice as much and engage in much more 
demanding and exceedingly manual tasks such as transplanting the rice or threshing 
the grains. (Coonrod, 1998; Kabeer, 2005) Johnson (Johnson, 2005) goes as far as to 
propose gender shares of national earned income as “possibly the most crucial 
58) Women from developing countries are equally more likely to suffer from hunger 
and malnutrition due to their vulnerable position in both family and society. (Coonrod, 
1998) Empowering them through expanding girls’ education and women literacy 
campaigns can have direct repercussions on them engaging in paid labour and 
contributing to the household’s income, which in turn will strengthen their social 
status.

e. **Girls’ education’s role in ensuring Environmental sustainability:** Perhaps 
the most elusive of the MDGs in terms of connectivity to girls’ education, ensuring 
environmental sustainability and developing a global partnership for development are 
areas of major concern in terms of women’s activities.

Being the major players in securing such materials as fire wood and water for 
the household, women are most of the time directly involved in taking care of these 
natural resources and also, equally increasingly affected by their scarcity. Coonrod 
(1998) gives a detailed account on the ways pollution affects women in rural India 
and the importance of education in familiarising women with health and hygiene 
practices is assessed by the Department of School Education and Literacy on its 
oficial website. In addition, women’s contribution to reviving the natural 
environment has been highlighted by the 2004 Nobel Peace Prize Winner, Wangari 
Maathai who declared in an interview to the United Nations University during the 
same year’s Tokyo International Conference on African Development (TICAD) that 
“Because women need fire wood, food for the animals and also need water, one way 
in which they can help themselves is to plant trees.” Such beneficial actions however
require increased awareness and knowledge and girls’ education is one potentially essential source of information.

**Women Education in India: The Current Scenario:** India still has one of the lowest female literacy rates in Asia. In 1991, less than 40 percent of the 330 million women aged 7 and over were literate, which means today there are over 200 million illiterate women in India. This low level of literacy not only has a negative impact on women’s lives but also on their families’ lives and on their country’s economic development. Numerous studies have shown that illiterate women have high levels of fertility and mortality, poor nutritional status, low earning potential, and little autonomy within the household. A woman’s lack of education also has a negative impact on the health and well being of her children. For instance, a recent survey in India found that infant mortality was inversely related to mother’s educational level. Additionally, the lack of an educated population can be an impediment to the country’s economic development.

The Indian government’s commitment to education is stated in its constitution with an article promising “free and compulsory education for all children until they complete the age of 14” (The World Bank, 1997b). The National Policy on Education, which was updated in 1992, and the 1992 Program of Action both reaffirmed the government’s commitment to improving literacy levels, by providing special attention to girls and children from scheduled castes and scheduled tribes.

**Improving Literacy Level:** Although literacy levels are low, there has been progress in improving educational attainment for both sexes in India over the last several decades. In 1971, only 22 percent of women and 46 percent of men were literate (Register General and Census Commissioner (RGCC), 1977). By 1991, 39 percent of women and 64 percent of men were literate (RGCC, 1993).¹ Thus, there has been a large increase in the proportion of women who are literate in just 20 years. Despite the improvements in literacy, there continues to be a large gap between the literacy levels of men and of women. For India as a whole, the gender gap in literacy has been decreasing since 1981; in some states, however the disparity in literacy between the sexes has been growing.

There are dramatic differences in literacy rates by place of residence, with rates in rural areas lagging behind rates in urban areas. In 1991, the urban female literacy rate was more than twice that of the rural rate, 64 and 31 percent, respectively (RGCC, 1993). While there have, however, been substantial increases in literacy rates in both urban and rural areas, the gap between the two sectors has not narrowed appreciably.

**Conclusion**

From the recent developments in the field of education, particularly in the field of female education, one can certainly be hopeful and assume that a new beginning is made which involves equal and proportionate effort of both man and women towards national development. We had the female philosophers like Gargi,

¹ These rates refer to the population aged 7 and over
Maritreyi and Viswabara in the Vedic age. We had Mirabai, Ahalyabai, Durgabati and Laxmibai in the days of history. They were all learned. It is time for the modern women to do their part, to make a point that they are no parasite and has as much potential as man to effectively contribute in the making of nation at large. Of course education can be a means to their endeavour as it had been so long for man. India’s failure in achieving universal primary education is primarily due to the poor participation of women in education. Poor participation of women in education disenfranchised women from being empowered. Absence of empowerment made women ignorant about health and hygiene. Also absence of education leaves women from being able to contribute towards freedom from poverty and hunger. And under such circumstances it is but foolishness to expect women to be an exponent/activist of environmental sustainability. Education, thus, is the key towards emancipation of women and of course this time the effort should involve not a class of people but of the mass women. Until that happens, and we witness the beginning is made, fulfilment of the Millennium Development Goals will be a myth.

References


Investigation of the Gender Differences on Self-regulated learning in Online Learning Environments

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Abstract

This study aims to collect quantitative and qualitative data according to the gender differences in six factors of SRL, which are Planning, Self-monitoring, Evaluation, Reflection, Effort and Self-efficacy. Sample of this study consisted of 172 undergraduate year 1 students from the Education University of Hong Kong (female 64.0% and male 36%). The Self-Regulation of Learning Self-Report Scale (SRL-SRS) has been developed for measuring students’ SRL about the perception of e-portfolios. The mean scores and interview responses gave interesting information according to gender differences.

Keywords: Gender Differences, Self-regulated learning, online learning Environments, and Higher Education
1. **Background**

According to Yukselturk & Bulut’s study in 2009, they examined the gender differences of higher education graduates and undergraduate students in self-regulated online learning environment. The results indicated that there was no statistically significant mean difference among the motivational beliefs, self-regulated learning (SRL) variables and achievement with respect to gender (Yukselturk & Bulut, 2009). However, through the teacher’s observation, we discovered that female and male higher education students have different learning behavior and motivation during an on-line assignment in The Education University of Hong Kong. This study aims to collect more information according to the gender differences on SRL in the online learning environments by using another samples and research method. Those result and information will help for further study in relevant area and curriculum design in the higher education sector.

2. **Literature**

The digital natives who live in the 21st century are using different digital applications, online systems, interfaces and artifacts everyday. Nowadays, the use of different learning management systems (LML), such as Moodle, Blackboard, WebCT and also the discussion environment, wiki, searching engine in the education sector was increasing (West et al. 2007). Researchers believed that these kind of online learning environments are important for supporting students’ learning (Gao, et al. 2013). A technology-rich learning platform is important to both teachers and students, especially in the learner-centered education context (Singh & Ritzhaupt, 2006).

Self-regulated learning (SRL) is a process that students aims to reach the academic success, therefore planning, setting goals, thinking critically, managing time and paying best efforts to solve all kinds of problems and completing different types of tasks intentionally (Zimmerman & Schunk, 2001). Zimmerman (2000) defines SRL as students setting goals and plans, selecting learning strategies that suitable to
their learning, maintaining motivation, monitoring learning and outcomes regularly, evaluating and correcting errors during the whole academic progress. Studies of SRL strongly suggest that students’ academic success can be better achieved when the design of online learning environments involves SRL’s consideration (Rowe & Rafferty, 2013).

Labuhn, Zimmerman & Hasselhorn (2010) defined SRL as a cycle (Figure 1) that mainly contains three sections: forethought, performance, and self-reflection. And these procedures also apply to students learning in the online learning environments.

Figure 1  Zimmerman’s (2000) cyclical model of self-regulation

Pintrich (2000) mentioned that SRL is “an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior”. For students who regulate their learning in the online learning environment, they need to plan and set goals before every action with the on-line resources, digital artifacts, etc. Self-monitoring with what they developed may affect the quality of learning outcomes. Their intrinsic interest, behavior and ability with informational technology may directly affect their motivation. Because of most learning activities through the online learning environment are belongs to student-direct learning, students’ time management, problem solving and effort were also important in the online learning environment. Researchers suggested that e-portfolios could use to enhance students’ learning according to setting goals, reflection, etc. (Fong, et al. 2014).
Bozpolat (2016) believed that gender is one of the important variables in SRL. Her study reported that female students used more self-regulated learning strategies than male students. According to Liaw & Huang’s study (2015), the statistical result that both female and male higher education students have highly positive perceptions according to online learning. The perceived self-regulation has gender difference, and the personal attitudes and learning environments affect gender difference, too. For both SRL and online learning environment are important in the 21st century education sector, we interest to gather more information from the view of gender differences and provide information for further studies.

3. Methods

Start from 2013, all of the undergraduates year 1 students from the Education University of Hong Kong (EdUHK) should develop their e-portfolios through an online environment – Mahara (Figure 2).

![Figure 2 Template for Year 1 student (Mahara@HKIED, 2014)](image)

Based on the course requirement, each e-portfolios should be contained at least students’ personal information, 11 e-journals and 1 essay during two semesters. All students learned of the basic information and technique in the first lecture, tutorials and workshops during the first few weeks in semester 1. The course materials and requirements were stored in the on-line environment – Moodle, which arranged by course coordinator and teachers. Students can also read and download the templates, technical information and other on-line resources from the school’s supporting platform of the Centre for Learning, Teaching and Technology (LTTC) of EdUHK. On the other hand, students can also seek help from teacher and LTTC through email, phone call, face-to-face in need.
3.1 Instruments

Turner (1995) found that “self-report questionnaires are the most frequently used protocols for measuring SRL.” For this study, we used the Self-Regulation of Learning Self-Report Scale (SRL-SRS), which is a self-report questionnaire contains six factors of SRL, which are Planning, Self-monitoring, Evaluation, Reflection, Effort and Self-efficacy (Toering et al., 2012). Toering, and her colleagues (2012) reported that the SRL-SRS is a reliable instrument with good fit and factor loadings were all statistically significant in Confirmatory Factor Analysis (CFA). All Cronbach’s coefficients were higher than the criterion of .70, indicating sufficient internal consistency. CFI and NNFI were higher than .90, and RMSEA was below .08, so these revealed that the SRL-SRS factor structure could be considered equal over time.

For those items were designed for general use, Toering and colleagues (2012) suggested that researchers should arrange reasonable amendment for each items’ wordings therefore to fit the aims of study. After consideration and discussion with experts, and also a pilot study according to students’ actual process when developing their e-portfolios, we amended the SRL-SRS to be a paper questionnaires (Table 1) which contains 46 items, which are Planning (8 items), Self-monitoring (6 items), Evaluation (8 items), Reflection (5 items), Effort (10 items) and Self-efficacy (9 items); for matching with higher education student’s process of e-portfolios only.

<table>
<thead>
<tr>
<th>SRL-SRS (amended version for this study)</th>
<th>Item Qty.</th>
<th>Item No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>8</td>
<td>1 to 8</td>
</tr>
<tr>
<td>Self-monitoring</td>
<td>6</td>
<td>9 to 14</td>
</tr>
<tr>
<td>Effort</td>
<td>10</td>
<td>15 to 24</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>9</td>
<td>25 to 33</td>
</tr>
<tr>
<td>Evaluation</td>
<td>8</td>
<td>34 to 41</td>
</tr>
<tr>
<td>Reflection</td>
<td>5</td>
<td>42 to 46</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>46</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 1

The Final version of SRL-SRS (the self-report questionnaire)

This six factors self-report paper questionnaire cover total 46 items, each item using a five-point Likert scale ‘1= Never to 5=Always’ for Planning, Self-monitoring, Effort, Self-efficacy, Evaluation, and ‘1=Strongly disagree to 5=Strongly agree’ for Reflection. The
reliability coefficients were .91 for Planning, .92 for Self-monitoring, .93 for Effort, .95 for Self-efficacy, .95 for Evaluation and .93 for Reflection.

3.2 Participants

A random sample of 172 undergraduates year 1 students from the Education University of Hong Kong were participant in this study. Participants have been invited to complete the paper questionnaires after they finished to develop their e-portfolios through the on-line environment for two semesters. The sample included 110 female (64.0%) and 62 male (36%), 150 were local students (87.2%) and 21 were mainland students (12.2%), age from 16 to 23, mean of age is 18.9 during the enrollment in 2014 September.

This study used SPSS 21.0 for the quantitative research- data from 172 valid self-report paper questionnaires. On the other hand, individual private interview with 3 female and 3 male students, therefore to collect in-depth responses from students’ point of view; aims to fill the gap and missing information in quantitative research. The entire pre-set interview questions were designed based on the extension of SRL-SRS and also the experience and perception with the e-portfolios in the online environment – Mahara.

4. Results

The quantitative research by using MANOVA - between-subjects effects reported that only Planning (F=4.403, p<0.05) is significant, but with a weak effect size (n^2=0.025). The result indicated that female and male have difference in Planning, however the weak effect size may cause by some issue, such as the size of sample. On the other hand, the result showed that other factors of SRL, which are: Self-monitoring (F=3.638), Effort (F=1.13), Self-efficacy (F=1.711), Evaluation (F=2.593) and Reflection (F=3.114) are all insignificant. The result indicated that after the perception with e-portfolios after 2 semesters, there are no gender differences in most factors of SRL, except Planning only (Table 2).

Table 2

The MANOVA results of 6 factors in SRL (N: F=110, M=62)

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th></th>
<th>Male</th>
<th></th>
<th>Overall</th>
<th></th>
<th>F</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning</td>
<td>3.28</td>
<td>0.63</td>
<td>3.06</td>
<td>0.73</td>
<td>3.20</td>
<td>0.67</td>
<td>4.403*</td>
<td>0.025</td>
</tr>
<tr>
<td>Self-monitoring</td>
<td>3.41</td>
<td>0.65</td>
<td>3.20</td>
<td>0.74</td>
<td>3.34</td>
<td>0.69</td>
<td>3.638</td>
<td></td>
</tr>
<tr>
<td>Effort</td>
<td>3.37</td>
<td>0.63</td>
<td>3.26</td>
<td>0.70</td>
<td>3.33</td>
<td>0.65</td>
<td>1.13</td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>3.32</td>
<td>0.67</td>
<td>3.18</td>
<td>0.70</td>
<td>3.27</td>
<td>0.68</td>
<td>1.711</td>
<td></td>
</tr>
<tr>
<td>Evaluation</td>
<td>3.28</td>
<td>0.73</td>
<td>3.09</td>
<td>0.79</td>
<td>3.21</td>
<td>0.76</td>
<td>2.593</td>
<td></td>
</tr>
<tr>
<td>Reflection</td>
<td>3.33</td>
<td>0.67</td>
<td>3.13</td>
<td>0.84</td>
<td>3.26</td>
<td>0.74</td>
<td>3.114</td>
<td></td>
</tr>
</tbody>
</table>

Note: * p < 0.05  S.D.=Standard Deviation
Although the result from MANOVA showed only Planning is significant and with a small effect size, moreover rejected the hypothesis of all other factors of SRL, such as Self-monitoring, Evaluation, Reflection, Effort and Self-efficacy, we found an interesting picture about the gender differences from the mean scores (Figure 3). All of the mean scores of male according to all factors in SRL are below the overall mean but female are above the overall mean. Indicated that female have higher SRL than male in the online environment.

Figure 3 Gender differences in the mean scores of 6 factors in SRL

On the other hand, we also got some interesting information according to the Gender differences from the individual private interview with 3 female and 3 male students:

CHUNG (female): “Although I was not interest in computing, I interested to learn because e-portfolios was new for me and I aims to get full marks in this course. Therefore I purposely spent effort to improve the layout of e-portfolios, for example, background, alignment and text fonts. I changed of step sequence to achieve quicker and better result based on my actual practice with the e-portfolios. Personally, I like to have good organization of information that may facilitate searching information in future. I believed spending time and extra effort would make it work although not keen on computer.”

YEUNG (male): “Although I planned to follow the e-portfolios template at the beginning, I did not find interest in it. My ability also discouraged my motivation. Furthermore, most of my group-mates are boys; they thought that the e-portfolios was meaningful, so all of us did not willing to pay effort. Therefore I decided to give up the improvement, too. I think that girls will work harder and positive in learning than boys.”
CHAU (female): “I planned every action after I got more information and understanding with the platform and also sharing from few classmates’ work. I decided to upload something that was meaningful in Year 1, for example photos to have better visual impact. I also planned to place all photos in a time sequence order. I trust prior planning helps to have a better grade and better understanding of the subjects.”

KWOK (male): “I did not have any specific plan for each steps of development for the e-portfolios because I am major in Information Technology. I knew the Mahara platform already and think that it is too simply.”

CHEUNG (female): “Although I did not find interest with the e-portfolios and not keen in managing computer related tasks, I never worries and fear with those problems because I seek help from friends and classmates. I also believe that planning can help for my academic result. Therefore I spend much of time to read through the course rubric and understand the requirement before start for developing the e-portfolios.”

MA (male): “Although the lecture and workshop explained the basic information and procedures, I failed to recall it and start for any steps afterwards. I felt that the e-portfolios just an assignment & the requirement is not high, therefore I have less effort with it.”

Both YEUNG (male) and KWOK (male) was not aware of LTTC’s resources or any useful information, websites, on-line resources, hotline & rubric & requirement for e-portfolios arranged by school & never access LTTC’s website.

5. Conclusion and Recommendations

With the result from quantitative research and also some of the responses from interviewees, we got some information showed the gender differences in some factors of SRL, which are Planning, Self-monitoring, Evaluation, Reflection, Effort and Self-efficacy after the higher students’ perception with e-portfolios after two semesters. All means scores of six factors in SRL are showed that males have lower SRL than females through self-report questionnaire. However the data from self-report questionnaire may also affect by the gender differences according to the expression of students’ self-evaluation behavior. On the other hand, the small sample size in both quantitative and qualitative research, sample from only one university of Hong Kong and only Chinese students participated gives limited findings and may not reflect the full picture in this area.

Further studies might be conducted with larger sample size. Samples from different countries, culture, education levels, may be included. According to the gender differences on Self-regulated learning in online learning environments, other factors may affect students SRL, such as students’ personal behavior before their higher education study, design of online learning actives, the interface of on-line environment, the school and teacher’s support, peer influences, etc. Measuring tool for SRL may also considered. For instance, researchers mentioned that students who were high in their overall use of self-regulation strategies sought help more frequently from peers, teachers, and parents and learned more than students who did not seek help (Pintrich et al., 1993). We believed that the investigator for those factors may support or affect students’ SRL is necessary.
References


Appendix

Questionnaire

Section A

Please provide correct information for each item. Please fill in the blank space or choose the correct answer.

<p>| | | | | |</p>
<table>
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<tr>
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<tbody>
<tr>
<td>1</td>
<td>Student Number:</td>
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<td></td>
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<tr>
<td>2</td>
<td>Age:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td>Year of study:</td>
<td>Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Programme:</td>
<td>Bachelor of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I am a student from:</td>
<td>Local / Mainland / Overseas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Gender:</td>
<td>Male / Female</td>
<td></td>
<td></td>
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</tbody>
</table>

Section B

Please tick the answer that is the most appropriate to describe how you work on the e-portfolio:

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Almost never</th>
<th>Sometimes</th>
<th>Almost always</th>
<th>Always</th>
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<td>7</td>
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</tbody>
</table>

1 I determine how to complete each task of my e-portfolio before I begin.
2 I think through in my mind the steps of developing my e-portfolio that I have to follow.
3 I ask myself questions about what difficult task requires me to complete when developing my e-portfolio, before I start.
4 I imagine what difficulties I may encounter during developing my e-portfolio.
5 I carefully plan my course of action to develop my e-portfolio.
6 I figure out the goals of my e-portfolio and what I need to accomplish.
7 I clearly plan my course of action to
8 I work out a plan for developing my e-portfolio.

9 I check my work while developing my e-portfolio.

10 I check how well I am doing upon completion of all tasks of my e-portfolio.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Almost never</th>
<th>Sometimes</th>
<th>Almost always</th>
<th>Always</th>
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<td>1</td>
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<tr>
<td>3</td>
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<td>5</td>
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</tr>
</tbody>
</table>

11 While developing my e-portfolio, I ask myself how well I am doing on each task.

12 I correct errors of my e-portfolio.

13 I check my accuracy as I progress through my e-portfolio.

14 I judge the correctness of my e-portfolio.

15 I keep working even on difficult tasks of my e-portfolio.

16 I put forth my best effort when developing my e-portfolio.

17 I concentrate fully when I do each task of my e-portfolio.

18 I don’t give up even if the task of my e-portfolio is hard.

19 I work hard on a task of my e-portfolio even if it is not important.

20 I work as hard as possible on all tasks of my e-portfolio.

21 I work hard to do well even if I don’t like a task of my e-portfolio.

22 If I’m not really good at a task of my e-portfolio, I can compensate for this by working hard.

23 I am willing to do extra work on tasks of my e-portfolio in order to learn more.

24 If I persist on each task of my e-portfolio, I work hard to do well even if I don’t like a task of my e-portfolio.
portfolio, I’ll eventually succeed.

25 I know how to handle unforeseen situations when developing my e-portfolio, because I can think of strategies to cope with things that are new to me.

26 I am confident that I can deal efficiently with unexpected events when developing my e-portfolio.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Almost never</th>
<th>Sometimes</th>
<th>Almost always</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>If I tied up when developing my e-portfolio, I can think of something to do.</td>
<td></td>
<td></td>
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<tr>
<td>28</td>
<td>I remain calm when facing difficulties during developing my e-portfolio, because I know many ways to cope with difficulties.</td>
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<tr>
<td>29</td>
<td>I manage to complete difficult tasks in my e-portfolio if I try hard enough.</td>
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<tr>
<td>30</td>
<td>It is easy for me to concentrate on the goals of my e-portfolio and to accomplish them.</td>
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<tr>
<td>31</td>
<td>I can complete most difficult tasks of my e-portfolio if I invest sufficient effort.</td>
<td></td>
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<tr>
<td>32</td>
<td>When I am confronted with a difficult task of my e-portfolio, I find several solutions.</td>
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<tr>
<td>33</td>
<td>No matter what comes my way during developing my e-portfolio, I’m able to handle it.</td>
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<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
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<td>---</td>
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</tr>
<tr>
<td><strong>34</strong></td>
<td>I look back what I did to my e-portfolio and check if everything was right.</td>
<td></td>
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</tr>
<tr>
<td><strong>35</strong></td>
<td>I double-check to make sure I did my e-portfolio right.</td>
<td></td>
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<tr>
<td><strong>36</strong></td>
<td>I check to see if my expectations for my e-portfolio are correct.</td>
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<tr>
<td><strong>37</strong></td>
<td>I look back to see if I did the correct procedures of my e-portfolio.</td>
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<tr>
<td><strong>38</strong></td>
<td>I check my work all the way through each task when developing my e-portfolio.</td>
<td></td>
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<tr>
<td><strong>39</strong></td>
<td>I look back at each task of my e-portfolio, to see if my action makes sense.</td>
<td></td>
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</tr>
<tr>
<td><strong>40</strong></td>
<td>I stop and re-think each step I have already done to my e-portfolio.</td>
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<tr>
<td><strong>41</strong></td>
<td>I make sure I have completed all procedures of my e-portfolio.</td>
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<tr>
<td><strong>42</strong></td>
<td>I evaluate the experiences of my e-portfolio so I can learn from each task.</td>
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<tr>
<td><strong>43</strong></td>
<td>I assess my strengths and weaknesses when developing my e-portfolio.</td>
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<td></td>
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<tr>
<td><strong>44</strong></td>
<td>I think about how the actions of developing my e-portfolio can be improved.</td>
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<tr>
<td><strong>45</strong></td>
<td>I utilize my past experiences to generate new ideas in completing my e-portfolio to achieve better results.</td>
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</tr>
<tr>
<td><strong>46</strong></td>
<td>I explore how I can develop my e-portfolio in better ways next time.</td>
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</tbody>
</table>
A Study of the Influence Factors on the Learning Effectiveness of Curatorial Education

Chia-Hua Lin, Tatung University, Taiwan

Abstract

In response to the increasing and sustained growth of exhibition market for Taiwan’s design industry in recent years, which directly reflects the demand for curators in cultural policies and social needs. Nonetheless the instructional courses for the average design related departments in Taiwan falls significant short of curation and other related fields, which could not cope with the demand for talents in curation design. For this reason, the study develops master program in curation with instructional core in experiencing the role of curators. Students may explore into the primary factors that affect the teaching effectiveness of curation through this course. Literature review divides the influence factors of curatorial education into four factors, including curation theories, learning process and motives, self-evaluation, and curatorial experience. In particular, there is a positive correlation influence among learning process, motive factors and specifically learning effectiveness. Moreover, there is an influence of positive correlation among the three factors, curation theories, learning process and motive, and curatorial experience. Moreover, there is a negative correlation between self-evaluation factor and learning effectiveness. It suggested that the future courses focusing on upgrading the introduction of self-learning and achievement in students.

Keywords: Curatorial education, Practical teaching, Learning effectiveness
1. Introduction

The thriving development of design industry in Taiwan in recent years also drives the industry of design exhibition to flourish in Taiwan. Taiwan is growing awareness for the demand in curator fostering and National Culture and Arts Foundation has launched the “curatorial empowering training system” of Hong-Gah Museum in an attempt to foster curators systematically. Nonetheless many curatorial scholars in Taiwan also identify the lack of effective learning platform and channel for fostering curators. The inaccessibility to direct contact with people having practical experience is replaced with experience instruction or small exhibition based practical operation, resulting in the fault of disconnection between theories and practice (Lin Ping, 2010). The key to current design incubation emphasizes on trends in time and demand for talent incubation. Hence it is necessary for designs to establish solid foundation in the knowledge and practice of curation.

For this reason, the research co-designs a curatorial study of “art administration and curatorial practice” through the graduate institute of design. The study collaborates with instructors to jointly design the content of curatorial study targeted at department of design based on the instructional core in experiencing the role of curators. Students will observe, evaluate and reflect on the curatorial knowledge learned and after experiencing curatorial work in person in a learning scenario. Moreover, the study investigates on the specific influence factors on the learning effectiveness of curatorial education. In view of this, the study objectives primarily comprise the following two: (1) Analyze the correlation between “Influence Factors on the Learning Effectiveness of Curation” and “Evaluation Indicators of Learning Effectiveness;” (2) Analyze the impact of correlation of all “influence factors on the learning effectiveness of curation” in addition to draw conclusion on the model for influence factors on learning effectiveness of curatorial education.

2. Literature Review

2.1 Educational Meaning of Curatorial Design

A curator is an intermediary role who makes outbound connection like network nodes and acts as an internal integrator of all information and the reproducer of ideas. Curators establish links to launch exhibitions with success (Lu, Pei-Yi, 2004). The work of curators involves contents of various projects and talents, including art, history, brokerage, mediating and coordination, publicity, exhibition design and fundraising (Heinich and Pollak, 1996). Such work requires coordination with all parties through fairness and openness, treating each other with equality so to form a series of social network effect and creation of production for the exhibition. Moreover, the curation of one exhibition requires the application of design and art knowledge, writing and verbal expression capacity, workpiece selection and planning capacity, the creativity and technology of presenting the exhibition hall visually and
in 3D, as well as the capacity of coordination, communication and problem solving (Wu Cai-Chun, 2011). Professor Ping Lin (2010) specifically mentioned that the incubation of curators requires the seven capacities, including experience in history, classics technology, control of contemporary issues, interdisciplinary technology, field survey, values of ethics, and ability to reflect. One of the necessary roles played by contemporary curators is a responsive and temporary organizer whose role changes at all times to link with different units (Ernest, Zafer and Lizzie, 2009). Moreover, the conceptual importance of curation in discourse becomes increasingly technical and hence the foremost important lesson for the curatorial education training center is help curators establish foundation in theories, concept focus, and the different looks in terms of topic presentation. Curation is integrated with the instruction of design field to essentially provide training for students to acquire the added-value capacity in the overall planning with integration capacity through their expertise in design and arts.

2.2 Evaluation Indicators of Learning Effectiveness

Learning effectiveness refers to the change in knowledge, skills and attitude for students after the instruction (Piccoli, 2001). Betz & Klingensmith (1970) proposed six dimensions: school environment and equipment, administrative measures and planning, instructor characteristics, instructional method, learning effectiveness and peer relationship. Field & Giles (1980) expands the six dimensions into eight dimensions: including the academic enlightenment of teachers, academic enlightenment of peers, participation in schools’ administrative decision, interpersonal relationship with peers, teacher-student relationship, freedom of planning activity, and academic achievement and study pressure. Fang-Ting Ma (1989) in contrast drew conclusion in four dimensions, namely teachers, courses, learning effectiveness, and international relationship. Many studies later also adopt the four factors of effectiveness for evaluation (Wu, Wan-Ru, 1992; Zheng, Tian, 1995; Chen, Wen-Chang, 1995; Wang, Quan-De, 2003). Scardamalia and Bereiter (2006) suggested that learners will need learning motive to learn better while the psychological learning process of learners is one mediator that should not be neglected in the influence on learning effectiveness. Hence, “learning process and motive” is also included as one of the evaluation for learning effectiveness. The scope of constructs for learning effectiveness can be concluded as: theoretical enlightenment, course design, teacher instruction, learning environment, learning outcome, faculty, interpersonal relationship, administrative measures, and teacher-student interaction. The study has compiled the viewpoints on the evaluation of learning effectiveness from literature and concludes into the following factors of curatorial learning effectiveness in accordance with the planning and content of curatorial instruction. Such factors include the four aspects in curatorial theories, learning process and motive, self-evaluation, and curatorial experience, and the evaluation indicators of learning effectiveness, as shown in Table 1 and Table 2.
## Table 1. Influence Factors on Learning Effectiveness of Curation (23 Items)

<table>
<thead>
<tr>
<th>Curatorial Theories</th>
<th>A1. Improve my planning capacity for curation through learning.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>A2. Help me think and express the concepts for curatorial issues.</td>
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<tr>
<td></td>
<td>A3. Understand the work content of curation.</td>
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<tr>
<td></td>
<td>A4. Improve my thinking capacity in curatorial issues through learning.</td>
</tr>
<tr>
<td></td>
<td>A5. Enhance my comprehension on the implementation process of curation thorough learning.</td>
</tr>
<tr>
<td></td>
<td>A6. Improve my proposal skills through learning.</td>
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<tr>
<td></td>
<td>A8. Understand self-characteristics and capacity after learning.</td>
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<td></td>
<td>A9. Review and revise flaws.</td>
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<td></td>
<td>A10. Compile team opinions and collectively solve the problems and difficulties encountered.</td>
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<td></td>
<td>A11. Improve capacity in topic research and thinking creativity</td>
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<td></td>
<td>A12. Enhance the philosophy of teamwork.</td>
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<td></td>
<td>A13. Course planning offers systematic and organizational learning.</td>
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<tr>
<td></td>
<td>A14. Course planning and content are intermediate for me.</td>
</tr>
<tr>
<td></td>
<td>A15. Overall improvement of my acquaintance and hands-on experience in curation.</td>
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<tr>
<td></td>
<td>A16. The collaborative teaching with instructors helps me learn in-depth and understand curatorial courses.</td>
</tr>
<tr>
<td></td>
<td>A17. The professionalism of instructor helps me learn curatorial knowledge.</td>
</tr>
<tr>
<td></td>
<td>A18. The arrangement of curatorial reflection helps me comprehend myself and the learning effectiveness.</td>
</tr>
<tr>
<td></td>
<td>A19. Practical drills enhance my creative aspiration for curation.</td>
</tr>
<tr>
<td></td>
<td>A20. Practical drills helps me understand the focusing method of issues.</td>
</tr>
<tr>
<td></td>
<td>A21. Professional theories and practice can be brought into full play and application.</td>
</tr>
<tr>
<td></td>
<td>A22. Curatorial experience helps me use, plan and learn about exhibition space.</td>
</tr>
<tr>
<td></td>
<td>A23. Practical drills can help me in thinking and effective interaction with the audience.</td>
</tr>
</tbody>
</table>

## Table 2. Evaluation Indicators of Learning Effectiveness (6 Items)

<table>
<thead>
<tr>
<th></th>
<th>B1. Emphasis on both theories and practice of curatorial planning.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B2. The content of curatorial course helps with practical learning.</td>
</tr>
<tr>
<td></td>
<td>B3. Helping me with expansion and learning of new knowledge.</td>
</tr>
<tr>
<td></td>
<td>B4. Enhancing my understanding and acquaintance with curation.</td>
</tr>
<tr>
<td></td>
<td>B5. Meeting my learning expectation and goals in curation.</td>
</tr>
<tr>
<td></td>
<td>B6. Improving my professional skills related to curation.</td>
</tr>
</tbody>
</table>
3. Research Method and Implementation of Curatorial Instruction

3.1 Research Process

The research adopts interview incorporated with semi-structural questionnaire survey as the evaluation method for instructional performance. The objects include 11 students such as 1st and 2nd-year master program students and undergraduate senior students with professionalism in industrial design. Prior to the instruction, the study conducts pre-interview for the fundamental course with students, which content includes (1) Comprehension on curation. (2) Self-professionalism review (3) Investigation on expectation for the course, and background and experience in ideas. Later students take the questionnaire survey for learning effectiveness after the instruction and the training of actual curatorial process experienced by curators.

The questionnaire survey scale includes 2 parts: Influence Factor on the Learning Effectiveness of Curation and Evaluation Indicators of Learning Effectiveness. After receiving the questionnaire, the surveys are analyzed through SPSS statistics software. Apart from the general descriptive statistical analysis of teaching effectiveness, the statistics will be analyzed for the correlation between the evaluation indicators of the two parts with relevant coefficients, in order to draw conclusion on the influence factors of curatorial education. Moreover, the content of interview before and after the instruction will be compared and incorporated to expound the teaching content for reference and development in curatorial teaching.

3.2 Research Model and Hypotheses

The study emphasizes on the relationship model between the influence factors of learning effectiveness of curation and the evaluation indicators of learning effectiveness, as shown in Figure 2. Namely, the study adopts the four influence factors of learning effectiveness of curation (curatorial theories, self-evaluation, learning process and motive, and curatorial experience) to explore into the correlation and impact of evaluation indicators of learning effectiveness. The research model of the study is shown below:
H1: Analyze the correlation of factors in learning effectiveness of curation and evaluation indicators of learning effectiveness.

H2: Analyze the relevant influence curatorial theory factors on learning effectiveness.

H3: Analyze the relevant influence of self-evaluation factors on learning effectiveness.

H4: Analyze the relevant influence of learning process and motive factors on learning effectiveness.

H5: Analyze relevant influence of curatorial experience factors on learning effectiveness.

H6: Analyze the correlation between the influence factors of learning effectiveness of curation.

4. Research Results and Analysis

The study recovered 11 feedback questionnaires of learning performance from students receiving the instruction, with 9 valid questionnaires recovered. The respondents were all from the same department and the age fell in the range between 21-23 years old. In spite of the small sample size of questionnaires, the samples have high level of similarity and centralized background and hence the results of the questionnaires still underwent ANOVA statistical analysis. The statistics were then incorporated with the qualitative data from in-depth interview in an attempt to draw conclusion on the instructional factors of curatorial education through quantitative comparison.

4.1 Overall Performance of Curatorial Education

The overall evaluation on curatorial instruction is shown in Table 3. Seven points is the highest positive evaluation for questionnaire results while B2 is the highest overall evaluation in the evaluation of learning effectiveness, followed by A22, A21 and B4 with relatively higher evaluation. Moreover, the A7 in curatorial instruction factors is the lowest
evaluation in general, followed by A8, A6 and A19 with relatively lower satisfaction in evaluation.

Table 3. Means and Standard Deviation of Questions in Curatorial Instruction Factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>Questions</th>
<th>Means</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation Indicators of Learning Effectiveness</td>
<td>B1 6</td>
<td>0.866</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B2 6.56</td>
<td>0.527</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B3 6.11</td>
<td>0.782</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B4 6.22</td>
<td>0.667</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B5 5.89</td>
<td>0.782</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B6 6</td>
<td>0.707</td>
<td></td>
</tr>
<tr>
<td>Curatorial Theories</td>
<td>A1 6</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A2 6.11</td>
<td>0.601</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A3 6.11</td>
<td>0.928</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A4 6</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A5 6</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A6 5.56</td>
<td>0.882</td>
<td></td>
</tr>
<tr>
<td>Self-Evaluation</td>
<td>A7 5.11</td>
<td>0.928</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A8 5.33</td>
<td>0.707</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A9 5.78</td>
<td>0.441</td>
<td></td>
</tr>
</tbody>
</table>

The foregoing data reveal from curatorial instruction that the understanding and acquaintance of curatorial theories and the integration of instructor result in positive evaluation. Nonetheless, the post-learning self-evaluation, self-performance, learning of proposal skills, and acquaintance with self-capacity all reveal relatively lower evaluation on contrary. Moreover, the level of difficulty for the course also received relatively lower evaluation. Compared with the overall feedback on the pre-course interview and post-course interview, it is inferred that the expectation for exhibition could not have been met due to the restriction of limited, time, space and funds. Small curatorial practice could not provide the actual and comprehensive execution of detailed operation and practice in curation execution. Furthermore, students taking the course intend to learn proposal writing in-depth and strengthen their capabilities into specific factors that can affect self-evaluation and level of difficulty in implementing curatorial experience. The study also will take consideration in this regard for making adjustment and correction in future courses.

4.2 Factor Correlation Analysis

The reliability and validity of questionnaire scale are analyzed prior to analyzing the correlation coefficient. The study verifies the reliability and validity of all factors in teaching effectiveness. The overall Cronbach’s Alpha coefficient is shown in Table 4, reaching as high as 0.962. Moreover, the reliability and validity of the factors is also greater than 0.950, suggesting homogeneity for the questions of the same factors and the measuring questions of the factors come with reliability.

Table 4. Reliability and Validity

<table>
<thead>
<tr>
<th>Factors</th>
<th>Questions</th>
<th>Means</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Evaluation</td>
<td>A10 5.78</td>
<td>0.833</td>
<td></td>
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<tr>
<td></td>
<td>A11 5.67</td>
<td>0.707</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A12 6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Learning Process and Motive</td>
<td>A13 5.89</td>
<td>0.601</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A14 5.78</td>
<td>0.972</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A15 5.67</td>
<td>0.866</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A16 6</td>
<td>0.707</td>
<td></td>
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<tr>
<td></td>
<td>A17 5.89</td>
<td>0.601</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A18 6</td>
<td>0.707</td>
<td></td>
</tr>
<tr>
<td>Curatorial Experience</td>
<td>A19 5.56</td>
<td>1.13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A20 6.11</td>
<td>0.601</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A21 6.22</td>
<td>0.833</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A22 6.33</td>
<td>0.707</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A23 6.11</td>
<td>0.601</td>
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</tr>
</tbody>
</table>
4.2.1 Correlation of questions between factors of learning effectiveness

The correlation coefficients of questions between learning factors of curatorial education are shown in Table 5. The table reveals that there is positive correlation (0.536) between factors “Evaluation Indicator of Learning Effectiveness (B1-B6)” and “Learning Process and Motive (A13-A18).” There is positive significant correlation (0.667*) between factors “Curatorial Theories (A1-A6)” and “Curatorial Experience (A19-A23).” There is positive correlation (0.553) between factors “Self-Evaluation (A7-A12)” and “Learning Process and Motive (A13-A18).” There is positive significant correlation (0.690*) between factors “Learning Process and Motive (A13-A18)” and “Curatorial Experience (A19-A23).” In the item of factor “Curatorial Experience (A19-A23),” it is clear that there is positive significant correlation between factors “Learning Process and Motive (A13-A18)” and “Curatorial Theories (A1-A6).” Moreover, the table also shows negative correlation (-.283) between factors “Evaluation Indicators of Learning Effectiveness (B1-B6)” and “Self-Evaluation (A7-A12).”

Table 5. Analysis of Correlation Coefficient between Factors of Learning Effectiveness

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Evaluation Indicator of Learning Effectiveness (B1-B6) Pearson Correlation</td>
<td>1</td>
<td>.281</td>
<td>-.283</td>
<td>.536</td>
</tr>
<tr>
<td>Pearson Correlation Significance (Two-Tailed)</td>
<td>.463</td>
<td>.460</td>
<td>.137</td>
<td>.668</td>
</tr>
<tr>
<td>Curatorial Theories (A1-A6) Pearson Correlation</td>
<td>.281</td>
<td>1</td>
<td>.289</td>
<td>.446</td>
</tr>
<tr>
<td>Pearson Correlation Significance (Two-Tailed)</td>
<td>.463</td>
<td>.450</td>
<td>.228</td>
<td>.050</td>
</tr>
<tr>
<td>Self-Evaluation (A7-A12) Pearson Correlation</td>
<td>-.283</td>
<td>.289</td>
<td>1</td>
<td>.553</td>
</tr>
<tr>
<td>Pearson Correlation Significance (Two-Tailed)</td>
<td>.460</td>
<td>.450</td>
<td>.122</td>
<td>.182</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.536</td>
<td>.446</td>
<td>.553</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Learning Process and Motive (A13-A18)</th>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha Based on Standardized Items</th>
<th>No. of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.955</td>
<td>.962</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Significance</td>
<td>.137</td>
<td>.228</td>
<td>.122</td>
</tr>
</tbody>
</table>
### 4.3.2 Correlation of Factors of Curatorial Learning Effectiveness

Regarding the correlation of questions between factors, the statistics on correlation coefficients reveal that the positive significant correlation between questions for the three factors, including curatorial theories, self-evaluation and learning process and motive is the closest. More specifically, the correlation is interpreted below: There is positive significant correlation (.678*) between B5 of evaluation factor of learning effectiveness and A18 of learning process and motive factors, suggesting a positive influence of course planning that provide systematic and organizational learning (A18) instruction on the expectation and goals in curatorial learning (B5). Nonetheless there is a high significance of negative correlation from the evaluation factor of learning effectiveness on A7(-.612) and A12(-.722*) of self-evaluation factors, indicating the influence of negative significant correlation on self-satisfaction and teamwork in terms of the actual execution of curation.

With regards to the correlation between the questions of curatorial theories factor and other factors, the questions for curative planning and learning in A1 of Curatorial Theory shows high level of positive significant influence on A13, A15 and A17 of learning process and motive. The correlation reveals positive correlation between the content of curatorial planning instruction on the aspiration of curatorial creativity (.832**), the expansion and application of curatorial theories and practice (.866**), and helping students think and interact with audience (.832**). There is high level of positive significant correlation between A2 of Curatorial Theory Factors and A20 (1**) and A19 (.818**), of Curatorial Experience, A14 (.904**) and (.801**) of A15 Learning Process and Motive, and A10(.804**) of Self-Evaluation. The results suggest positive correlation of the course in helping students with curatorial thinking, conveying acquaintance for curation, level of hands-on difficulty and focus of curatorial issues, theories and practice, and problem solving by team. There is positive significant correlation between A3 of curatorial theories, A13(.697*) and A17(.697*) of learning process and motive, suggesting that in the understanding of curatorial work, there is positive correlation of practical drills on the creative aspiration and thinking in curation as well as interaction with audience. In view of A4 and A5 questions for curatorial theories and the questions for learning process and motive factor, there is high level of positive significance with the exception for A18, suggesting that the thinking training for curatorial issues and comprehension of curatorial process in curatorial teaching have positive correlation with the theoretical and practical application in learning process, and actual curatorial operations. A6 of curatorial theories only shows high level of significant correlation (.802**) with A23 of curatorial experience factors, suggesting the upgrade in curatorial skills has positive correlation on the comprehension and outcome of self-learning.

There is high level of positive correlation between on A9 Self-Evaluation Factor and A13(.839**) , A16(.802**) and A17(.839**) of A13(.839**) Learning Process and Motive
Factor, suggesting that the review and correction for self-deficiency in curatorial practice drills have influence of positive correlation on the upgrade of creative aspiration for curation, spatial application and design, and the interaction with audience in curatorial thinking. There is high correlation between A2(.804**) of A10 curatorial theory factors, A14(.857**) of learning process and motive factor, and A20(.804**), A21(.800**), and A22(.778**) of curatorial experience factor, suggesting the concept and expression of learning curation, focus of curatorial issues, and the professionalism of instructors will help increase acquaintance with curation, so that students will have positive significant correlation in solving problems and difficulties at the curatorial practice training.

Among the factors of learning process and motive, there is high level of positive significant influence on A13 and A1(.832**) , A4(.832**) and A5(.832**) of curatorial theories, and A9(.839**) of self-evaluation factors and A21(.804**) of curatorial experience. The significant suggests the positive correlation between curatorial planning capacity, thinking of curatorial issue and comprehension on curatorial process on the creative aspiration of curation. The A2(.904**) of A4 curatorial theories and A10(.857**) self-evaluation factors, andA19~22 of curatorial experience factors contain high level of significant correlation, suggesting students learning concepts and expression of curatorial issues as well as the collaborative teaching of instructors will also have influence of positive significance. Among the questions in A15, expect for A3, all other curatorial theory factors have high level of positive significance. Moreover, there is high level of positive significant correlation between the A11 (.816**) of self-evaluation and A20 (.801**) of curatorial experience. The results have positive correlation on the comprehension of curative work, theories and practical application, as well as positive correlation between the research and creative thinking capacity for curatorial issues, the upgrade of overall acquaintance. There is positive significant correlation between A17 questions for A1(.832**), A4(.832**) and A5(.832**) of curatorial theory factors, A9(.839**) of self-evaluation and A21(.804**) of curatorial experience, suggesting that there is positive correlation between curatorial planning, thinking ability in curatorial issues, comprehension of curatorial process, instructor collaborated teaching, and the thinking and interaction with audience, in addition to help conducting self-examination in execution flaws.

The high level of positive correlation between A19 of curatorial experience factors, A2(.818**) of curatorial theories and A14(.809**) of self-evaluation suggests a positive correlation between the instructional plan for the comprehension of concepts in curatorial issues and issue focus method with the level of learning difficulty in students. There is positive significant correlation between A20 and the A1~A4 questions of curatorial theory factors, and A10(.804**), A14(.904**) andA15(.801**) of self-evaluation, suggesting a positive correlation between acquaintance and practice of curation, curatorial planning, and the thinking and comprehension for the process and issues. A21 has a positive significant correlation with the A9(.832**) and A10(.800**) of self-evaluation, and A13(.804**), A14(.840**) and A17(.804**) of learning process and motive, suggesting that the collaborative teaching method of instructors has positive correlation with the self-examination and cooperation in teams, focus on curatorial issues, creative thinking and interaction with audience. There is positive correlation between A23 questions and A4~A6 of curatorial theory factors, suggesting that the arrangement of reflective instruction for curation will have the influence of positive correlation on the learning and reflection of self-curatorial theories.
4.3 Model for Instructional Factors of Curatorial Education

The analysis of foregoing correlation reveals that the following model can be formed (Figure 3) based on the learning factors of curatorial education. Research findings shows that there is positive correlation between the factors of “learning process and motive” and “evaluation indicators of learning effectiveness,” suggesting the specific correlation with the influence on learning effectiveness and particularly that organizational learning process can enhance the expectation and objectives for learning. Moreover the relationship between the four factors of curatorial teaching shows a close and significant positive correlation between the “learning process and motive” factor and “curatorial experience” factor. Further analysis of the relevant coefficient suggests that the thinking and focus of curatorial issues and the repurposing of outcome from curatorial theories and actual curatorial experience in the learning process have positive correlation, which can enhance the acquaintance for the overall curatorial work and help the team solve problems jointly. Furthermore, there is a positive correlation between the upgrade of curatorial skills in the instruction and the comprehension and outcome of self-learning. In contrast, there is a mutual positive correlation between the factors of “self-evaluation,” “learning process and motive” and “curatorial experience.” The relevant coefficients of all questions specifically suggest the method of instructors’ collaborative teaching is an important influence factor on the exhibition design and teamwork execution in curatorial practice experience, which can assist students to examine one’s roles in the team and reflect on the doubts in curatorial execution in addition to making self-correction. Likewise, the relation between self-evaluation and learning effectiveness is a completely negative correlation which the study must take into review for future course planning in order to boost students’ self-satisfaction, sense of achievement and guidance in teamwork through the execution of curatorial practice.

![Figure 3. Model for Instructional Factors of Curatorial Education](image)

5. Conclusion and Suggestions

In times of infinite expansion of curation, everything can be curated (Lu, Pei-Yi, 2013). The concepts and issues of curation constantly transform, regenerate and overturn into
physical, digital, cloud, and virtual natures through incessant self-upgrade. Currently Taiwan faces with the massive demand for incubation of curators while it is most urgent trend to develop and expand in courses for curatorial education. With regards to the course designing in design education, few courses focus on the characteristics of designers and introduce curatorial education into the context of design incubation. The study takes consideration of the properties of students from the department of design and the due professional knowledge related to curation for course planning. The study also incorporates with the practical experience of instructors and collaborates with curatorial teaching for students to minimize their difference in cognition and hands-on experience through “leaning” and “application.” In sum of the research results, the study proposes two main research contributions in the follows:

The study compiles literature and the planning and content of curatorial instruction by proposing the “factors of curatorial learning effectiveness” (curatorial theories, learning process and motive, self-evaluation, curatorial experience), and the “evaluation indicators of learning effectiveness.” The aforementioned factors can provide reference for the scale design of relevant research on future curatorial instruction effectiveness under the test with statistical reliability. Moreover the analysis of the correlation coefficient of factors shows a positive correlation between the four factors of “curatorial learning effectiveness factors” in terms of “learning process and motive” and learning effectiveness. The study emphasizes on the systematic design of curatorial courses and allows students to apply what they acquired in course. Particularly the cooperation with instructor discussion to undergo the practical drills of actual experience as curators has positive influence on learning effectiveness, notably the creative thinking for curatorial issues, issue thinking and focus with specific evaluation on the learning effectiveness.

The correlation analysis results of factors in “influence factors of curatorial learning effectiveness” are proposed with a model of curatorial instruction factor. In particular, the “learning process and motive,” “curatorial theories” and “curatorial experience” show high level of significant correlation. In response to the scholar of the literature, the concept of curation has increasingly surpassed the technical dimension. The study adopts curatorial experience approach to establish foundation in students with application of theories to implement the concepts with focus and the practical drills presented through specific issue context. Students of department of design have certain level of technology for product design and printing in the learning course as well as professionalism in product development. Nonetheless the curation of one exhibition is a series of integrated work involving conceptual thinking, deepening of ideas, proposal of self-perspectives, exhibits integration, exhibits context layout and categorization, spatial design and movement planning, and exhibition activity planning from social concept, historical context, and art design context. Such concept is closely related to curatorial education. Hence for the future course planning, the design and execution of the three factors will be closely connected. Moreover, in the curatorial practice drills, students have few experiences in accessing and handling multiple curatorial affairs within short period of time, which has affected the self-evaluation of learning. Therefore for the execution time for curation in practice and the applicability of execution burden are suggested to be divided into small drills by section. Consequently students will be able to accumulate and familiarize with the actual planning work of curation layer by layer during the different stage of learning in order to enhance the validity of curatorial education.
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Empowering Women and Achieving Gender Equality to Be Sustainable Development in the Context of Myanmar

Ni Ni Hlaing, Mandalay University of Distance Education, Myanmar*

Theint Theint Tun, Kyaukse University, Myanmar

*Corresponding Author

Abstract

The present research is an attempt to explore the different dimensions of women empowerment in Myanmar. In the present study various dimensions for 113 respondents have been explored through questionnaire and 39 individuals were included in the interview-based study which was conducted among adult women residing in our own country in 2017. Differences in women empowerment have also been observed across different social groups. The study views women empowerment based on the dimensions namely decision making, access to and control over resources, security, and support by family / freedom from domination, gender awareness and mobility of each women respectively. In this study, women empowerment is explored by using a pre-framed questionnaire and face to face interviews. Women's empowerment is a fundamental issue of development in some countries. The purpose of this study is to uncover the role of women empowerment and promoting gender equality in the social context of Myanmar. Based on the data analyzed, the findings show that the role of women across selected dimensions is less reflected in the context of Myanmar. According to the average data obtained from interviews and questionnaire, the place of women in society is downgraded to contributing minimally to the social development of the country.

Keywords: Women's empowerment, Gender equality, Social Context
1. Introduction

Social scientists and development practitioners have long been interested in the conditions that empower women. The current research takes up this topic anew in the interests of clarifying what we mean by women’s empowerment, how it should be measured and what determines it. In particular, after discussing conceptual issues, we turn to a previously unanalyzed data set collected in Myanmar that permits us to illustrate the key points about the conceptualization and measurement of women’s empowerment. The first point is that power within the household — the particular aspect of women’s empowerment on which we focus — is strongly influenced by social context (national and community) because it is strongly determined by social institutions rather than by individual characteristics. The second point is that all aspects of women’s empowerment are multidimensional and the interrelations among different dimensions depend on social context. The concept of women’s empowerment implicitly assumes that in all societies, men control women — or, to be more precise, men control at least some of the women of their social class, particularly those in their households and families. In this view, women are a “class” in the (two-class) gender stratification system, a system that is governed by shared norms and values.

According to Gupta and Srivastava (2011), empowerment of women and improvement of their economic, social and political status is a highly important end in itself. Women's Empowerment is not only about their economic betterment and reduction in dependency but also about gaining greater control over lives and claiming the rights and entitlement for them. It has become widely accepted that promoting empowerment of women and ending violence against women is essential to achieve poverty eradication, human development and inclusive growth.

Carolyn Hannan (2001) states that Gender refers to the social attributes and opportunities associated with being male and female and the relationships between women and men and girls and boys, as well as the relations between women and those between men. These attributes, opportunities and relationships are socially constructed and are learned through socialization processes. They are context / time-specific and changeable. Gender determines what is expected, allowed and valued in a women or a man in a given context. In most societies there are differences and inequalities between women and men in responsibilities assigned, activities undertaken, access to and control over resources, as well as decision-making opportunities. Gender is part of the broader socio-cultural context.
Equality between women and men (gender equality) refers to the equal rights, responsibilities and opportunities of women and men and girls and boys. Equality does not mean that women and men will become the same but that women’s and men’s rights, responsibilities and opportunities will not depend on whether they are born male or female. Gender equality implies that the interests, needs and priorities of both women and men are taken into consideration – recognizing the diversity of different groups of women and men. Gender equality is not a ‘women’s issue’ but should concern and fully engage men as well as women. Equality between women and men is seen both as a human rights issue and as a precondition for, and indicator of, sustainable people-centred development.

2. Materials and Method

The analysis is based on the data collected in the year 2017 from 113 representative sample of Myanmar women population through questionnaire. Questions regarding other socioeconomic factors, such as current age, age at marriage, and level of education, were asked in the questionnaire. There was an agreement among the participants that "empowerment" has become one of the most widely used development terms. In Myanmar, women's groups, non-governmental development organization, politicians, governments and international agencies refer to empowerment as one of their goals. The sample was restricted to women only because the researchers are interested mainly in the relationship between empowering women and achieving gender equality.

2.1 Sampling of Study Participants towards Questionnaire

For selection of 113 females to be included in the sample for study, they are randomly selected, 70 from downtown and 43 from rural in Myanmar. Women’s lifestyle and behaviour were not restricted very much in this research. Finally, women fulfilling the eligibility criteria (married, 28-59 years) from each household participated to respond towards a predesigned questionnaire. The questionnaire consists of 43 question items covering the selected dimensions of women empowerment. Thirteen questions on ‘Decision making dimensions’, six questions each on ‘Access and Control over resources’ ‘Mobility’ and ‘Security dimensions’, five questions on ‘Gender Awareness’, four questions for 'Support by family / Freedom from Domination' and three questions on ‘Relationship with community / Participation in society’, were asked to each sampled respondent.

2.2 Interview of Study Participants

Study subjects for interviews were women who had ever been married, were residing in Myanmar, had at least one child, and were aged between 28 and 49 years at the time of the interview. The total number of women interviewed was 41; however, 2 were subsequently excluded from the study, as they did not respond to key
questions necessary for the analysis. Therefore, 39 individuals were included in the present analysis.

A face-to-face interview was carried out at the home of each participant by a pair of trained female Myanmar interviewers, using a structured question items. The question items were developed by referencing various survey questions. Information on social status and empowerment of the participant was obtained using a set of relevant questions based around financial stability and the decision-making powers of the participant, and the level of support they received from other members of their household. Age, education, family structure, and other demographic information were also obtained as control variables.

Table (1): Dimension wise relevant questions and responses

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Dimensions</th>
<th>Description</th>
<th>Father / Husband / Son</th>
<th>Mother / Wife / Daughter</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Decision Making</td>
<td>Who in your family takes the following decisions:</td>
<td>61%</td>
<td>39%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• day-to-day household expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Large expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Child related decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Savings and investment decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Financial help to parental family</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Decision regarding your education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Marriage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pregnancy decision</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Own health related decision</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Socialising</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Active participation in any social organizations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Voting decision</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Taking interest in politics / attending campaign</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Access to and Control over</td>
<td>• Do you have access to bank account in your own name?</td>
<td>80%</td>
<td>20%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Do you have access to own earnings or husband’s earnings?</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
resources
- Access to own house or land in your own name
- Any saving in your own name
- Access to newspaper
- Access to politics (Political activities by close relation / own involvement).

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Dimensions</th>
<th>Questions related to the dimension</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
</table>
| 1. Security | • Do you have knowledge about your husband’s financial position?  
• Do you have freedom to spend without permission?  
• Do you feel secure outside home?  
• Do you feel dignified and worthy at home?  
• Are you aware about Laws and rights?  
• Have you ever experienced domestic violence? | 60%  | 40%  | 100% |
| 2. Support by family / Freedom from domination | • Is physical support by your family available in household chores?  
• Are you living with your mother-in-law / daughters-in-law?  
• Have you ever been hit by your husband?  
• Are you regularly hit | 55%  | 45%  | 100% |

According to the data, most of the important decisions and access to and control over resources in the family have been made by the man in the context of Myanmar.

Table (2): Dimensions of women’s empowerment and their corresponding questions in the study questionnaire
<p>| | | |</p>
<table>
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<tr>
<th></th>
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<tbody>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Gender Awareness</td>
<td>Your perception about equality in education and employment among sons and daughters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- About nominee in property and bank balance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- About equality in house work division.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- About male child preference.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Do you support women’s participation in politics?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>55% 45% 100%</td>
</tr>
<tr>
<td>4. Relationship with community/Participation in society</td>
<td>Are you aware of any community activities in your community?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Do you participate in those activities?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Do you have time to participate in the activity?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>39% 61% 100%</td>
</tr>
<tr>
<td>5. Mobility</td>
<td>Can you go to the following places without accompanied by someone?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Day-to-day shopping</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Mall or jewellery shop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Friend’s or relative’s house</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Doctor or clinic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Attending Social function or meeting (parent teacher)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Free to visit and interact with public official.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>43% 57% 100%</td>
</tr>
</tbody>
</table>
Even though Myanmar has witnessed admirable achievements in social development, its progress on gender and women's empowerment indicators is slow; it still has to face considerable challenges. In this respect, the researchers looked into the role of empowering and educating women in maintaining healthy family, society (Freedom of Movement, Support by Family, Decision-making in Daily Life and Relationship with Community) and avoiding the badly socialized and stereo-typed perception of society towards women. Moreover, to bring about social development, removing the badly socialized stereotyped perception of society towards women is also equally important. Women’s decision making power is measured by constructing a series of survey questions on who within the household makes decision on matters that range from day-to-day expenses, big purchases, children’s education and health, savings and investment to respondents’ own health, participation in paid work, number of children to have, social visits and participation in politics. Decision making dimension of each respondent ranges between no power 61% to full power 39%. Culture and social practices determine the lesser role and status ascribed to Myanmar women, whereas they were not born for that. The stereotyped perception of society towards women is unfavorable to the well-being of women as well as to the development of the entire country.

The second dimension, ‘access to and control over resources’, is frequently considered as a key aspect of women’s decision making power and is measured in terms of women’s ability to access their own or husband’s earning, having bank account on own name, property or savings in own name that they can utilize whenever necessary. In this study a set of 6 questions were asked to the sample women. According to the data, 80% of women don't have access to and control over resources in our context.

After that, the study identifies 'Security Dimension' on recognition of the fact that feeling of security is of utmost necessity for women. The study assumes that without security there is no empowerment in real sense. The security dimension was measured by asking 6 questions regarding women's knowledge about husband's or family's financial position, spending freedom, feeling of security outside the home, feeling of dignity and worthiness at home, experience of domestic violence and awareness about legal rights. It was found that a few women reported their experience of domestic violence. According to the data, 60% of Myanmar women feel secure and only a few has awareness about laws and rights.

Family support has been regarded as one of the factors that had an influence on women. It has been found that only 55% of Myanmar women have support by family and they are freedom from domination.

The Gender Awareness Dimension was constructed on basis of women's responses to 6 questions regarding their perception about gender equality in education, employment opportunity, their views regarding equality in nomination in property and bank balance, whether they support gender division of work, male child preference, and priority to daughter's marriage over her employment, same caste marriage and women's participation in politics. Answers to the questions of women supporting equality in education, nomination, housework and participation in politics were
analyzed and supporting male child preference, priority to daughter's marriage and same caste marriage are investigated. The researchers found that although husbands take part in the household’s financial and expenditure responsibilities, only about 55% of them have positive attitude about equality in education and employment among sons and daughters.

Another aspect is relationship with community / participation in society. It is the intension of this research to show their full participation in society. According to the data, all the Myanmar women have awareness of community. Most interestingly, it has been noted that only 39% of Myanmar women can actively participate in society. Women's participation should be given utmost importance in society. This is because women are the invaluable source of knowledge and expertise and are more concerned than men with the society due to the relationship with community and participation in society. This shows that empowering women with greater household decision-making powers and an active part in relationship with community and participation in society is indispensable. To this end, every single one of the country's residents is desperately required to play his or her part. However, taking part in relationship with community and participation in society is indispensable but it is too difficult for Myanmar women. Thus, empowering women to play an equal role in the society, with their special knowledge and expertise, is essential. There were several community-based activities in Myanmar, such as literacy class for the illiterate, and sewing and other handicraft training sessions for women, as well as a nursery for pre-school children, which were run by a local non-governmental organization. The proportion of women who knew about these activities was only a few, and the proportion that had ever participated in any of these activities was very few. The main reasons for this lack of participation, even if the women were aware of the activities taking place, were “I don’t need to participate”; and “I don’t know how to participate”.

Moreover, the third dimension “Mobility Dimension” is measured by asking 6 questions regarding women’s ability to go unaccompanied to places like shopping, jewellery shop or malls, friend’s or relative’s house, doctor or clinic, meeting or social function, visit and interact with public officials. Most of Myanmar women can go without accompanying anyone whereas some with husband accompanied and also found some women who are unable to go to any one of the place alone. According to the data, 57% of Myanmar women have limited freedom of movement and they still need to get permission from the family to go alone outside. Participants answered that they required asking their family for permission to go anywhere, yet the degree of restrictions on movement differed widely among age groups, and was related to their destinations of visit. There is a need to remove such culturally and socially deep-rooted attitudes so that women will be seen as equal to men and enjoy their rights, determine their lives, and fully contribute towards the development of their country. Unless such detrimental perceptions are addressed at the grass roots level, all other efforts will not address gender inequality effectively. For instance, father or husband or son holds the final say in decision making process.

Figure 1:  Dimension wise relevant questions and responses
3. Results

This study aimed to investigate the dimensions of women’s empowerment which are associated with an increased utilization of a country.

The improved awareness of gender was brought by the remarkable social and economic development in any country when the women experienced equality in education, employment, women’s participation in politics, etc.

In this research, we found that there was a significant association between the dimension “support by family and freedom from domination” in the study. As shown in the method section, availability of support from family members in doing chores, it can encourage women, not only by providing the means of physical take-over of the household chores, but also through understanding and sympathy by using good communication among family members.
This research reveals that even though Myanmar women account for over half of the country's total population, the full use of their potential for social development is not being carried out due to the widespread gender gap. This research concludes that attaining development among all the pillars of development is unthinkable without empowering women and obtaining gender equality, thereby using the entire potential of the country. Thus, this research suggests that all of us need to work hard to change the existing position of women and achieve gender equality, which will have a positive spillover effect on the sustainable development of the country. It can be seen that there are some limitations in equipping Myanmar women to be economically independent, self-reliant, have positive esteem to enable them to face any difficult situations and they should be able to participate in development activities.

Selected dimensions: decision-making, access to and control over resources, Security, support by family, community participation and freedom of movement, have equal and interrelated importance and the absence of one will impede others. The Myanmar government is also convinced that sustainable development will be achieved in the country only when balanced development of those three areas is pursued and all citizens benefit from it. In a nutshell, sustainable development requires an all-rounded, comprehensive and integrated development. Therefore, sustainable development denotes achieving a balance among these pillars. Moreover, it is worth noting that the economic strength of women is instrumental in achieving other pillars of sustainable development of the country. Most importantly, empowerment of women is crucial for them to become more active participants of the country. To sum up, women empowerment cannot be possible unless women come with and help to self-empower themselves. Based on the findings obtained, this research calls upon all of us to take the following measures to bring about sustainable development in the country.

• Empowering women and providing them with fair representation across different decision-making levels to better protect women's interests and to achieve quality life
• Protecting the rights of women to make them active participants in the social development and other areas of the country, thereby bringing about sustainable development

4. Discussion

The findings from questionnaire responses indicate that women in Myanmar are least empowered in access to and control over resources dimension and interviews also state that they are more empowered in dimension of support by family / freedom from domination, having 20% and 85% respectively. Thus, women empowerment in Myanmar is indicating a medium level of overall status of empowerment. According to the data, they even need to get permission from their family if they wish to go outside their home. Father or husband or son also holds the final say for the family. They usually make a decision on child’s schooling and family planning. Most of the women do not participate in community activities since they do not have time to join them. Moreover, women are highly affected by environmental problems, and less emphasis is given to their participation in protecting the environment. It is too
difficult for them to help the environment. Thus, Myanmar women are independent to some extent when most of them are free from domestic violence, but at the same time they have only moderate levels of freedom of movement and high levels of fear about disagreeing with their husbands. Here it can be seen in the figure that freedom of movement scale has a moderately high however, interestingly, some expressed fear of disagreeing with the husband and others also experience with being beaten by their husband.

This study has several limitations. First, there might be recall bias in the responses, as the women were asked about their past experiences. Second, the analyses were based on self-reported responses, which might not be exactly same as their actual behaviour. Third, the study was conducted in selected places in the country, thus the findings may or may not be applicable to any other parts of the country.

Our study has also indicated that women should not be the only targets. Encouraging families, as well as the local community, to support women could be equally important and effective. Thus, it can be concluded that if gender equality is not maintained, the country will not achieve sustainable development with the recognition of only men's participation.

Acknowledgement

We would first like to express our gratitude to the participants of the study and their excellent cooperation was greatly valued and appreciated. We are also grateful to the Ministry of Education, Myanmar for giving us a chance to submit the paper and also for the financial support. Then, we would like to thank our colleagues who supported technical assistance and sources of special materials throughout the study.
References


Analysis of the Quality of AR-Craft as an Interactive Promotional Media for Yogyakarta Art Craft Enterprises

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Abstract

Yogyakarta has over 75,000 small craft companies that create various products. In order to compete in the market, they have to publish attractive promotional media. The purpose of this research is to develop AR-Craft Cards and Jogja Craft App as interactive promotional media for Yogyakarta Micro, Small, and Medium Enterprises. The research method is Research and Development (Waterfall Process Model). The research was conducted into several steps: (1) need assessment and literature study, (2) application design, (3) promotional media development, (4) software test, including functionality, usability, portability, efficiency, maintainability, and reliability based on ISO 9126. After conducting all the research steps, the AR-Craft successfully developed the performance of the media generally with the result is “Excellent” consisted of usability 82,98%, functionality 82,5%, reliability 83,3%, portability 85,0%, maintainability 75,0%, and efficiency 75,0%.
Keyword: Media, Promotional, Enterprise

1. Introduction

Indonesia has high potency on local handicraft products, especially in Yogyakarta which has more than 75,000 handicraftsmen (jogjapages.com). With high market demand and local product quality, and the forthcoming challenge of ASEAN Economic Community 2015, we decided to make an innovative promotional media for increasing sales and selling value of product in domestic and foreign market.

According to Gusman (2013), by looking at Indonesia’s competitiveness ranked 5th in ASEAN, this is the perfect time for Indonesia to reform its regulation to be pro-investment, good governance, economics justice including equalization, political stability, social safety and justice, technological innovation, and sufficient infrastructure availability.

A more advanced computer technology combining the real time between virtual and real world, *Augmented Reality*, becomes a media for some developers to build useful application for raising Indonesian economics and prosperity. Lazuardy (2012), a Head of IT Division AR&Co Indonesia said, “*Augmented Reality* which combines the real time between virtual and real world is an excellent solution and influential to brand awareness of a product, so it will increase the sales of a product.”

The facts above encouraged us to develop new and interactive promotional media for micro, small, and medium enterprises’ products in book form based on Augmented Reality technology. With this innovation, we expected that it could be a new promotion media to introduce local handicraft products that would create new type of interaction among human, computer, and the product.

2. Theoretical Background
Azuma (1997) defines *Augmented Reality* as a combination of real and virtual things in the real environment which works interactively in real time and involves an integration of objects in 3 dimension that is integrating virtual objects in the real world.

Augmented Reality Technology, also known as AR, will break the limit between real world and computer output, so that we can see, hear, feel, and smell as shown in Picture 1. Lazuardy (2012), Head of IT Division AR&Co Indonesia said Augmented Reality technology creates new kind of interaction between human and computer.

AR-Book consists of “AR” means Augmented Reality and Book. It can be interpreted as a book which combines virtual world and real world in real time. AR-Book can show pictures of a book visually which can move in 3D, video, audio, and image in the real time.

![Picture 1. Augmented Reality](image)

ISO 9126 Quality Factor Model is the international standard for evaluating software. ISO 9126 quality factor model identifies six points of main quality. These ISO characteristics would be used as a variable for software testing. The variable is based on the most relevant characteristics towards the software to produce a good quality test, that is having a high probability of finding the fault (Myers, 2004).

### 3. Method

This research used Research and Development method. Sugiyono (2009) in his book states that “Research and Development is a method of research which is used to produce certain product and to test the effectiveness of the product. The development of AR-Craft use Linier Sequensial Model (Waterfall Model).
The development of AR-Craft using Augmented Reality was conducted in Informatics Engineering Department’s laboratory of Yogyakarta State University, on July 2015 until August 2015. Whereas, the trial to users was in Vocational High School of Wonosari, Gunungkidul, Yogyakarta.

According to Simamora (2005:27), so the calculation is:

\[ RS = \frac{m - n}{b} \]

Note:

- \( m \) = The highest scores on the scale
- \( n \) = The lowest scores on the scale
- \( b \) = sum of class or category has created

Authors interpret the measurement results through semantic differential scale with five scale, \( m = 7 \), \( n=1 \), into five category (\( b=5 \)), so the calculation is:

\[ RS = \frac{(m-n)}{b} \]

\[ = \frac{(7-1)}{5} \]

\[ = 1.2 \]

So, the standards for 5 categories which are formed with pole 7 as the positive pole is as follows:

\[ \text{Table 1. Table of Scores Range} \]

<table>
<thead>
<tr>
<th>Scores Range</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 2.2</td>
<td>Poor</td>
</tr>
<tr>
<td>2.2 – 3.4</td>
<td>Fail</td>
</tr>
<tr>
<td>3.4 – 4.6</td>
<td>Good</td>
</tr>
<tr>
<td>4.6 – 5.8</td>
<td>Very Good</td>
</tr>
</tbody>
</table>
Then, can be made presentations in continuum interval categories as follows:

![Interval line for percentage categories](image)

Picture 2. Interval line for percentage categories

### 4. Discussion

In this paper, the product is an application of Jogja AR-Craft Cards which uses Augmented Reality Technology and the printed of Jogja AR-Craft Cards. Jogja AR-Craft Cards software was made using tool from ARToolkit. The demonstration and explanation the work of system is as follows:

#### 4.1. Jogja AR-Craft Cards

Jogja AR-Craft Cards are a card that is used as a promotional media of Jogja AR-Craft and contains 1) Yogyakarta handicrafts, 2) User Guide, dan 3) Developer information based on Augmented Reality technology.

![Jogja AR-Craft Cards](image)

Picture 3. Jogja AR-Craft Cards

Jogja AR-Craft Card contains marker on the right side of the page while information about the name of handicraft, description, category, price, address, and contact person of handicraftsman is on the left side as shown in Picture 4 below. The
function of marker on the page is to display a craft object in 3 dimension in Augmented Reality when faced on the computer screen.

![Marker](image)

Picture 4. Pages of Jogja AR-Craft Card

### 4.2. Jogja AR-Craft Software

Jogja AR-Craft software is the one package with Jogja AR-Craft Card. It is used to read the marker on the page. Jogja AR-Craft software was already programmed and contains database of Yogyakarta handicraft products.

![Picture 5. Output from PC’s webcam](image)

### 4.3. How “Jogja AR-Craft” works

1. Open Jogja AR-Craft software by clicking the shortcut.
2. Then, it shows up the initial setting (Property Sheet Properties) on the screen as displayed in Picture 7.

Picture 7. Property Sheet Properties

3. After the user sets the property sheet properties, webcam will be activated immediately.

4. Take Jogja AR-Craft and face the book cover toward the web-cam.

Picture 8. Before

Picture 9. After

5. Open the first page that contains the user guide of Jogja AR-Craft. Then face it to the webcam, so the page will show the user guide in augmented reality as shown in Picture 10.

Picture 10. User Guide Pages
6. The next page is the products of Yogyakarta handicraft. Face it toward the webcam, and the 3D object will appear as shown in Picture 11.

![Handicraft product pages](image)

Picture 11a. Handicraft product pages

Jogja AR-Craft demo had been in accordance with use case design from start until finish without error in the software.

4.4. Alpha Testing

Alpha Testing was executed to get the result of quality analysis from the software developed. The result of this test is in the form of questionnaire study result by media expert in the terms of functionality, reliability, portability, maintainability, and efficiency (ISO 9126).

This is the table of media testing result which was performed in the terms of functionality, reliability, portability, maintainability, and efficiency.

<table>
<thead>
<tr>
<th>Num</th>
<th>Testing Aspect</th>
<th>Number</th>
<th>Media Expert A</th>
<th>Media Expert B</th>
<th>Tot</th>
<th>%</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Functionality</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>9</td>
<td></td>
<td>82.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Reliability</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td></td>
<td>83.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Portability</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>9</td>
<td></td>
<td>85.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Maintainability</td>
<td>10</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td></td>
<td>75%</td>
</tr>
</tbody>
</table>
Based on the test result by media expert, the quality software from functionality terms is 82.5%, from the reliability is 83.3%, from the portability is 85%, from the maintainability is 75%, and the efficiency is 75%. Overall percentage software quality is 80.17% and categorized as “Very Good”.

4.5. Beta testing

Beta testing was conducted to know the feasibility of this application in usability terms. Usability testing was taken from Usability questionnaire by Jr. Lewis. Software demo can successfully be approved using the questionnaire consisting of 19 question items with 60 respondents.

Here is the result of the calculation of average data from questionnaire. Total answers collected is 6622. Divided by 60 respondents, the average answers for each respondent is 110.37 with 19 question items. To explain the average for each item is

\[ X = \frac{110.37}{19} \]

\[ = 5.80 \]

Average result is X = 5.80, which is categorized as “Excellent”. Then the interval category percentage was made by calculating the data percentage. The data was tabulated by calculating the total score criterion (if each item gained the highest score) = 7 x 19 x 60 = 7980. With the highest score in each point = 7, the total point = 19, the total respondent = 60, whereas score results of collecting data = 6622. Therefore, the usability level of “Jogja AR-Craft” based on the sample from 60 respondent is (6622 : 7980) x 100% = 82.98% from represented criteria.

Alpha testing was conducted by the developers and the media experts to analyze the software quality. Aspects of software quality tested consisted of functionality, reliability, portability, maintainability, and efficiency aspects. Beta testing was conducted to test the software usability. The testing was conducted by 60 teenagers of Maarif Wonosari Vocational High School. Table 9 shows the result of alpha and beta testing.

<table>
<thead>
<tr>
<th>Num</th>
<th>Aspect</th>
<th>Result</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>bility</td>
<td>11</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Efficiency</td>
<td>12</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Tabel 3. Testing Result
1. **Functionality**
   1. Software could do 82,5% functions correctly.
   2. All function worked correctly and accurately.
   - Very Good

2. **Reliability**
   1. Software gained 83,3% reliability value.
   2. Software hard to crash or stop working suddenly.
   3. Software could endure and recover from system failure.
   - Excellent

3. **Portability**
   1. Software gained 85% portability value.
   2. Software could run in all version of Windows OS.
   3. Software could run in all screen size.
   - Excellent

4. **Maintainability**
   1. Software gained score 75% for maintainability
   2. Software was upgradable
   - Very Good

5. **Efficiency**
   1. Software gained 75% efficiency score
   2. Software was not lagging
   3. Software had efficient program algorithm
   - Very Good

6. **Usability**
   1. Software gained 82,98% usability value
   - Overall users were satisfied with Jogja AR-Craft
   - Excellent

## 5. Result
From those discussion, it can be concluded that: The development of this book media has been developed through a series of software engineering from designing to product testing, had been in compatible with specification; The result of quality analysis for Jogja AR-Craft as a promotional media for micro, small, and medium...
enterprises handicraft product in functionality is 82.5%, in reliability is 83.3%, in portability is 85%, in maintainability is 75%, and in efficiency is 75%. On the whole, the quality percentage is 80.17% and can be classified as “Good”; the results of the feasibility test by users resulted in usability value of 82.98%, so it can be concluded that Jogja AR-Craft using Augmented Reality Technology was highly proper as a promotional media for handicraft products of micro, small, and medium enterprises in Yogyakarta.

References


Women empowerment: A case study of Myanmar employed women and housewives

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Khin Mar Mar, Mandalay University, Myanmar

*Corresponding Author

Abstract

This research analyzes multiple measures of women’s empowerment in the context of Myanmar. Empowerment is a multidimensional social process, which can change our life and social status in the society. In the present research, an attempt has been done to evaluate the impact of women empowerment on employed and housewives of Myanmar. Sample size of 107 comprising of employed and housewives was selected to respond the closed ended questionnaire consisted of 15 statements. Primary data were also collected by interviewing 31 women who are educated as well as
housewives. The limited size of sample was chosen to avoid response errors. The results show that Myanmar women's ability to make strategic life choices in that educated and employed women are in a better position and have participative and decision powers in making family economic and social decisions. This indicates that employed women have positive impact on their family life. Thus, they gain control over their own lives, their decision for children's education, and in their society by acting on issues that they define as important. It has been also found that women's empowerment is all about allowing and equipping women to make changes by democratic ways. Some Myanmar housewives remain underrepresented in decision-making positions in most spheres of economic, social and family living standard. In conclusion, the analysis shows that, consistent with the theoretical approach employed here, which treats gender relations as heavily influenced by community norms and values, community is a far stronger predictor of women’s empowerment than are individual traits. The relationship of both community and individual traits to different measures of empowerment vary, suggesting that “empowerment” is inherently a multi-dimensional phenomenon, with women relatively empowered in some spheres but not in others. The primary policy implication is the importance of changing community norms and values about gender relations for empowering women. The results also suggest that policies to enhance their educations and open greater employment opportunities will also help to empower them, at least in some respects.

**Keywords:** Women empowerment, Employed women, Housewives

1. **Introduction**

The current research focuses on women’s empowerment in the domestic sphere — that is, their freedom from control by other family members and ability to affect desired outcomes within the household. Empowerment has been argued to be important for development because it determines the extent to which women gain access to education, are able to seek employment outside of the family, can acquire contraceptive information, and have the freedom to act on their fertility preferences or on the illnesses of their children, among other dimensions (Caldwell 1986; Dyson and Moore 1983; World Bank 2001). Education, too, is often argued to increase women’s empowerment by increasing their self-confidence and understanding of how to operate in the world (Cochrane 1979). In addition, one of the most important products of education, literacy, is said to increase women’s independence from other family members by giving them the means to learn about the outside world on their own (Jejeebhoy 1995). Education has also been argued to enhance women’s value on the labor market and hence their income, which is in turn said to decrease their dependency on other family members and hence increase their empowerment (Cochrane 1979, Safilios-Rothschild 1980). Employment is argued to improve women’s empowerment for similar reasons, i.e., because it gives women access to their own earnings or contributions to family income that in turn increase their understanding of money, right to participate in financial decisions, or financial independence. The particular aspects of domestic empowerment we examine are:
Women’s economic decision-making power — do they participate in the family’s major decisions and have the freedom to make minor decisions on their own?

Women’s social decision-making power — do they participate in the family’s major decisions and have the freedom to make minor decisions on their own?

Their skills and force, specifically, personal power and collective power?

Thus, we focus on what women believe their empowerment to be rather than on what they believe their empowerment should be or how they empowered actually are. We ignore women’s empowerment in contexts other than the family and household, for example, their ability to affect desirable outcomes in school, the workplace or the community. We have three goals in studying women’s domestic empowerment.

Firstly, we want to illustrate the multi-dimensional nature of women’s empowerment and show how interrelationships between different aspects of empowerment are themselves affected by social context. In other words, women with a high degree of economic decision-making power do not necessarily have a strong say in family size decisions, a high level of freedom of movement or a low level of coercive control by the husband. Because gender systems may allocate power to women in some spheres while denying them power in others, different aspects of women’s empowerment do not invariably rise and fall together.

The second empowerment measure is towards women’s participation to variation in gender systems by showing that women who live in our contexts having differing gender systems indeed report themselves to have differing levels of empowerment — and not simply because they have differing personal characteristics. Thus, we measure women’s exposure to personal power and collective power through two items.

2. Materials and Method

The data analyzed in this research were collected through questionnaire as well as household interviews with married women aged 25-59 in the sampled communities. Interviews covered a range of subjects, but a major focus was on women’s empowerment. In the analysis we focus on specific measures of empowerment. The first is concerned with women’s say in household economic decisions. It is based on questions asking whether women have any say on family budgeting or family business freely without involvement of their father or husband or son and whether they have the most say in using family resources (time, money, friends, etc.) for making economic decisions, plus questions asking whether they want to increase positive image of uplift of family economic position by overcoming negativity their freedom to make two kinds of purchases without getting permission from other family members.
The second empowerment measure is towards women’s participation in making social decisions. This scale is based on three questions, one asking whether they make social decisions freely without involvement of other family members and the second for woman's participation in decisions about options especially for children’s education, their health and social factors. The last one asks if they want to increase social status of family by overcoming negativity.

The third empowerment measure is related to both the personal and collective level measurements with regard to practice personal power, to exercise or implement opinions or attitudes to collective decisions in terms of face to face discussion with other family members as well as by working together with them at the same time and to practice their collective power.

The analysis is based on the data collected in the year 2017 from a representative sample of Myanmar women population. In this research, primary data required were collected by interviewing 52 women who are educated and housewives. Due to cultural and ethnic values, there are probabilities that women may not give the answers and there are probabilities that some women hide their real position in family life. Hence, closed ended questionnaire was also used for 102 employed and housewives to respond in the present research. In the interview and also for questionnaire, various questions were framed to get information based on the following questions. In addition to attitude items, the interview administered in Myanmar included some supplementary questions concerning financial arrangements and the allocation of responsibilities within the family. The sample was restricted to women only because the researchers are interested mainly in the relationship between women’ employment and household responsibilities.

2.1 Data Collection through Questionnaire

Question item 1 of the questionnaire asked whether women can make their economic decisions freely without involvement of their father / husband / son. Seventy percent of employed women responded positively and only 35% of housewives responded "yes" that employed women are getting due respect and making important decisions on family budgeting or family business. When the respondents were asked question item 3 which is about their access and information of family resources for making economic decisions, results indicate that 81% of employed women who are earning have access and information of family resources and even participating in economic decisions. However, only 48% of housewives have limited rights to use family resources (time, money, friends, etc.) for making economic decisions. Result from item 13 that is whether women can increase positive image of economic status of family by overcoming negativity is that majority of employed and housewives respondents (89%) and 83% positively responded and this indicates that employed women are more interested to see the uplift of family economic position.

Table 1: Responses of Myanmar employed women and housewives towards economic decision
<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Employed Women</th>
<th>Housewife</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>1</td>
<td>Do you usually make your economic decisions on family budgeting or family business freely without involvement of your father or your husband or your son?</td>
<td>72%</td>
<td>28%</td>
</tr>
<tr>
<td>3</td>
<td>Do you have any right to use family resources (time, money, friends, etc.) for making economic decisions?</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>13</td>
<td>Do you want to increase positive image of uplift of family economic position by overcoming negativity?</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>81%</td>
<td>19%</td>
</tr>
</tbody>
</table>

According to the above data, a woman’s paid employment is associated with higher levels of financial decision-making power in our country. In terms of individual-level determinants of women’s empowerment, this analysis suggests that aspects of women’s empowerment across a wide range of settings include their economic decision-making power which enhances decision-making power; and education, which is associated with women’s employment opportunities. Our results are consistent with policy recommendations concerning women’s empowerment that emphasize investing in the schooling of girls, and enhancing women’s employment opportunities.

Figure 1: Responses of Myanmar employed women and housewives towards economic decision

The second question item asked whether women can make their social decisions freely without involvement of their father / husband / son. Mostly employed women (71%) responded positively and 65% of housewives responded negatively which indicate that employed women are getting due respect and importance in family decisions.

For question item 4, when the respondents were asked if they have a range of options especially decision for children's education, selection of future field of
specialization, health and hospitality, the respondents that are employed as well as housewives equally responded for yes and no. This indicates that our country still needs change in the form of women participation.

For question item 14, that is if women can increase positive image of social status of family by overcoming negativity, majority of employed respondents (88%) and housewife (83%) positively responded and this indicates that most of the women are interested to see the uplift of family social status.

**Table 2: Responses of Myanmar employed women and housewives towards social decision**

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Employed Women</th>
<th>Housewife</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Can you make your social decisions freely without involvement of your father / husband / son?</td>
<td>71% 29%</td>
<td>35% 65%</td>
</tr>
<tr>
<td>4</td>
<td>Do you have options especially decisions for your children’s education, their health and social factors, so that you make choices?</td>
<td>60% 40%</td>
<td>54% 46%</td>
</tr>
<tr>
<td>14</td>
<td>Do you want to increase social status of your family by overcoming negativity?</td>
<td>88% 12%</td>
<td>83% 17%</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>73% 27%</td>
<td>57% 43%</td>
</tr>
</tbody>
</table>

**Figure 2: Responses of Myanmar employed women and housewives towards social decision**

For item 7, when respondents were asked if they are skillful to improve personal economic and social power, almost all working women are more powerful than housewives.
Table 3: Responses of Myanmar employed women and housewives towards personal power

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Employed Women</th>
<th>Housewife</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Do you have skills to practise your personal power?</td>
<td>99% 1%</td>
<td>61% 39%</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>99% 1%</td>
<td>61% 39%</td>
</tr>
</tbody>
</table>

Figure 3: Responses of Myanmar employed women and housewives towards personal power

Regarding question item 5, when respondents were asked if they are skillful to improve collective economic and social power in terms of face to face discussion with their father or your husband or your son, 81% housewives responded "yes" while 73% employed responded "yes".

Regarding question item 6, when respondents were asked if they are skillful to improve collective economic and social power by working together with their father or husband or son at the same time, 61% working women responded yes and over 80% housewives responded yes.

Regarding question item 8, when respondents were asked if they are skillful to practice their collective power (the ability to control people or things), 65% working women responded yes and only 36% housewives responded yes.

Table 4: Responses of Myanmar employed women and housewives towards collective power

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Employed</th>
<th>Housewife</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>5</td>
<td>Do you usually exercise or implement your opinions or attitudes to collective decisions in terms of face to face discussion with your father or your husband or your son?</td>
</tr>
<tr>
<td></td>
<td>73%</td>
</tr>
<tr>
<td>6</td>
<td>Do you usually exercise or implement your opinions or attitudes to collective decision by working together with your father or your husband or your son at the same time?</td>
</tr>
<tr>
<td></td>
<td>61%</td>
</tr>
<tr>
<td>8</td>
<td>Do you have skills to practise your collective power (the ability to control people or things)?</td>
</tr>
<tr>
<td></td>
<td>65%</td>
</tr>
<tr>
<td></td>
<td>Average</td>
</tr>
</tbody>
</table>

**Figure 4: Responses of Myanmar employed women and housewives towards collective power**

For item 9, nearly 80% of respondents from both employed and housewives answered yes when they were asked about the possibility of changing others perceptions by democratic ways. It is very surprising to note that even housewives expressed similar opinion although they have different opinions in economic condition and greater financial autonomy.

Regarding question item 10, most of the women responded yes when they are asked whether they have positive approach for bringing social changes, which is indication that housewives are more interested in social changes.

For item 11, all employed women responded yes when asked whether they have positive approach for bringing economic changes, and have a clear idea about their economic changes.
According to item 12, respondents were asked whether they involved themselves in the growth process and changed which was never ending self initiated, most of the employed respondents said yes. This indicates that almost all the women are dedicated to improve family living standard.

Table 5: Responses of Myanmar employed women and housewives towards collective power

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Employed Women</th>
<th>Housewife</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Can you change your perceptions (the way you think about or understand someone or something) by democratic ways (people should be treated equally)?</td>
<td>78% 22%</td>
<td>79% 21%</td>
</tr>
<tr>
<td>10</td>
<td>Do you have positive approaches for bringing social changes?</td>
<td>80% 20%</td>
<td>91% 9%</td>
</tr>
<tr>
<td>11</td>
<td>Do you have positive approaches for bringing economic changes?</td>
<td>100%</td>
<td>82% 18%</td>
</tr>
<tr>
<td>12</td>
<td>Do you usually involve yourself in the family living standard and changes which are never ending self-initiated?</td>
<td>90% 10%</td>
<td>82% 18%</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>87% 13%</td>
<td>83% 17%</td>
</tr>
</tbody>
</table>

Figure 5: Responses of Myanmar employed women and housewives towards collective power
For question item 15, almost all the employed respondents responded yes when they were asked about their feelings that they have sense of self-worth. This clearly indicates that employed women have their visions and almost none of them said no. However, only 52% of the housewives respondents responded yes towards their feelings that they have sense of self worth. Thus, the data clearly indicate attitudinal difference between employed and housewives towards their self image.

Table 6: Responses of Myanmar employed women and housewives towards sense of self worth

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Employed Women</th>
<th>Housewife</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>15</td>
<td>Do you have sense of feeling that you are a good person who deserves to be treated with respect?</td>
<td>99%</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>99%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Figure 6: Responses of Myanmar employed women and housewives towards sense of self worth

For interview questions, all respondents provided detailed background and employment information for themselves. This made it possible to construct a file so that information was provided on wife’s characteristics and on household arrangements. Three dimensions of household activities are examined: housework, responsibility for household expenditures, and control of household finances. Respondents were asked to report who is primarily responsible for household chores (the wife, the husband, both equally, or a third person) in four different areas of housework. These included doing the laundry, home repairs, care for sick family
members, and shopping. Home repairs is clearly a male-dominated task, and shopping is not gender specific and is considered by both spouses as a pleasant activity. Taking care of sick family members is a chore that has not been studied frequently in the context of family division of labor. Nonetheless, interviews that have focused on care work within the household found that it tends to be women’s chore. In line with the proposition discussed for the responses of the questionnaire, it was expected that when women are employed, less desirable tasks such as doing the laundry and taking care of sick family members become more equally shared. This, however, should not affect the distribution of the other two tasks.

A second area of family arrangements is responsibility for household’s expenditures. More specifically, this refers to the person (husband, wife, or both) primarily responsible for expenditures in each of six different areas: expenditure on food, expenditure on vacation, payment of municipal taxes, payment of bills, purchase of household goods, and household maintenance expenses. Expenditures in all areas are expected to be managed on a more egalitarian basis in households where the women hold full-time jobs. Last, the topic of money management refers to whether the wife, the husband, or both manage the household money. Respondents were asked whether the husband administers the family financial resources and relegates the wife a certain share, whether the wife does this, whether they pool their financial resources and have independent access, or whether each takes care of his or her money separately. The researchers regard as equal sharing all cases in which the couple pools their resources and both have access to the household’s money. It is expected that in households where women are employed, the control of household finances will be more equally shared compared to households in which women are fulltime housewives or hold a part-time job. In all, the authors examine four aspects of housework tasks, six areas of household expenditure, and one indicator of money management.

In each of the analyses, the dependent variable denotes whether both the husband and the wife are equally responsible for the specific task. All the analyses thus use a logistic regression technique to estimate the likelihood of egalitarian arrangements. Employment status, the main independent variable, classifies women into one of two categories: housewife and employed. In addition to employment status, the models included several control variables that are commonly used in the study of household division of labor. These include labor force status of wives and their education, whether the wife’s earnings are equal or more than her husband earnings. The operational definition of these variables and the descriptive statistics of the sample are considered.

3. Results

The current research takes up this topic anew in the interests of clarifying what we mean by women’s empowerment, how it should be measured and what determines it.

According to the 12 Critical Areas for the Advancement of Women Defined in 1995 by the U.N. Conference on Women in Beijing, China, women remain
underrepresented in decision-making positions in most spheres of economic, political, religious, athletic, arts, media, law, culture, and scientific activities. In particular, after discussing conceptual issues by interview method and using questionnaire, we turn to a previously unanalyzed data set collected in Myanmar that permits us to illustrate key points about the conceptualization and measurement of women’s empowerment. The first point is that power within the household — the particular aspect of women’s empowerment on which we focus — is strongly influenced by social context because it is strongly determined by social institutions rather than by individual characteristics. The second point is that all aspects of women’s empowerment are multidimensional and the interrelations among different dimensions depend on social context.

4. Discussion

The world population is growing at an alarming rate. As one instrument of women's empowerment, educational access has been equally giving to women. The education of girls and women plays a tremendous role in social development. However, Myanmar women are not well educated compared with men. Their access to education has been hindered by traditional customary attitudes. For this reason, the knowledge of women regarding family planning is poor, especially in rural areas.

Moreover, family is the psychological agent of society, as parents, who are the representatives of the social character of their society or class, transmit to the child what we may call the psychological atmosphere or the spirit of a society just by being who they are. Therefore, attitudes and perceptions developed towards women regarding their status, role, and jobs are importantly learnt from family.

Therefore, one cannot undermine the role of the housewives in particular in shaping the behaviour of children. It is the housewives who, from early childhood on, up brings the children and who have frequent face-to-face interaction with children in their early years. Hence, when the housewives is educated, equally treated, empowered, and has a say in the treatment of children and the management of the family, it is less likely that the children will have badly constructed, discriminatory perceptions towards women. Thus, the stereotyped perception of society should be addressed at the family level so as to transform society in general and to bring about sustainable development.

According to the data, it was also clear that empowerment can be observed at different levels. The above-mentioned definitions already point to interpersonal relations and institutions as possible sites of empowerment. The researchers look at the individual level when we cite definition of empowerment as "the ability to direct and control one's own life". But it is clear that such an individual empowerment of Myanmar women is attained in relationship to the larger society. It is a process in which limited women gain control over their own lives by knowing and claiming their rights at all levels of society at the local, and household levels. Self-empowerment means that women gain autonomy, are able to set their own agenda and are fully involved in the economic and social decision-making process.
The findings of this analysis also suggest that some of the policies traditionally used to empower women — greater levels of schooling and better employment opportunities for women — may indeed contribute to women’s empowerment across a wide range of settings. As a result, in the present research, it was observed that educated women and working women are empowered than housewives because they are financial independency. They are in better position in the society and have decision making power for home and about children’s future. Highly educated and employed women can impact their family position and on standard of living, skill to change other’s perceptions. The result of the study shows that education has positive impact on women’s family position. Results from the present study also indicate that good quality of education to Myanmar women may help in uplifting society and hence country.

Acknowledgements

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Self Learning Assistant (SLA) as a Way to Develop Easy Access E-learning Open Source Collaborative for Student

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Abstract

Ease in accessing the learning materials are still difficult to obtain student Indonesia. The material obtained student currently only relies on teachers who come from one of the same institution. This paper discuss the development of the ease of accessing E-Learning Open Source Collaborative for Indonesia’s Student use Self Learning Assistant (SLA). The method that we use for research is Research and Development and the goal of the research is to create and develop access Open Source E-Learning Collaborative. Collaborative Learning becomes a necessity for students in Indonesia. We find that 100% of the 30 respondents need lessons from different teachers and various agencies are easy and free. Self Learning Assistant (SLA) is an Open Source E-Learning Collaborative for the student of Indonesia. SLA has features that allow students to learn independently with the two-way interaction and equipped learning materials from various educational institutions in Indonesia. To add to the student's level of understanding, the SLA provides a Self Learning Electronic Book (SLE-Book). SLE-Book has advantages i.e. There is Audio Visual system in learning. Augmented Reality add SLE-Book more interesting for Indonesia’s student. With the SLA is expected to facilitate the student's learning access Indonesia wherever, whenever, effectively and efficiently. Recommendations for an SLA that is, the need for the development of SLA, SLA so that objects can be used also by informal learners.

Keywords: Self-learning, Easy access, E-learning;

1. Introduction

Indonesian students are difficult to accessing learning materials. The materials obtained by the learner currently depends on the teacher who comes from the same institution. Implementation of E-Learning in teaching and learning process has become an important requirement today (Jirasak et al, 2014). E-Learning technology has changed the paradigm of learning process model using various electronic media (audio/video) that has dependence on internet technology (Jirasak et al, 2014 & Jiri K, 2013). The teaching and learning process is no longer dependent on the place and time and can improve the motivation to learn the teachers and students, so that the learning process is more dynamic, flexible, interactive and communicative (Jiri, 2013).

Technology and information can not only be used in the industrial and economic sectors. Technology and information can be developed in the education sector as more innovative and creative learning media. Based on interviews (26/02/2016) of 100% of the respondents have the technology and information namely gadgets. Unfortunately, 73.3% of respondents of gadget users do not have access or special applications related to learning. On the other hand, 56.7% of respondents need access to independent learning. E-Learning technology can help and facilitate school to overcoming the existing constraints such as a smoother flow of
knowledge. Few professional schools control school residents can share online and exchange information with more accurate and relevant data (Vandana et al, 2011). Based on this, the author has an idea entitled Self-Learning Assistant (SLA) as a Way to Develop Easy Access E-learning Open Source Collaborative for Students.

2. Theoretical Background

2.1 Independent Learning

Song and Hill (2007: 31-32) states that independence consists of several aspects, namely (a) Personal Attributes, (b) Processes; (c) Learning Context [4]. Personal attributes are related to the motivation of the learners, the use of learning resources, and learning strategies. Motivation to learn is a desire that is in someone who stimulates learners to do learning activities. Processes are relating to the autonomy of learning process conducted by learners including planning, monitoring, and evaluation of learning. Focus of learning context is the environmental factor and how it affects the level of learners' independence.

2.2 Open Source

Open source is a term used for software that opens source code to be seen by users. Users can see the software works and develop better software. Open source software has much advantages. It can be obtained free or don not need to pay software license. Open source software can be obtained on the internet, one of the famous open source software Linux operating system computer (Sora, 2015).

2.3 E-Learning

According to Candrawati (2010) E-Learning is a long-distance process by combining principles in the learning process with technology(Sri Rahayu, 2010). Characteristics of E-learning according Nursalam (2008: 135) are:

1. utilizing the services of electronic technology;

2. utilizing the benefits of computers (digital media and computer networks);

3. using self-learning materials (self-learning materials) then stored on the computer, so it can be accessed by the doen and college students anytime and anywhere (Nursalam, 2008).

3. Method

Three stages in this research were the data collection, the collection requests (user requirement), and architectural design. User requirement was done using
interviews and questionnaires distributed to students. Applications developed using Unified Modeling Language (UML), which is the most widely used language standard in the industry to define requirements, created analysis, design, and describe architecture in object-oriented programming (Rosa A.S, 2011).

4. Discussion

ICT plays a crucial role in the context of this research because it has profound effect on the outcomes of the study process: the move away from learning facts, the need for e-learning skills and attitudes, the importance of student-centred learning and opportunities for collaborative and interactive learning (Mason, 2004) and effective use of ICT develops “learning, communication and information skills” (Fulton, 1998:60). There are the development process of SLA.

4.1 Analysis and System Design

Before to development, the authors take survey conducted on February 26, 2016 using a questionnaire of 30 respondents consisting of 20 students and 10 students. The survey results show that:

a. one hundred percent of respondents have good gadgets including laptops, mobile phones, personal computers, or the others;
b. ninety percent of respondents have gadget usage time more than 2 hours a day, while 10% less than that;
c. eighty point seven percent of respondents can access internet easily, while 13.3% access internet difficulty;
d. fifty point seven percent of respondents prefer electronic learning resources than books;
e. seventy three point three of respondents do not have specific applications to access learning materials;
f. eighty point seven percent of respondents prefer free learning access than paid;
g. fifty six point seven percent of respondents felt that they were more comfortable learning with private teachers/lecturers, 16.7% never felt learning with teachers, private lecturers, and 26.7% respondents said uncomfortable with teachers or private lecturers;
h. ninety percent of respondents want a two-way interaction in self-learning;
i. ninety percent of respondents like learning to use visual features;
j. one hundred percent of respondents expect to have learning resources from various educational institutions;
k. one hundred percent of respondents expect to have easy access to meet teachers when difficulty understanding the material;
l. ninety three point three percent of respondents expect teachers to guide flexibly;
m. sixty percent of respondents have difficult time to understand the material by conventional learning methods such as expository.

SLA application is an useful e-learning to help students learn. The students can obtain course materials, schedule tasks, see the value implemented on the web. There are four main features of e-learning PBL supporters, which view and download
the subject matter, view project details (tasks), see the value, and see the enrol subjects. This e-learning product takes advantage of a browser on the device used and internet connection in running it.

Based some references above, research that researchers do are to make e-learning as a supporter of learning SLA. Then, e-learning can be accessed wherever and when researchers pinned Responsive Web Design technology. After that researchers also measured the level of user acceptance of e-learning that was built by utilizing Mean Opinion Score (MOS).

Actors in this SLA have three, including (a) admin that manage the system and assigned to provide transactional services through the system; (b) the teacher as a user in charge of providing services in the form of materials and assessment, (c) students as ordinary users who only can use e-learning applications and access the SLA EBook to help the learning process. The application uses the Unified Modeling Language (UML) model to document, specify and build the device system of the son. There are few diagrams are used to describe the model of an e-learning system.

4.2 Use case diagram
Use cases are one way of describing these units and an important part of any requirements document for a system (Jackson, 2014). Based on usecase diagram can be explained that the user in this case is a student who categorized into students and lecturers or teachers can open the SLA using the internet network available. After that presented 5 menus, including home, log in, sign in, SLE book, about SLA.

1. **Home**

The home menu contains about the start page of the SLA. Provides an interesting impression through the images of the SLA.

2. **Log in**

The log in menu is presented as the initial access for the user entering the SLA. In the log menu there are sub menus such as log in as teacher and log in as student.

1) Log in as teacher is dedicated to lecturers from various universities / schools / educational institutions that are not accessible to students. In the sub menu the teacher can input the material with .pdf format. The material will be classified according to the subject and can be accessible to the learner. In addition, the teacher also has access to visit the study room of the available students. Such access enables teachers to conduct the teaching-learning process within the classroom or just as a visitor of the class. In addition to access to enter the study area, teachers also have access to create their own study space with a maximum number of students that can be determined as well as teachers can lock the study room. To meet the needs of teaching materials that attract learners, SLA also provides additional features of Self-Learning Electronic Book or SLE Book. SLE book comes from E-Book which is input by teacher in the form of .pdf which then will be changed by SLA Team (consist of us as
researcher and developer and technician) become SLE Book. SLE Book is an innovative development of E-Book based augmented reality so that SLE Book has the advantage in the form of audio visual display. Augmented Reality is a technology that combines two-dimensional and three-dimensional virtual objects into a real three-dimensional environment and projects those virtual objects in real-time (Hermawan, 2015). Unlike virtual reality that completely replaces reality, Augmented Reality only adds or complements reality. In addition, SLE-Book has the advantage that when a student difficulties in understanding the material in SLE-book. The student select difficult materials then the programs will appear call assistant icon that serves to call the book maker and call the relevant teacher with the book concerned, so that will be formed learning space with several teachers automatically. The existence of SLE-book allows for two-way interaction whether in the form of video call, audio, or chat. SLE-book enables learners to be more independent in learning time-anytime and anywhere effectively and efficiently. Sub menu log out here serves as user access to exit from SLA.

2) Log in as student means that user log in as student in this case student or student. In general, the features provided in this sub menu the same as the features provided in the log in as teacher. The difference is, in the sub menu log in as student there is no feature to upload teaching materials, but there are features to mengkases teaching materials. Then there is no feature to enter E-Book but there is a feature to access SLA-Book.

3. Sign in

The sign in menu allows the user to create an account first. Creating an SLA account is required for SLA membership data collection.

4. SLE-Book

The SLE-Book menu provides users to download SLE-books easier. This menu also allows users to download SLE-Book without having to log in first.

5. About SLA

The About SLA menu provides information about developers of the SLA and all those supporting the SLA.

4.3 Activity Diagram
One of the important modeling artifacts used in UML, is the Activity Diagrams (referred as UML AD) that are used to model sequence of actions as part of the process flow. It is used to model sequence of actions to capture the process flow actions and its results. It focuses on the work performed in the implementation of an operation (a method), and the activities in a use case instance or in an object (Bhattacharjee, 2002).

All users must login first to access e-learning. The system is designed to have three actors namely administrators, teachers, and students. First, when the system detects login rules as an administrator, it will display system management and maintenance menu. Second, when login rules as a teacher, it will appear two options that want to manage learning data or follow learning. If you choose to manage the learning data will be raised menu manage data learning by the system, and if choose to follow the lesson will be displayed menu mengikuti learning. Third, when the system detects login rules as students, then it will display the menu following the lesson.

5. Conclusion

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A Comparative Analysis of Aspects of Private and Autonomous “Mutual Assistance Payments” in Asian Countries

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Abstract

It is inevitable that Asian countries will see rapidly aging societies in the future. However, many of these countries have not yet developed public social welfare institutions comparable to those found in European welfare states. Hence, there is a need to develop more efficient and appropriate social security systems in these societies. When investigating this problem, it may be necessary to focus on Autonomous “Mutual Assistance Payments” based on personal relationships like parent and child, siblings, family relatives, friends, and significant others. According to our previous original survey, conducted about 2000 sheets in Thailand, we found that private mutual aid in households accounted for 20 per cent of the average household income. This scale of expenditure is larger than official public aid at the household level. Since public aid based on personal human networks already exists in other countries, it might be possible to actively use similar social welfare systems in Asian countries. This study investigates the existence of mutual assistance payments in Asian societies, such as Cambodia, South Korea, and Indonesia. We also attempt to underscore differences between these countries in a comparative analysis based on various cultural elements or religious social norms largely derived from Buddhism, Confucianism, and Islam at different stages of economic development. If we find the existence of private and autonomous aid in these four countries, such ‘informal’ institutions may be eventually mobilized to augment social security systems.

Keywords: ‘Informal’ institution, Culture, Private human network, Social capital,
1. Introduction

To achieve the aims of this paper, we introduce theoretical and methodological ideas to our economics and area studies in Chapter 1. First, we deal with an effective concept: the ‘informal’ institution—cultural elements, social norms, and customs—as defined by North (1990; 2005) in the new institutional school, which helps us to consider cultural aspects from an economic perspective. Second, we also focus on the typology of mature or official social security systems in area studies in recent years (e.g., Suehiro, 2010). Due to a lack of research and analysis on ‘informal’ institutions in the past, we must emphasize that our theoretical position is not limited to these frameworks.

In Chapter 2, we proceed to confirm our results of mutual and autonomous monetary aid in 2,000 Thai households through an original questionnaire methodology. Our survey results suggest the presence of a kind of private income redistribution mechanism in Thailand. Our empirical hypothesis is based on this case. However, it is doubtful that this phenomenon is specific to Thailand among other Asian countries. Therefore, we present an additional summary of original surveys conducted in Cambodia, South Korea, and Indonesia by using about 400 to 1,000 questionnaires in each country. Our survey results indicate that some form of monetary aid based on personal human networks exist in these countries too. From the perspective of income distribution, the monetary scale at the household level cannot be dismissed.

To further identify aspects of mutual private monetary aid, we would like to add some significant characteristics of mutual aid in each country by showing mathematical results based on multiple correlation analysis of questioning of relation among several items such as gender, age, marital status, birth place, profession, and on quantity analyses about relation between income to money by aided, or money to aid to others (Chapter 3). By outlining monetary flow to show the relationship between providers and receivers of aid, the similarities and differences in private mutual aid among four countries is highlighted. For example, we can confirm that partners or significant others mainly give and receive money in Thailand. In Korea, there is a relatively strong role of monetary support between an older male sibling and younger female sibling. Family relatives are more important in private money gifts and contributions in Cambodia, compared to other countries. Furthermore, in Indonesia, various persons relate private aids relatively.

On the basis of our exhaustive examination of private and autonomous aid, we suggest that there might be a form of ‘hybrid’ income redistribution mechanism in Asian countries. One is an ‘informal’ institution, which is based on private human networks; the other is a ‘formal’ institution, which is the official public aid provided by social security institutions (Chapter 4). We must emphasize that the former path may be confirmed for each country without adjusting for current differences of economic development stages among Asian societies. In other words, this analysis
might offer us information on utilizing private human networks, which are based on existing cultural and social customs that are original, but also similar—Buddhist offerings, the doctrine of filial piety towards parents in Confucianism, and Zakat in Islam—within each country. This enables us to avoid transplanting social welfare institutions from European countries in the future.

I. The theoretical background of story cultural matter from the perspective of economics

I. 1 Institutional economics and cultural matters

Generally speaking, it is thought that an economist can take one of two main approaches to research: the so-called micro- and macro-level approaches. However, these approaches may be inadequate when addressing differences among various countries’ socioeconomic systems, or when creating effective social policies for the general populace, especially in developing countries.

All of the basic mainstream approaches assume that an efficient market system has already been developed, and that mature political decision-making systems, widely recognized social norms across a country, and the like already exist. In other words, most ordinal analyses that are based on general equilibrium theory—the theory that connects both micro- and macro-level foundations, which has been a challenge in the macro approach since the 1960s—emphasize that the formation of some kind of standardized socioeconomic system is the best route to take, both when forming a sound theoretical foundation and when realistically portraying the circumstances within a country. However, history has repeatedly shown us that this academic thinking is limited to explaining the real-world aspects of only a few countries. In addition, economists fundamentally cannot provide a complete story of what moves people to bring about economic changes, nor can they explain why systematic changes occur within a given state. In other words, although we may easily understand some kinds of results or the past states of various social resource distribution mechanisms from an economic perspective, we do not yet know how to easily resolve current conditions, or how to provide advice vis-à-vis improvements for certain people within a system.

In an effort to reconsider these problems—which have not, to date, been resolved by economic research—we would like to address some typical institutional approaches that have been developed since the 1970s. It is expected that in so doing, we might offer additional theoretical insights that will explain the entire socioeconomic system, thus allowing us to consider the differences among nations more comprehensively and permitting us to take a wider analytical view and more fulfilling framework than that which is seen in most ordinal economic approaches.

The current study explores the ways in which theoretical advantages of the institutional approach can be exploited, in order to further contribute to economic
development theory. Ultimately, we would like to focus on the role or effectiveness of “informal” institutions; in other words, those that pertain to cultural matters, social customs, social norms, historical thinking, and the like. The term “informal institution,” which was defined by North (1990, 2005), is useful in any consideration of the effectiveness of “formal” institutions (i.e., those that pertain to laws and official economic policies). On the other hand, it is assumed that such cultural or historical elements merely play a subtle and underlying “foundational” role for formal institutions or for shared cognitions within a certain societal state. In other words, there is at work within the theoretical framework, a one-way mechanism that operates from informal institutions to formal ones. Therefore, it is not sufficient to only know of the economic effectiveness of such elements within the system, or to determine the detailed parameters of the micro-level foundation, when one addresses certain special issues—e.g., income disparities or effectiveness of income redistribution as per official economic policies—in developing countries.

I. 2 Classifications of Asian welfare states

Since the famous book of classification of European welfare countries, published by G. Esping-Andersen (1990), some scholars have started trying to expand this analytical object from western countries to Asian ones in some academic fields, such as economic development and area studies. Of course, other realistic, future tendencies in Asian countries, such as the pressures of globalization or the transformation into rapid aging societies, are important factors as well.

It is useful to understand the academic outcomes of these past attempts, as presented in Table 1-2 (Suehiro (ed.), 2010, p. 11). This table also presents an orthodox and brief summary of past research. In the research of the conventional Asian welfare state, countries are, in most cases, grouped by their economic-development state. In addition, it is questioned that there are several, official social-security institutions: the official medical insurance system, the national pension plan, and so on are already established or have not yet been until now. At the same time, the research has, in some cases, also focused on population trends in order to understand the relevant plans for making official social welfare systems persistent in each country.

I. 3 Research problems and our theoretical position: towards analyzing the role of an ‘informal’ institution as social capital

These concepts of social welfare systems in Asian countries do not answer the following two questions. First, do the differences in social welfare institutions simply depend on economic development? Second, can we achieve a better welfare society only by way of transplanting the same institutions that exist in European countries? In short, most research dismisses several background factors, such as the role of existing
social customs in the context of income redistribution, or the cultural effects on the original aspects of institutions, when thinking about the classification types of Asian welfare states.

As already discussed, the present institutional approach is a useful perspective for explaining cultural matters, but it cannot clearly answer the above two questions, because of its explanatory-logic problem. In other words, an informal institution is either merely the background on which to base a formal institution, or it is merely one variable in an actor’s behavior model, as seen in North’s comprehension. For that reason, we can neither directly analyze nor discuss informal institutions. Therefore, it is also necessary for us to construct another analytical framework to independently explain the role of social customs, or other mechanisms of cultural effects, in a society. This idea will also open the way to fulfilling dialogues between institutional economics and the social capital theory in sociology (e.g., Lin, 2001; Castiglione et al. (eds.), 2008).

To understand these problems and our ideas, specifically, we will focus on an empirical case study of private and autonomous mutual aid in Thailand and South Korea, and compare the results, including statistical analyses, in the following three sections. Finally, we would like to suggest the economic values of cultural functions as a means to understand Asian welfare states by showing the economic roles of cultures and traditional social customs.

II. Aspects of mutual assistance payments among households in Thailand

To capture the characteristics of mutual assistance payments among households, we tried to gather data thrice via the questionnaire in our original survey, which was carried out within the Bangkok metropolitan area from 2011 to 2013. The results of our analysis—in which 1,776 participants completed questionnaire sheets consisting of 14 questions—touched upon several characteristics: age, gender, the number of children, birthplace, and profession, among others.

We were able to determine the following three significant features of mutual assistance payments among households in Thailand (see details in Table II-1): (1) each “piece” of private-source monetary aid represents about 20% of the source’s total income. In addition, about 40–50% of subjects receive monthly private support from people outside of their household (item (g)-1, 2), and over 60% of people aid others outside of their household (item (h)-1, 2). (2) On the other hand, tax payments, excluding VAT, appear extremely small when compared to the amount of the money that comprises the mutual payments among households (item (d)-1). This same tendency is also confirmed in the limited survey of 278 salary workers in the manufacturing industry (item (d)-2). (3) Over 20% of people responded that they received money each month from someone, and that they themselves helped others with money (item (f)-1, 2).
Our original survey also shows that Girl/Boyfriend plays an important role of mutual assistance payments in Thailand (see details in Table II-2).

In addition, several results of statistical Analyses by using our data shows it is possible to think that helping others is a behavior that is not only specific to certain people, but to the whole of society. In sum, these results are interpreted as showing the possibility of a common feature that can aid others throughout Thai society.

### III. Comparing among Asian Countries: To compare with Thailand

In this Chapter, we'd like to examine that we can capture and understand these actions in other Asian countries: Cambodia, Indonesia, and South Korea by similar style and methods. Because, we would like to question that the role of culture or basement of behaviors in the future types of Asian welfare systems too. In short, If there are two type of income redistribution paths: monetary aid by based on private human network or relations and official aid at the same time in Asian society, it is possible to think of other ways of exploiting private human networks, based on existing cultural and social customs that are original but also similar—Buddhist offerings, the doctrine of filial piety towards parents in Confucianism, and Zakat in Islam—within each country, without simply transplanting social welfare institutions from European countries.

### IV · Conclusion: Hybrid Income redistribution mechanism in Asian Countries

As we have discussed before, the private human network plays an important role in redistributing money among people both countries. In particular, we found that its economic function comprised 20% of the average household income in Thailand. In addition, similar human connections among people also exist in Korea, one of the developed countries. Of course, we can confirm similar tendencies in other countries: Cambodia and Indonesia. Therefore, it is reasonable to think that there is another redistribution mechanism, based on an “informal” institution, which is itself in the developing stage of the social welfare system.(see Figure IV)
Figure IV: Hybrid Income Redistribution Mechanism

'Informal' Institutions

Private aids based on human networks
Involving several differences in the details such as cash flows: gift and receive

'Formal' Institutions
(Social welfare Institutions)

Relatively strong Income Redistribution Mechanism

Informal Institutions

Relatively weak
Income Redistribution: Economic Scale etc

Tables

Table 1.2: Development states of social welfare institutions among Asian countries

<table>
<thead>
<tr>
<th>Group</th>
<th>Stage of Economic Development</th>
<th>Population Trends</th>
<th>Social Security Institutions</th>
<th>Basic Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore, Hong Kong, Taiwan, and Korea</td>
<td>Relatively high stage</td>
<td>Close to the aging-society stage</td>
<td>Universal provision</td>
<td>Developed</td>
</tr>
<tr>
<td>Malaysia, Thailand, Philippines, Indonesia, and China</td>
<td>Industrialization stage</td>
<td>Population-increase stage</td>
<td>Service for employees. No service for self-employed persons</td>
<td>Developing</td>
</tr>
<tr>
<td>Vietnam, Laos, Cambodia, and Myanmar</td>
<td>First stage</td>
<td>Population explosion</td>
<td>Limited service for professional soldier and government</td>
<td>Undeveloped</td>
</tr>
</tbody>
</table>
Table II. 1: Several significant features of our survey results in Thailand

<table>
<thead>
<tr>
<th>(a)-1</th>
<th>Average total monthly income (THB)</th>
<th>15667.84</th>
<th>ratio of all 1716 sheets</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)-2</td>
<td></td>
<td>21035.55</td>
<td>ratio of the 913 valid answers</td>
</tr>
<tr>
<td>(b)-1</td>
<td>Average money received monthly from other people (THB)</td>
<td>2582.17</td>
<td>ratio of all 1716 sheets</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>16.48%</td>
<td>percentage of (a)-1</td>
</tr>
<tr>
<td>(b)-2</td>
<td>Average money received monthly from other people (THB)</td>
<td>7951.11</td>
<td>ratio of the 497 valid answers</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>37.80%</td>
<td>percentage of (a)-2</td>
</tr>
<tr>
<td>(c)-1</td>
<td>Average money given monthly to help other people (THB)</td>
<td>3336.04</td>
<td>ratio of all 1716 sheets</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>21.29%</td>
<td>percentage of (a)-1</td>
</tr>
<tr>
<td>(c)-2</td>
<td>Average money given monthly to help other people (THB)</td>
<td>5061.58</td>
<td>ratio of the 1131 valid answers</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>24.06%</td>
<td>percentage of (a)-2</td>
</tr>
<tr>
<td>(d)-1</td>
<td>Monthly tax payments (THB)</td>
<td>293.19</td>
<td>ratio of all 1716 sheets</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>1.87%</td>
<td>percentage of (a)-1</td>
</tr>
<tr>
<td>(d)-2</td>
<td>Monthly tax payments (THB)</td>
<td>687.48</td>
<td>Average of 278 workers in the manufacturing industry</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>4.79%</td>
<td>percentage of Average income of 278 workers in the manufacturing industry</td>
</tr>
<tr>
<td>(e)</td>
<td>Monthly support from NGO, government, and other organizations (THB)</td>
<td>293.14</td>
<td>ratio of all 1716 sheets</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>1.87%</td>
<td>percentage of (a)-1</td>
</tr>
<tr>
<td>(f)-1</td>
<td>How many people receive support and give support to other people each month</td>
<td>487</td>
<td>people</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>28.38%</td>
<td>percentage of all 1716 sheets</td>
</tr>
<tr>
<td>(f)-2</td>
<td>How many people receive support and give support to other people each month</td>
<td>72</td>
<td>people</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>25.90%</td>
<td>individuals among the 278 workers in the manufacturing industry</td>
</tr>
<tr>
<td>(g)-1</td>
<td>How many people are supported by people outside of their household each month</td>
<td>837</td>
<td>people</td>
</tr>
<tr>
<td>Percentage</td>
<td>49.09%</td>
<td>percentage of the 1705 valid answers</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>--------</td>
<td>-----------------------------------</td>
<td></td>
</tr>
<tr>
<td>(g)-2</td>
<td>How many people are supported by people outside of their household each month</td>
<td>93 individuals among the 278 workers in the manufacturing industry</td>
<td></td>
</tr>
<tr>
<td>Percentage</td>
<td>34.70%</td>
<td>percentage of the 268 valid workers</td>
<td></td>
</tr>
<tr>
<td>(h)-1</td>
<td>How many people support others outside of their household</td>
<td>1131 people</td>
<td></td>
</tr>
<tr>
<td>Percentage</td>
<td>66.33%</td>
<td>percentage of the 1700 valid answers</td>
<td></td>
</tr>
<tr>
<td>(h)-2</td>
<td>How many people support others outside of their household</td>
<td>individuals among the 278 workers in the manufacturing industry</td>
<td></td>
</tr>
<tr>
<td>Percentage</td>
<td>82.51%</td>
<td>percentage of the 263 valid workers</td>
<td></td>
</tr>
</tbody>
</table>

Table 1.3: Private human networks for monetary aid in Thailand

<table>
<thead>
<tr>
<th>Supported from</th>
<th>N = 347 persons</th>
<th>Helping to</th>
<th>Brothers or Sisters</th>
<th>Children</th>
<th>Other blood relative</th>
<th>Parents</th>
<th>Lover</th>
<th>Girlfriends or Boyfriends</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brothers or Sisters</td>
<td>Number of persons</td>
<td>0</td>
<td>8</td>
<td>1</td>
<td>17</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Percentage of N</td>
<td>0.00%</td>
<td>2.59%</td>
<td>0.29%</td>
<td>3.46%</td>
<td>0.00%</td>
<td>0.58%</td>
<td>0.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td>Number of persons</td>
<td>0</td>
<td>9</td>
<td>1</td>
<td>12</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Percentage of N</td>
<td>0.00%</td>
<td>2.59%</td>
<td>0.29%</td>
<td>3.46%</td>
<td>0.00%</td>
<td>0.58%</td>
<td>0.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other blood relative</td>
<td>Number of persons</td>
<td>0</td>
<td>6</td>
<td>2</td>
<td>16</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Percentage of N</td>
<td>0.00%</td>
<td>1.73%</td>
<td>0.58%</td>
<td>4.61%</td>
<td>0.29%</td>
<td>0.86%</td>
<td>0.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td>Number of persons</td>
<td>0</td>
<td>25</td>
<td>1</td>
<td>67</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Percentage of N</td>
<td>0.00%</td>
<td>7.20%</td>
<td>0.29%</td>
<td>19.31%</td>
<td>0.58%</td>
<td>0.58%</td>
<td>0.29%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lover</td>
<td>Number of persons</td>
<td>0</td>
<td>15</td>
<td>0</td>
<td>18</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Percentage of N</td>
<td>0.00%</td>
<td>4.32%</td>
<td>0.00%</td>
<td>5.19%</td>
<td>0.58%</td>
<td>0.29%</td>
<td>0.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girlfriends or Boyfriends</td>
<td>Number of persons</td>
<td>0</td>
<td>55</td>
<td>1</td>
<td>56</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Percentage of N</td>
<td>0.00%</td>
<td>15.85%</td>
<td>0.29%</td>
<td>16.14%</td>
<td>0.29%</td>
<td>1.15%</td>
<td>0.58%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>Number of persons</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>9</td>
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<td>---</td>
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<tr>
<td></td>
<td>Percentage of N</td>
<td>0.00%</td>
<td>0.05%</td>
<td>0.00%</td>
<td>0.05%</td>
<td>0.00%</td>
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</table>

**References**


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Diversity and Intensity in Integrated Rural Farm Management through HDPE Geo-Membrane Natural Irrigation Ditches for Rural Farmers Entrepreneurial Economic Generation and Environmental Sustainability

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Abstract

This study is attempted to look into the diversification and integration of rural farm management through a permanent man made HDPE Geo-Membrane natural irrigation ditches for economic generation and upgrading rural farmers’ livelihood and sustain eco-system. We are looking into the economic value derive from the existing rural farmers’ rubber and oil palm smallholding towards income generation and economy. The introduction of a diversify and intensify integrated rural farm management with HDPE Geo-Membrane agriculture program will generate income for the rural farmers’ effort in economically intervention on its potentiality and usefulness in cultivating commercial agro food crops or mix temporal cash crops and livestock breeding, at the same time retaining of moisture, soil fertility and conservation of its eco-system. The participative efforts from various fraternities are crucial. It has great impact in determining the level of maximizing the potential agro crop outputs, livestock and meat production and eventually in upgrading farmers’ income and livelihood as well as generates country’s economy and supply of agro food to meet the demand of world population. Technicality and expertise in the implementation process are two important factors. Knowledge on agriculture and animal husbandry are also taken into consideration in this study. The Design or methodology used is diversification and integration of rural farm management through manmade HDPE Geo-Membrane natural irrigation ditches technique on the integrated commercial agro mix monoculture, temporal cash crops, livestock and fresh water fishes breeding. In general, there is a significant difference among factors stated above on diversification and integration of rural farm management system. The initiatives depend on the inter-relatedness of the various partners in the program which will constitute to the income
generation and economy. In addition, the quality and agro knowledge of farmers are another two essential factors found to be the strong fundamental in the diversification and integration of rural farm management program.

**Keywords:** Diversification and integration, Rural farm management, HDPE Geo-Membrane, Agriculture, Livestock breeding.

**Introduction**

It is very fortunate and god’s gift for countries of the tropical region, like Malaysia due to adequate natural rainfall and warm temperature throughout the year. But things has change in the recent years that due to climatic changes and the depletion of the ozone layer, rainfalls in the tropical countries became quite extreme with occasional torrential downpour causing flash flood, draughts and other calamities. All this has done a lot of damages to the rural farmers and small holders in their initiatives to produce more agriculture produces to feed the ever growing world population. Therefore good agriculture and farm management as well as good irrigation are the two most important aspects that we need to look into. Furthermore, there has been an increase in ‘value-added’ in agriculture sector recently due to changing in consumers’ taste and preference (Danyelle, et.al, 2008). The value added in agricultural sector is to economically add value to any agro product by changing its current place, time and from one set of characteristics to the others that are more preferred in the market place (Boland, 2007).The projected growth of agriculture sector in Malaysia is expected growth at an average rate of 6 per cent per annum for the period 2006 – 2010 and 6.5 per cent in 2011- 2020 period. Agriculture Industry has radically transforming its production relation and one major effect of the transformation is the redefinition of farmers as contract grower by the life industry (Abaidoo, 2000). The basis of developing this sector should centered on the rural farmers and smallholders because the constraints that the producers face in trying to achieve maximum profit are twofold namely the market conditions (the price outputs and inputs) and the technical relationships governing production (Young et.al, 1997).

**Literature Review**

Water is lifeline to all especially rural farmers to produce edible agriculture crops to feed the ever increasing population. Country like Malaysia and its neighbors in the ASEAN and Pacific regions mostly produce the same kind of agricultural commodities for the world market. The normal agricultural practices are the monoculture of rubber and oil palm. As for the agro greens, only nominal percentage and the highland farmers were producing it for local and neighboring industry economy like Singapore. Therefore the local Malaysian depends much from China, and certain parts of Indonesia for their agro greens. It is in fact that the local farmers could produce enough agro greens for the local and neighboring market by diversify and intensify their plantation into profitable dual, mono and agro greens producing hub by a systematic Integrated Rural Farm Management through HDPE Geo-membrane Natural Irrigation Ditches for rural farmers entrepreneurial economic generation and as well as environmental sustainability. The participation of the Ministry of Agriculture, FAMA, and local Farmers Association are crucial and have
great influence in determining the level of achievement in their small and medium enterprises as well as generate country’s economy. As Ritson (1997) quoted throughout much of the world, government are attempting to loosen their grip and exposing farmers to the exigencies of market force and at the same time farmers are increasingly being encouraged to improve their marketing with modern business marketing techniques at farm level.

The subsistence agro life style of farmer from the rural villages could transform into a multimillion dollar venture if there are combined efforts from all quarters in the rural farming fraternities. Azman (2003) found that Johor state has the largest independent smallholding (40%) in Malaysia. Agriculture and farm management of rural farmers agro and aqua produces are the major problems in upgrading their earning not only due the volume produce; suitability of agriculture land, irrigation, perishable nature of agro produces and preyed agro middleman but knowledge in producing quality agro produces are at stake. Vernooy and Song (2004) quote that new approaches to agricultural development research are needed to conserve agricultural diversity, improve crops, and produce food of quality for all. Such an approach should enable farmers on marginal lands to participate as equal partners. Thornton et al (2006) quoted that it is seeking to redefine the roles of scientists and farmers through collaborative learning processes, addressing questions about the level, timing, type and form of participation, as well as the most effective approaches and methods to foster them. The research domains of the program deal with sustainable intensification of smallholder agriculture and farm land management with irrigation ditches, the sustainable management of natural resources, the development of efficient markets, and the promotion of enabling policies Laroche et al., (2001) quoted food consumption patterns are rapidly changing nowadays as a result of environmental issues, concern about the nutritional value of food and health issues. Stoop and Hart (2006) suggested that sustainable agricultural development is presented as a diverse and dynamic process through which it copes with agro-ecological and socio-economic diversity at field level and with ever-changing needs and opportunities of farmers. Kaljonen and Rikkonen (2005) pointed out in their survey in Europe that in the latest reforms of the Common Agricultural Policy (CAP) the EU has adopted a concept of multifunctional agriculture that should encourage farming to play several roles in society and contribute to the well-being of rural areas by managing the countryside and the environment.

Research Objectives

The objectives of this study are:

1. To examine the feasibility of the introduction of systematic Integrated Rural Farm Management through HDPE Geo-membrane Natural Irrigation Ditches to support rural farmers Entrepreneurial farm management in diversification and intensification of planting agriculture produces concept
2. Proposing to the enterprising rural farmer and the Malaysian Ministry of Agriculture on solving the rural farmers’ plight of not able to sustain and upgrading their livelihood and earning from their toil and effort as well as the
ongoing prey by the agro middlemen when there is a fluctuation of farm price and glut of their produces.

3. The systematic Integrated Rural Farm Management through HDPE Geo-membrane Natural Irrigation Ditches to support rural farmers’ Entrepreneurial farm management in diversification of planting agriculture produces concept and practice could be use as a long term strategy to help the rural farmers’ livelihood and generate economy and create agro entrepreneurs.

4. Increase agro food yields and sustain eco-system of a well manage rural farm management system.

**Theoretical framework**

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural farmers’ demographics</td>
<td></td>
</tr>
<tr>
<td>Federal Agriculture Marketing</td>
<td></td>
</tr>
<tr>
<td>Community Support Agriculture</td>
<td></td>
</tr>
<tr>
<td>Consumer’s market</td>
<td></td>
</tr>
<tr>
<td>District Agriculture and Aquaculture Department</td>
<td></td>
</tr>
</tbody>
</table>

**Systematic Integrated Rural Farm Management through HDPE Geo-membrane Natural Irrigation Ditches to support rural farmers Entrepreneurial farm management in diversification of planting agriculture produces concept and practice**

![Figure 1: Theoretical Framework](image)

**Research Methodology**

Investigative and interview techniques were applied, the investigative and interview session conducted on the rural farmers to gather the answers of the opinion on the feasibility of farmers themselves on the proposed systematic Integrated Rural Farm Management through HDPE Geo-membrane Natural Irrigation Ditches to support rural farmers Entrepreneurial farm management in diversification of planting agriculture produces concept and strategy on their existing monoculture smallholdings. Interview session also convene on the management of the farmers onsite production of agro and aqua produces from the HDPE Geo-membrane natural irrigation ditches to determine the production of quality agro food and green produces as well as the farmers’ plot of land.

Likert 5 point scale (5- Strongly Agree, 4- Agree, 3- Undecided, 2- Disagree and 1- Strongly Disagree) were apply in the process of gathering data pertaining the farmers problems in producing agro produces, marketing of produces on the systematic Integrated Rural Farm Management through HDPE Geo-membrane Natural Irrigation Ditches to support rural farmers Entrepreneurial farm management
Results

Descriptive Statistics

Table 1: Summary of Respondents’ Characteristics

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>FREQUENCY</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENDERS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>235</td>
<td>78.3%</td>
</tr>
<tr>
<td>Female</td>
<td>65</td>
<td>21.7%</td>
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<td>RACE</td>
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<td>Malay</td>
<td>186</td>
<td>62%</td>
</tr>
<tr>
<td>Chinese</td>
<td>100</td>
<td>33.3%</td>
</tr>
<tr>
<td>Indian</td>
<td>14</td>
<td>4.7%</td>
</tr>
<tr>
<td>ACADEMIC ACHIEVEMENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>198</td>
<td>66%</td>
</tr>
<tr>
<td>Secondary</td>
<td>102</td>
<td>34%</td>
</tr>
<tr>
<td>EXPERIENCE IN AGRICULTURE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 – 5 years</td>
<td>30</td>
<td>10%</td>
</tr>
<tr>
<td>6-10 years</td>
<td>65</td>
<td>21.6%</td>
</tr>
<tr>
<td>11-15 years</td>
<td>98</td>
<td>32.6%</td>
</tr>
<tr>
<td>&gt;16 years</td>
<td>107</td>
<td>35.8%</td>
</tr>
<tr>
<td>LAND OWN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2 hectare</td>
<td>190</td>
<td>63.4%</td>
</tr>
<tr>
<td>3-5 hectare</td>
<td>85</td>
<td>28.3%</td>
</tr>
<tr>
<td>&gt;6 hectare</td>
<td>25</td>
<td>8.3%</td>
</tr>
<tr>
<td>TYPE OF FARM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monoculture single crop</td>
<td>300</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 1.1 and 1.2 summarize the respondents’ characteristics. They are 235 male (78.3%) and 65 female (21.7%) rural farmers who took part in this study and they are members of the farmers’ association. Among them are 186 Malays (62%), 100 Chinese (33.3%) and 14 Indian (4.7%). Table 1.3 shows 198 respondents only managed to poses primary education (66%) whereas 102 respondents poses secondary education (34%). Table 1.4 shows that 30 respondent have between 0-5 years experience in agriculture (10%), 65 respondents have between 6-10 years experience (21.6%) and 98 respondents have between11-15 years experience (32.6%) and 107 respondents’ have more than 16 years of experience in agriculture (35.8%). Table 1.5 shows that 190 respondents have poses land not more than 2 hectares (63.4%), 85 respondents poses between 3-5 hectare of agriculture land (28.3%) and only 25 respondents poses more than 6 hectare of agriculture land (8.3 %). Table 6 shows all the respondents involved in single crop monoculture.
Farmers’ initiative that affect the management and tending of farm; knowledge of agriculture and marketing, location of farms which is a distance away, soil erosion, replanting problems, low yielding and farm pests; low quality agro produces and low income derivation from farms and unable to sustain.

Table 2 above shows high percentage of rural farmers all facing some sort of problems such as lack of knowledge in managing their plot of land since most of them only have primary and secondary education. Even through the investigative and interview techniques, we can find that the location of the farm is far away where no proper drainage and land management, there are soil erosion with low yields, low and fluctuation of price and low quality of monoculture agro product of oil palm and rubber. Therefore rural farmers are unable to sustain their livelihood and they really need help.

Table 3: Farmers opinion on the marketing dimension

<table>
<thead>
<tr>
<th>Marketing produces and diversification of agriculture Dimension</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers’ effort in marketing their farm produces are mar by the preying agro middleman and the powerful agro cartel; the agro middleman set the farm price; farmers do not have choice to sell the farm produces on their own; difficult to sell the farm produces; low prices; very little help from governmental agencies; difficult to find a platform to sell their farm produces. Dependent to single monoculture cropping (rubber or oil palm) make rural farmers helpless in term of marketing their agro produces.</td>
<td>150</td>
<td>4.89</td>
</tr>
</tbody>
</table>

Table 3 above shows that rural farmers’ opinion on their initiative in marketing their monoculture products. With the low price of rubber and palm oil in the world market that affect much on the whole South East Asia countries of production. Therefore, in order to sustain, rural farmers really needs to diversify and intensify to other agro produces to sustain their livelihood and national economy.

Table 4: Farmers opinion on the introduction of integrated rural farm management through HDPE Geo- membrane irrigation ditches

<table>
<thead>
<tr>
<th>Systematic Integrated Rural Farm Management through HDPE Geo-membrane Natural Irrigation Ditches to support rural farmers Entrepreneurial farm management in diversification of planting agriculture produces concept and strategy</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are agro crop diversification, not only monoculture crop but short term agro greens and fishes. The income from farm produces increase. Proper management and maintenance of land; Farmers themselves involve in the management of their plot of land and they sell their farm produces within the weekend wholesale and retail community support farmers marker; Profit double through auction of farm produces to agro middleman as well as provide fresh farm produces for retailing to ordinary customers who frequent the weekend wholesale and retail</td>
<td>300</td>
<td>4.90</td>
</tr>
</tbody>
</table>
Farmers market.

Table 4 above shows almost all rural farmers surveyed agreed to a new methodology in farm management to and diversity in agro produces with intensification in productions that will reap in profits as well as well management of their agro land.

Discussion

The introduction of a systematic Integrated Rural Farm Management through HDPE Geo-membrane Natural Irrigation Ditches to support rural farmers Entrepreneurial farm management in diversification of planting agriculture green produces concept and strategy will be a value added to the farmers is recent phenomenon that has developed in a number of countries, including the USA, the UK, Australia and New Zealand has been the reappearance of “farmers' markets”. While literature on the growth of these is limited, it is clear that they have emerged as a highly successful form of distribution for many small farm producers over the last few years (Fischer, 2004). By definition, this success means that these markets have found a different way to create value from that being achieved by other agro food distribution channels. On the other hand, Carman (1979) suggested that grades and standard may have one or more economic impact. Grade may increase demand, resulting in increased sales at a given price and or increased prices and this will benefited the enterprising in the wholesale and retail farmers’ market indefinitely. Therefore Doessel and Vakadkhani (1998) quoted that income inequality can be reduced by stimulating the good producing sectors of the economy such as agriculture and the village farmers’ plot of land only planted with monoculture crops such as rubber and oil palm could be diversify and intensify into planting others corps such as fruits trees, agro greens of all kinds of vegetable of tubers, legume etc as well as fresh water fishes and livestock breeding of caws, sheep, goat, chicken etc and the smallholding that could be put into proper and prosperous use. Community support farmers' markets are also clearly the domain of small businesses. This is implied in descriptions that refer to the local nature or community linkages, but the small business aspect of farmers' markets is reinforced by the overall statistics regarding enterprise size employment figures in the agricultural sector. Killen; Hunt; Kleinschmidt (2008) on the growth of farmers' markets has been ascribed to changing consumer desires and the shifting economics of agriculture. Therefore it will just fit into the rural farmers’ entrepreneurial talents.
Community support farmers' markets have provided new alternatives for rural farmers' producers to obtain direct distribution to consumers. The growth has been spectacular in several countries and this paper has examined how they may be creating value by looking at participation and cooperation amongst the farmers function as entrepreneurs themselves at these markets. As the Malaysian farmers are belong to the older generation and most of their farms were still planted with orchard or some other commercial cash crops with vegetable plots and livestock’s. Therefore the combinations of all these facilities maintain by the rural farmer from are feasible to revitalize and regenerate into economically sound fit for the systematic Integrated Rural Farm Management through HDPE Geo-membrane Natural Irrigation Ditches to support rural farmers Entrepreneurial farm management in diversification of planting agriculture produces concept and strategy Phusavat (2008) suggested in their findings indicated that the quality criterion was perceived to be the most important priority for maintaining and/or improving competitiveness in the future. Systematic Integrated Rural Farm Management through HDPE Geo-membrane Natural Irrigation Ditches to support rural farmers’ Entrepreneurial farm management in diversification and intensification of planting agriculture produces concept and strategy will reap in high profits with the calculation as below:-

\[ \text{Rural Farmers' Profit} = \sum_{i=1}^{\infty} L_n + F + K - \text{Cost} \]

Where the rural farmers’ monoculture smallholding with diversify and intensify agro green produces, fresh water fishes and livestock breeding entrepreneurial marketing is the combine effort of farmers themselves \((L_n + L_1 + L_2 + L_3\ldots)\), and government agencies which include FAMA and farmers cooperative minus the cost of production of the farm produces. The cost of conducting the above mentioned rural farmers initiatives is minimal, it consist of the farmers’ maintaining cost of their land, farm infrastructures such as HDPE Geo-membrane, digging of ditches etc which only once and will last and livestock feeds and raw materials. The total earning which would be handle directly by the farmers themselves under the supervision of FAMA and the farmers’ cooperative. Most of the cost will be absorb by farmers themselves. Therefore the exact earning of the above mention farmers diversification in agro produces with the propose systematic Integrated Rural Farm Management through HDPE Geo-membrane Natural Irrigation Ditches to support rural farmers Entrepreneurial farm management in diversification and intensification of planting agriculture produces concept and strategy will be:-

\[ \text{Profit} = \text{Revenue} - \text{Cost.} \]

\[ \text{Rural Farmers' Profit} = 70 (L) + 5 (F) + 5(K) - 20 \]

Where the profits derive from the diversify and intensify agro initiative are the summation of farmers at 70%; FAMA at 5%, farmers’ cooperative at 5%, minus the cost incurs amounting to 20%. Another option for the farmers in the diversification agro produces is to cooperate with the agro middleman who stood as contractual in

133
investing in the farmers’ cultivation and irrigation for a percentage and they have to conduct the wholesale to earn extra income in agro marketing enterprises

\[
\text{Rural Farmers’ Profit} = \left[ \sum_{i=1}^{\infty} L_i + F + K + M \right] - \text{Cost} \]

Where the diversification and intensification of agro produces and agro marketing enterprises is the sole effort of farmers themselves in collaboration with the agro middleman who provide funding and wholesale marketing effort (L1 + L2 + L3 + F + K + M) - 20%

\[
\text{Rural Farmers’ Profit} = 50(L) + 5(F) + 5(K) + 20(M) - 20
\]

The rural farmers will tends to gain almost half of the profit from their diversify and intensify agro farm produces and share the other percentage with the other parties which include agro middleman as venture capitalist minus the 20% cost. These options will save the farmers themselves in wholesale and retail effort. Therefore the farmers can concentrate on producing quality agro farm produces.

**Conclusion and Recommendations**

It has been tested and the result is beyond the mere expectation of anyone involved. As Lee (2008) surveyed that the profit shared by the farmers increase by five fold. Even if the concept applied could be carry out on agro farm of any terrains throughout the year where the farmers could carry on harvesting the monoculture crops and as well as produce seasonal and non seasonal agro green produces of tuber, legume and green leafy vegetable. Furthermore rural farmers also could produce fresh water fishes on the HDPE Geo-membrane ditch and pond inside the monoculture rows, the earning could be fivefold and indirectly this not only progress agriculture sector but spur the economy of the country. Likewise, it is the fact that the profits earn will goes to the rural farmers. With the successful implementation of a systematic Integrated Rural Farm Management through HDPE Geo-membrane Natural Irrigation Ditches canvassing to support rural farmers Entrepreneurial farm management in diversification of planting agriculture produces concept and strategy, not only the government does not have to subsidize heavily to the farmers yet they could generate the country’s economy. The government through the Ministry of agriculture and the affiliating agencies like FAMA, states and district agro-aqua agencies should play its role in planning to initiate the smooth process of the integrated farming concept with community support farmers’ entrepreneurial of their own produces themselves in the country’s agro and aqua sector.

Quality of the agro monoculture and agro greens with fresh water fishes and livestock produces is of utmost important, therefore farmers should be emphasize on the organic agro produces to accommodate customers’ satisfaction and healthy practice in producing and consuming. This is their priority that is to save guard the
future undertaking which will reap in higher profits. A regional agro cooperative could play its role to facilitate the supplying of high quality plant sapping and seeds; agro chemical, agro fertilizer, agro advice, agro storage, and agro logistic International Quality certification for all the agro and aqua products is a must to upkeep the standard of the agro sector of the country. Research and development on agro and aqua produces is another aspect that include in the budget under the Ministry of Agriculture to improve the quality and new products for export purpose. Collaboration and venture capitalism could be practice between the rural farmers and agro and aqua culture middleman to reap in higher profit in the sharing basis for export purpose. At least the agro middleman could practice their role as a contact point for the agro produces international market.

References


Rhetorical Relations to Punctuation Marks of Selected Research Articles in the Context of Myanmar

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Abstract

Rhetorical Structure Theory is an essentially descriptive theory that aims to account for the rhetorical relations in texts. This research is an attempt to investigate rhetorical relations to punctuations in the selected research articles of Arts and science journal published in Myanmar. Punctuation consists of cue marks for joining and separating words, phrases, clauses, and sentences. The purpose of punctuation is to clarify what otherwise would seem vague or confusing to a reader. Punctuation marks used in the selected articles are observed to find out types of punctuation and rhetorical relations to punctuation to fulfil the objectives of this research. Research articles written by Myanmar researchers are selected to be analysed.
and then these articles are analysed with the theory of Segment Discourse Representation Theory proposed by Asher 2003 & Lascarides 2007. Rhetorical relations are classified as Elaboration, Explanation, Narration, Continuation, Background, Foreground-Background Pair, Result, Alternation, Consequence, Def-Consequence and Question Answer Pair. In this research, SDRT is used to investigate how information can be conveyed through punctuations and to explore the semantic and discourse effects of punctuation in writing research report. In investigating Rhetorical Relations of punctuations, discourse relation of continuation and background are mostly used while discourse relation of elaboration is the second dominant figure. Six types of rhetorical relations such as Elaboration, Explanation, Continuation, Background, Alternation and Result have been also found in the selected articles. It is obvious that punctuation can give necessary information and the linguistic study of the discourse and semantic can affect the meaning and information of the articles.

**Keywords:** Segment discourse representation theory, Rhetorical relations, Punctuations

1. Introduction

Punctuation is a system of symbols and graphic features used to protect the integrity of the sentence in the English writing system and make it visible. According to (Little, 19986) like other linguistic phenomena, punctuation must be examined in a variety of ways. Its history and how it evolved through time are needed to know. The various ways in which the punctuation symbols are able to convey meaning – how their functions are needed to establish. Punctuation plays a great role in contemporary society as communication teaching and learning are conducted every day. Punctuation allows people to avoid misunderstanding and render this or that meaning, express the attitude and opinions. Punctuation marks are important in reading, writing, listening and speaking. It aids the reader in understanding the Writer's intended message. The uses of punctuation make reading easier and comprehend writer’s ideas. But some marks can completely change the intended meaning. Depending on where they are placed or if they are used at all, commas, apostrophes, and other marks affect a sentence's message. Moreover using punctuation correctly makes the learners writing easier for the reader to understand. Proper punctuation is essential in written English to enable the reader to understand what he is trying to say. Spacing with punctuation is also important to make his writing readable. Besides reading and writing, when someone is speaking, pauses and gestures can be used to clarify the meaning. Naomi Baron claims that there are two types of punctuation: 1) rhetorical punctuation, which refers to the attempt to create an oral rendition of a text; and 2) called grammatical, syntactie, or logical, which look
at the structure of the text instead. The punctuation mark specifies a grammatical, semantic, or pragmatic function, sometimes in addition to the marking of separation. So punctuation practice is governed primarily by grammatical considerations and is related to grammatical distinctions. Sometimes it is linked to intonation, stress, rhythm, pause, or any other of the prosodic features which convey dictions in speech, but the link is neither simple nor systematic, and traditional attempts to relate punctuation directly to (in particular) pause are misguided. Dr. Bilge Say’s research suggests that semantics and pragmatic information obtained from written sentences come from various sources; punctuation marks are one of them. However, punctuation marks, the symbols that assist the understanding of written text have not been studied much by linguists. Punctuation has received very little attention in psycholinguistic, even though punctuation makes are perhaps among the most important structural elements in written language. The lack of research into the role of punctuation has been acknowledged by researchers both from a linguistic perceptive and a psycholinguistic viewpoint. If the punctuation is applied indignantly, it may cause serious problems, inconveniences and its absence become even humorous for an attentive listener. The lack of commas sometimes can change the sense of the whole sentence and reading or speech without pausing does not allow the one to catch the breath, speech flow become monotonous and tedious and speech without pausing is not as good for comprehension as a person. Who reads a paragraph is not sure where to stop for his listener to gain a better insight. If the rules of punctuation can be applied in daily correspondence writing and speaking, it is sure to succeed. To fill the gap in the present, this paper aims to explore rhetorical relations to punctuations in research articles. Data were collected from the two arts and science articles. And then they are discussed and the last part is the conclusion of this research, findings of the objectives.

This research aims to investigate rhetorical relations to punctuations in the selected articles of Arts and Science journal published in Myanmar by the use of SDRT. The objectives of the research are:

(i) To find out how information is conveyed through punctuations in the research articles of Arts and science journal published in Myanmar
(ii) To explore the semantic and discourse effects of punctuation on writing research reports

According to (www.uhcl.edu/writingcenter), Punctuation Marks and their Common Functions have been defined in this research.

1.1 Punctuation Marks and Their Common Functions

**Colon ( : )**

Used after an independent clause (complete sentence) to direct attention to a list, an appositive, or a quotation
To separate two independent clauses (complete sentences) when the second one summarizes or explains the first

**Dash (—)**

To indicate a sudden, abrupt break of an unfinished word or sentence

To set off a summary of a preceding series

**Parentheses ( )**

To set off digressions or elements which provide extra information

To enclose numbers and letters enumerating parts

**Semicolon ( ; )**

To separate independent statements that are not joined by a coordinating conjunction (and, but, or, nor, for, yet, so)

To separate independent statements when the second statement begins with such conjunctive adverbs or phrases like therefore, however, thus, otherwise, on the other hand, for example, in fact, that is, etc.

To separate independent statements joined by conjunctions if such statements are long or they contain internal punctuation

**Comma (,)**

To separate independent clauses joined by a conjunction

To separate parts of a series

To separate coordinate or “equal” adjectives in a series

To separate introductory statements beginning with such words as when, while, since, if, because, until, although, and whenever (or other subordinate conjunctions)

To set off introductory prepositional phrases (starting with on, in, at, to, by, for, of, through, etc.)

To separate non-essential elements from the rest of the sentence.

A non-essential element is a word or group of words that gives additional identifying information about someone or something already identified; it’s non-essential because the sentence is still clear without it.
To set off introductory phrases beginning with verb participles ending in –ing, -ed, -en, etc.

To set off such expressions as you, no, well, on the other hand, you might say, and of course, (such expressions are called interrupters)

1.2 Segmented Discourse Representation Theory

Segmented Discourse Representation Theory (Asher and Lascarides (2003) is a theory of discourse which attempts to model the semantics and pragmatics interface of discourse using rhetorical relations. Asher and Lascarides main concern is how discourse or rhetorical structure affects phenomena such as anaphora, presupposition, and lexical inferences among other issues. In contrast with traditional theories of pragmatics, Segmented Discourse Representation Theory (SDRT) is incremental and dynamic viewing content in terms of change potential in the semantic representation of the discourse context. The focus of SDRT is the way in which the interpretation of utterances involves the supplementation of compositional and lexical semantics of utterances with additional content.

1.3 Rhetorical Relations

In this section, the list of rhetorical relations described by Asher and Lascarides (2003) is defined and exemplified. It is important to present the full range of relations, partly for reference, but also because the meaning of some relations is only clear in the context of the full set. However, the result is somewhat indigestible, and the reader may prefer to skim some parts on a first reading. Rhetorical relation proposed by Asher and Lascarides (2003) is content-level relation: elaboration, explanation, narration, continuation, background, foreground-background pair (FBP), result, alternation, consequence, and def-consequence, question answer pair (QAP).

Content-level Relations

There are (11) categories of content-level relations.

(i) Elaboration

Elaboration is a rhetorical relation that relates two propositions where the second proposition gives more detailed information about the event described in the first proposition.

For example, (1) Max had a lovely meal last night.
(2) He ate lots of salmon.

(ii) **Explanation**

Explanation gives the cause or reason or supporting information why the state of affairs presented in the context sentence takes place or why the speaker (or) writer believes the content of that sentence.

For example, (1) John came back because he loved her.

(2) a. Max fell.

   b. He slipped on a banana peel.

(iii) **Narration**

Narration is a kind of discourse relation that one proposition temporally ends when the following proposition starts.

For example, (1) I stayed home all night.

   And my parents went out.

(iv) **Continuation**

Continuation holds between units that have a common topic and where one eventuality is temporally a continuation of the other. This is the most general relation that can hold between textual parts and may coexist with other relations.

For example, (1) Maria cooked soup. She knitted a sweater.

(v) **Background**

Background holds if the text unit is a specialized explanation of the context of the unit it is attached to.

For example, (1) I got his notes.

   They were unreadable.

(vi) **Foreground-Background Pair (FBP)**

Foreground-background pair holds if the text unit is a simple coordinating relation of the unit it is attached to.

For example, (1) I tried to read his notes.

   They were unreadable.
(vii) Result

In result, the effect follows the cause. If the second text is the effect of the first one, there is a result relation between the two texts.

For example, (1) The sun was shining. So, the temperature rose.

(viii) Alternation

Alternation means that either one event or another can happen, but not both.

For example, (1) Either it is raining or she took a shower before coming.

(ix) Consequence

Consequence holds in cases where if an event takes place, then there is another event as a consequence of the former.

For example, (1) If it rains, we won't play football.

(x) Def-Consequence

Def-Consequence stands for defensible consequence. This relation is capable of dealing with constructions like the following example.

If Mary plays football, she will bring her boots.

(xi) Question Answer Pair (QAP)

Question answer pair is a relation which holds if the answer of the second proposition infers the question of the first proposition.

For example, (1) What time is it?

It is 8 0'clock.

(xii) Other Relations (nonrhetorical)

These are the relations which are not included in SDRT relations.

2. Research Methodology

This research focused on colon ( : ), dash ( _ ), parentheses ( ), semicolon ( ; ) and comma( , ) . Data will be collected from articles of Arts and science journal. Data
will be analysed according to the theory of Segmented Discourse Representation Theory (SDRTD) by (Asher 03, Lascarides 07). The aim of this research is to investigate rhetorical relations to punctuations in the articles of Arts and Science journal published in Myanmar by the use of SDRT. In this research distribution of the discourse relations of punctuations are discussed first. Among five level relations, the only content-level relation is explored. Then the data of dash, semicolon, colon, parentheses were examined to recognize how information can be conveyed through punctuation from the articles and to conduct a linguistic study of the semantic and discourse effects of punctuation on corpora of written English. These data are shown in the tabulated form for each article followed by the explanation of how punctuations affect the information.

Data were collected from articles of Myanmar Academy of Arts and Science 2013. Arts article, And then distribution of discourse relations for punctuations dashes, semicolon, colon and parentheses and comma can be identified in different ways such as elaboration, explanation, narration, continuation, background, FBP, result, alternation, consequence, def-consequence, question and answer pair and and other (Nonrhelational). In this research, linguistic observations of punctuations (dashes, semicolon, colon and brackets) are categorized according to the identification of Segmented Discourse and Representation Theory [Asher and Lascarides (2013)]. These types of discourse relations are illustrated based on the data analyzed, how the information from the article are conveyed. The following table shows the detailed analysis of punctuations and discourse representation of punctuations found in the Arts and Science Articles. The punctuation marks in the arts and science articles convey the information of the articles.

Table (1): Average Percentage for the use of punctuation marks found in Arts & Science articles

<table>
<thead>
<tr>
<th>Punctuation Marks</th>
<th>Colon</th>
<th>Dash</th>
<th>Parentheses</th>
<th>Semicolons</th>
<th>Comma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>3.79%</td>
<td>0%</td>
<td>4.88%</td>
<td>6.78%</td>
<td>84.55%</td>
</tr>
<tr>
<td>Science</td>
<td>4.49%</td>
<td>0%</td>
<td>43.67%</td>
<td>1.22%</td>
<td>50.61%</td>
</tr>
<tr>
<td>Average</td>
<td>4%</td>
<td>0%</td>
<td>24%</td>
<td>4%</td>
<td>68%</td>
</tr>
</tbody>
</table>

According to the above tables, both arts and science articles used all punctuation marks except dash to convey the information of the articles. Arts articles used commas mostly followed by semicolons and parentheses. Science articles also used commas mostly followed by parentheses and colons.
The following table shows Content Level Relation of Arts research article.

I = Discourse relation of Elaboration
II = Discourse relation of Explanation
II = Discourse relation of Narration
IV = Discourse relation of Continuation
V = Discourse relation of Background
VI = Discourse relation of FBP
VII = Discourse relation of Result
VIII = Discourse relation of Alternation
IX = Discourse relation of Consequence
X = Discourse relation of Def-consequence
XI = Discourse relation of Question Answer pair
XII = Discourse relation of Other

Table (2): Distribution of Discourse Relations for Punctuations found in Arts and Science Article published in Myanmar

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Punctuations</th>
<th>Discourse Relations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>I</td>
</tr>
<tr>
<td>1</td>
<td>Arts</td>
<td>8.8 %</td>
</tr>
<tr>
<td>2</td>
<td>Science</td>
<td>7.2 %</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>8.0 %</td>
</tr>
</tbody>
</table>

Although the arts used discourse relations of continuation and elaboration mostly, the science article used elaboration and background mostly to explore semantics and discourse effects of the articles.
3. Findings and Discussion

In investigating the use of punctuation marks, Arts articles used commas mostly followed by semicolons and parentheses. Science articles also used commas mostly followed by parentheses and colons. But dash was not used in both arts and science articles. In analyzing rhetorical relations, elaboration is the most dominant one in all different types of observation in analyzing rhetorical relations to punctuation. Moreover, the punctuation marks that show the relation of background and explanation can also be found. The author best use of punctuation can make his article clear and get information. Therefore the readers can know the article clearly and get information. Moreover, the readers understand and become more interested in the articles because of the author's effective use of punctuation marks. Information of the articles can be conveyed clearly because of the author's effective use of punctuation. The research deals with an analysis of punctuation of Arts and Science articles published in Myanmar by using the Segmented Discourse Representation theory proposed by Nicholas Asher and Lascarides. Based on the theory, articles are explored sentence by sentence. The analysis of punctuation in the Arts and Science articles has fulfilled the first objective of the research to find out how information can be conveyed through punctuation from the articles.

It was found that SDRS segmented Discourse Representation structure corresponds to a text-sentence (an orthographic sentence), a text-clause (clauses or
lexical sentences, clauses or phrases separated or delimited by colons, parenthetical or dashes. It also described that many uses of certain marks (eg: comma, colon, semicolon, dashes and parentheses) act as signals of discourse structure as observed by Dale Asher's extension (2) of DRT with SDRS proves valuable for the readers. SDRT has been used for a different problem: translation of a syntactically complex, informationally dense into a less complex and partactical language. SDRT can be used as a valuable framework for exploring problems of punctuation in which informational characteristics of written text are central. Punctuation can not only encode and facilitate purely discourse relational links between text units in text sentences. The information of the research reports can be conveyed through rhetorical relations to punctuation. However, the writers of research articles used 38% of content-level rhetorical relations and 62% of other relations. Therefore the research articles have little semantic and discourse effects of punctuation. In other words, the writers of research articles could not properly use punctuation marks. In conclusion, if the rules of punctuation can be applied in reading, writing, speaking and listening, it is sure to succeed.

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An approach to study of the utility of Electronic resources for Buddhist Studies

Rev Bodagama Sumana, The Bhiksu University of Sri Lanka, Sri Lanka

Abstract

Electronic resources are two types. They are online e–resources and offline e–resources. An "electronic resource" is defined as any work encoded and made available for access through the use of a computer. It includes electronic data available by (1) remote access and (2) direct access (fixedmedia). In other words: Remote access (electronic resources) refers to the use of electronic resources via computer networks. (AACR2, 2002 edition; glossary) Offline e-resources are CD–Rom, Tipiṭaka –CD, Mettanet – CD, Dhammapada–CD, Diskettes, VCD/ DVD, e–card. Online e-resources are Institutional &
Introduction

Information and knowledge are useful for the development of the quality of a particular society. They are transmitted to generation to generation with human activities. Various written materials were used to document knowledge since ancient periods. According to the archaeological excavations, clay tablets took the priority of written materials in Sumerian and Babylonian periods. After that Inscriptions, Parchments, Papyrus, Velum, Ola books, Copper sheets, Gold sheets and Silver sheets were documented materials in Eastern and Western countries. Religious and philosophical teachings and various knowledge and information were included in those documented materials. Therefore, people could find and get ancient information and knowledge from those sources. This situation was changed with the discovery of the paper by Cai Lun in 105 A.D. And then the knowledge of the world was drained to the common society. Since then, learning resources are being developed as printed and non-printed books since information technology has been developed quickly after 1970s. Computers were extended as an information media thereafter. This study is to investigate the usage of electronic resources on the development and communication of Buddhism.

Objectives of the Study
There are several objectives in this study.

- The main objective of this study is to investigate the usage of electronic resources on the development and communication of Buddhism.
- To identify the electronic sources of Buddhism.
- To comparatively study the productivity of the printed sources and electronic sources.
- To encourage student to use the electronic resources to study and research of Buddhism.

**Methodology**

This study is conducted using primary and secondary data from a sample group and books and journals. Semi structured interview method is used to gather data from the sample group. Researchers conducted in this field are also referred as literature review. Data is analyzed qualitatively.

**Data Analysis and Findings**

Major www sites and the virtual library related to Buddhism can be divided into three main categories.

01. The academic study of Buddhism
02. The study and practice of Buddhism
03. Introduction to Buddhism

Www. Virtual library was established in 1994 and Tibetan Studies were established in 1995. Cyber Sanga was introduced in 1991 by Gray Ray to make an online Buddhist community. Furthermore www.dharmanet and H. Buddhism are other examples regarding it. As a whole, e-resources related to Buddhism can be categorized as following.

**Table 01**

<table>
<thead>
<tr>
<th>Type of E- resources</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion forum</td>
<td>Buddha –L, Zen Buddhism-L, Tibet –L ( There are include E-mail, Chat, Online listen in these Discussion forum</td>
</tr>
<tr>
<td>Buddhist web sites</td>
<td><a href="http://Www">Www</a>. Dhammanet.org, Buddhanet (<a href="http://www.buddhanet.net">www.buddhanet.net</a>)</td>
</tr>
<tr>
<td>E-books</td>
<td><a href="http://www.buddhanet.net/ebooks.htm">http://www.buddhanet.net/ebooks.htm</a></td>
</tr>
<tr>
<td></td>
<td><a href="http://www.tipitaka.org/">http://www.tipitaka.org/</a></td>
</tr>
</tbody>
</table>
• As a special finding of this study, the blueprint the book Vimuttimagga is available as an electronic resource although it is very rare to find out as printed one.

Discussion

At present, information technology has been greatly improved. The world has become a global village. More information is created by the Internet and electronic resources for the sake of research arena. The concept of the virtual library is being developed. Therefore, information technology should be used for social advancement. According to the study, it can be distinguished the advantages and disadvantages of electronic resources and printed and non-printed sources of Buddhist studies as following.

Table 02

<table>
<thead>
<tr>
<th>Printed and unprinted documented resources</th>
<th>Electronic resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expensive (books and journals etc…)</td>
<td>Not Expensive</td>
</tr>
<tr>
<td>Ex: Tipiṭaka</td>
<td>Ex: (Tipiṭaka and Dhamma as PDF format, CD, DVD)</td>
</tr>
<tr>
<td>More space is needed</td>
<td>Only one computer is needed</td>
</tr>
<tr>
<td>Traditionally gets more honor</td>
<td>Many people are using</td>
</tr>
<tr>
<td>Information is not updated quickly</td>
<td>Information will be updated soon</td>
</tr>
<tr>
<td>Library access required for further study</td>
<td>Documents can be easily distributed and to communicate (facility to downloads, uploads and share)</td>
</tr>
<tr>
<td>Difficult access to necessary information</td>
<td>Quick access (data base, search engine, search pattern)</td>
</tr>
<tr>
<td>Language is a barrier</td>
<td>Language is not a barrier</td>
</tr>
<tr>
<td>Can be destroyed</td>
<td>Cannot be destroyed</td>
</tr>
</tbody>
</table>
Conclusion

Electronic resources are very useful than printed or unprinted books and other printed publications as they have more capacity, cheap and quick access point. Researchers and readers can use electronic resources without libraries of their own.

References


Web links

http://www.buddhanet.net/ebooks_s.htm

http://buddhistvillage.net/

http://www.thebuddhistsociety.org/
The Impact of Songs with Lyric and Animation to Strengthen Reading Fluency

Shelen Aderina Kok, Institute of Teacher Education, Malaysia

Abstract

Reading is a difficult skill to acquire, especially for learners learning a new language. Focusing on the reading fluency of three young readers from Tuaran, Sabah, this study aims to measure the participants’ CWPM by using song lyrics with animation. The improvement gained from this approach will then be used to measure their reading fluency of new and unfamiliar texts. Woodcock-Johnson’s Reading Fluency subtests were applied to standardize their fluency measurements. The young readers’ reading rate was monitored in three stages. Measurements were recorded daily and then compared. Discussions and observations were also conducted to validate the findings. Results suggest that the three young participants’ reading fluency can be enhanced through song lyrics with animation. The gain gathered from this was found to improve the participants’ reading fluency of new and unfamiliar texts. Using song
lyrics with animation as an approach to reading had also increased their motivation in reading. In conclusion, combination of using songs with lyrics and animation as the reading material showed a positive motivation and helped students persevere with the task of increasing fluency which is similar to the studies proposed by Douville and Wood (2009) and Wong et al. (1994). The outcome of this study will benefit school language teachers, curriculum designers as well as textbook writers. However, future research may need to explore other methods of enhancing reading fluency as a means of offering teachers with more varieties of teaching techniques.

Keywords: Fluency, Songs, Lyrics, Reading, CWPM

1. Introduction

Reports from numerous studies (see Mohammad Jafre, Majid & Ooi, 2011) suggest that Malaysians rarely read and this habit may even be extended to young children in rural regions. In today’s high-tech world, it is more conducive to watch movies, play games or listen to songs on You-Tube as a means of occupying their leisure time instead of reading valuable books for knowledge or pleasure. Over the years this issue has become more crucial as presently, reading for knowledge can now be enjoyed by listening to audio tapes which are also readily accessible. One need not have to read to learn about a new topic, story or news; one can now just listen for such knowledge through audio tapes where the contents are read by a reader. Because of this, reading fluency becomes less important although it cannot be denied that reading is an important and fundamental skill for the new generation who will one day aspire to pursue higher education or become professionals in an industry. Such kinds of pursuit require reading skills coupled by writing skills and these skills are often tested by the relevant institutions through examinations, reports or theses. The importance of reading as a literacy skill has been duly established (Kuhn & Stahl, 2003; National Institute of Child Health and Human Development, 2000; National Reading Panel, 2000) because without literacy, a nation cannot advance far. As a component of literacy, reading is a skill that comprises many layers of understanding although the layman may assume it otherwise as a simple task of just recognizing words and then understanding these words for their meanings. There are more to reading than what meets the eye. Reading requires several levels of competence. The first of this is for
the reader to be able to distinguish the language system which may be different from the second learner’s (L2) first language. The next level is for the reader to be able to recognize the words and their meanings. Following this, the reader must be able to distinguish the differences in meanings based on the different contexts of use. Finally, the reader must be equipped with the relevant linguistic cues that can help the reader to comprehend a text as reading takes place whether formally or informally. Since reading is such a complex skill to acquire, it deserves to be thoroughly researched because proficient reading skills need to be instilled among learners in schools and scholars in institutions of higher learning because reading offers the reader a vast amount of knowledge that are important (Hudson, Lane & Pullen, 2005; Pikulski & Therrien, 2005; Mohamad Jafre, Majid & Ooi, 2011). In reading other people’s works, the reader also becomes entrenched with innovative ideas and thoughts besides having the right model to develop his/her own writing competence. Scholars such as those mentioned above have also noted that a good reader should know how to read fluently and accurately as the transference of meaning and knowledge needs to take place speedily. Specific reading strategies can act as a catalyst to reading comprehension but the truth of the matter, as claimed by studies (Stecker, Roser, & Martinez, 1998), suggest that reading fluency and comprehension are interrelated. Reading fluency is the ability to read with speed, accuracy and proper expression (Rasinski, 2006). Being a fluent reader enables the person to focus on the contents during the ready activity rather than the attempt to decode the meaning of each word respectively. Children who become fluent readers become future readers who can interact with text on a higher level. In comparison, reading comprehension refers to the ability to read a text, process it and then understand its meaning. Despite the distinction in these two aspects of reading, there has been little research conducted to show the contribution of reading fluency on reading comprehension.

In the study of language acquisition, experts (Cummins, 1979) often distinguish fluency from proficiency with the former meaning having the ability to say something in the target language quick and fast with some noticeable errors and the latter as having the ability to say something quick, fast and accurate. In the context of this paper, fluency in reading is taken to be the ability to read a text with comprehension in a fast and accurate manner followed by expressions (Cotter, 2012). Fluency in reading acts as the bridge between word recognition and comprehension (Cotter, 2012). It is an efficient and effective decoding skill that a reader needs to possess. Having the ability to read quickly, efficiently and accurately combined with rapid, accurate, prosodic and expressive skills, helps the reader to comprehend the texts (Pikulski, 2006). In contrast, readers who possess poor reading fluency would experience difficulty with these oral reading components (NICHD, 2000; Therrien, 2004).

Studies (O’Shea, Sindelar & O’Shea, 1985; Therrien, 2004) show that reading a passage repeatedly can lead to an increase in fluency. However, this is based on the condition that the passage is read for a minimum of three times or more for it to gain significance. Therrien’s (2004) study hypothesized that singing would enhance fluency because singing enables students to enjoy the activity. This knowledge has been endorsed by Rasinski (2006) and Sample (2005) who also mentioned that music has been proven to motivate adolescents who enjoyed the activity during learning time. Students who were exposed to music were found to have an increased reading
fluency rate (Sample, 2005). In his study, Thérrien (2004) also reported that songs would naturally encourage students to do re-readings. Likewise, Douville’s (2001) study demonstrated that the rhythm and repetitive characteristics of songs also developed and motivated students’ learning desire. Consequently, their oral language and reading fluency rates also increased. Douville (2001) argues that the rhythm and repetitive characteristics of songs have the potential to strengthen not only students’ oral language development and motivation but also their interest in reading. Despite these studies indicating the value of songs, Thérrien’s (2004) study, however, implied that this gain may not be as significant when transferred to other reading texts. Taking this issue as a literature gap, the current study aims to use the gains of the three young readers reading fluency accomplished from using song lyrics on new and unfamiliar texts to see if Thérrien’s (2004) view can be modified.

2. Background of study

Three young students who were weak in their reading abilities were identified from a grade a rural school located in Tuaran, Sabah. There were only 31 teachers and 415 students in the school and most of the students learning English in this school learn it as a foreign language because they have very little exposure to the language. It is seldom spoken and used within the school environment. The participants involved were thus the three young readers and one English language teacher. Prior to conducting this study, permission was sought from the principal of the school, the children’s parents and the three young readers themselves. All of them gave their verbal consent to the participation. For research ethics, the three young learners’ profiles were provided with pseudonyms to preserve their privacy and confidentiality. The three learners involved were thus known as Surianah, a Year two aged 8 years old while the other two learners were Berlynda and Muhammad Nur Amin, Year three aged 9 years old. All the three participants were identified based on their weak reading fluency as evidenced by their test results of the English placement test conducted. They were instructed by their English teacher to participate in an additional activity which can help them improve their reading fluency rate. The activity would be conducted by their teacher three times a week, and each activity will last for about 30 minutes. The venue identified is the resource room located in the school. The table below illustrates the background of the three participants.

| 1 | Surianah | Year Two (8 years old) | • shows symptoms of classic signs of language-based reading disability in terms of transposing letters during spelling and reading speed,  
• word attack competence was below average level,  
• shows poor knowledge of orthographic patterns during reading and spelling,  
• has poor organization and understanding in the |
writing process,
- reading was graded as a word-by-word reading, with slow rate speed and monotone rhythm,
- struggles with automatic pronunciation thus reading is choppy,
- struggles with multi-syllabic and single word in reading,
- omits or substitutes word automatically in most instances if unable to manage when reading.

2 Berlynda Year Three (9 years old)
- was diagnosed with language-based reading disability,
- is specifically weak in phonics,
- reading competency in terms of spelling, word attack and fluency was noted as below national standard.

3 Muhammad Nur Amin Year Three (9 years old)
- was diagnosed as having reading disability,
- reading competence in terms of reading speed, transposing letters when spelling and word attack skills was stated as below average,
- has poor knowledge of orthographic patterns when reading and spelling,
- has poor organization and understanding in writing processes,
- scores in reading were lower than academic peers but word attack skills and reading speed was higher than Surianah and Berlynda,
- accuracy, speed and attention to punctuations vary,
- automatically decodes multisyllabic words,
- shows efficient and appropriate pauses of punctuations at times but at other times, rushes through reading, without proper punctuation or accuracy.

3. Problem Statement

Malaysian education system nowadays has been bombarded with the issue of English literacy especially reading proficiency. To smooth things out, it is better for us to adopt a reading strategy to improve students’ reading ability based on reading fluency, rate and prosody. It appears that reading instruction and assessment has
always been a prominent component in the Malaysian school curriculum (Kathrine, 2014). However, there is insufficient research conducted to determine the most effective fluency instructional practices to help students consistently make gains in reading comprehension, as well as in fluency (Applegate et al., 2009; Begeny & Martens, 2006; Edmonds et al., 2009; Kuhn et al., 2010; Lipson et al., 2011; Murray et al., 2012; Nichols et al., 2009; O’Shea et al., 2009).

4. Aim of study

As mentioned earlier, the aim of this study is to explore the effectiveness of using song lyrics with animation in increasing the reading fluency of three young learners of English from Tuaran, Sabah, Malaysia. The measurement used to measure their reading fluency is based on the Correct Words Read per Minute scale, hereby also known as CWPM. From the measurement of the reading fluency gained by the three participants through the song lyrics with animation approach, this study aims to assess if this immediate gain can be transferred to new and other unfamiliar texts. To do this, repeated reading instances of a regular passage, followed by repeated reading instances of a set of song lyrics were conducted. The gains retrieved from the use of song lyrics were then used to see if improvement occurs for the reading fluency of new and unfamiliar texts, as mentioned by Therrien (2004).

5. Significant of study

The outcome of this study suggests that the reading materials which incorporated song lyrics with animation in evaluating reading fluency can enable the young learners to increase their reading rate. The liveliness noted in the music and songs appear to increase the reading rate of the three young readers as well as their motivation for reading. Consequently, their competence in reading or gain, as Therrien (2004) calls it, was transferred to the participants’ long-term memory. This enabled them to apply their current reading fluency on other texts too. In that regard, it is deduced that the gain acquired from the repeated reading of song lyrics with animation will support them in the future as lifelong readers.

6. Literature Review

Reading fluency has been identified by many studies (see Therrien, 2004, Mohamad Jafre, Majid & Ooi, 2011; Cotter, 2012) as an important link to reading comprehension. In recalling the research done on reading fluency, it is important to understand what constitutes as elements that embrace fluency and what constitutes as
potential causes that can affect fluency. First and foremost, in the classroom context, the teacher needs to understand the complexity of reading (see Goswami, 2008). Reading involves the recognition of a language system. A reader needs to know how the system works then learns to recognize words and their various meanings before being able to transfer this knowledge onto a text. A reader thus learns to decode the underlying meaning of the text that is transmitted through the words. During a reading process, whenever a reader comes across an unfamiliar word, the reader needs to follow a certain procedure. The reader first tries to locate the sounds represented by the letters in the word. This means that the reader must have the ability to blend the phonemes then be able to read the phonograms and then use both letter-sound properties and meaning cues to determine the pronunciation and the meaning of the word that is contained in the text (Hudson, Lane and Pullen, 2005, p. 703). This process very much influences the reader’s fluency.

According to Kuhn, Schwanenflugel, Meisinger, Levy and Rasinski (2010), reading fluency consists of three main elements: automaticity, accuracy and prosody. These three elements rely heavily on the learner’s ability to read with automaticity. Taguchi and Gorsuch (2010) had stressed that one of the most effective means of increasing the lexical proficiency of a reader is by implementing repeated readings of a familiar text (Taguchi & Gorsuch, 2010). As is common in all learners, each learner has his/her own learning style but it is the teacher’s creativity that will help the learner to address these learning styles. When the teacher incorporates some of the most suitable reading strategies among the learners during classroom activities, meaning exists. Green (1999) notes that a language teacher should first immerse learners in complex and interactive experiences. For example, exposing them to music and rhythm is often a fun way of destressing learners’ anxiety during classroom management. This has been endorsed by other researchers such as Rasinski (2006), Sample (2005), Therrien (2004) and Douville (2001). Most of these studies have also noted that melodies can enhance many aspects of learning. Young children have been observed to smile, hum and clap their hands when they hear a familiar music and these signs indicate that children resonate with melodies (Sibal, 2004). Studies have also indicated that children appear to recognize words when they learn such words through songs (see Rasinski, 2006; Sample, 2005; Therrien, 2004; Douville, 2001). Other studies (Ridout, 2006) suggest that children appear to recognize the usage of certain words better when they are exposed to stories. Regardless of contexts or participants, it appears that music thus enables people to release their anxiety thus, facilitating learning. In the context of language, it can be the absorption of vocabulary, reading as well as intellectual development and these claims have been verified by other studies (Brown & Brown, 2008). Dr. Susan Homan, a literacy professor, conducted a research (Homan, 2011) for some students who were struggling readers. Her study provided a fun and engaging environment of repeated reading through the use of song lyrics. The results showed that reading fluency and its comprehension increased by more than had been estimated. Based on this, Dr. Susan Homan (2011) believes that even though the students were merely reading the lyrics of the songs, they were still reading and due to that, they became self-motivated and self-encouraging in wanting to read even more. In another case, Colwell (1988) carried out a study to determine whether implementing music in a kindergarten’s language program would improve the students' reading accuracy. The results showed that music facilitated greater reading accuracy than the hard copy of reading texts made available
to the learners. These studies showing how reading can be enhanced through musical contents can also promote creativity (Weinberger, 1998).

Fluency in reading creates a relationship to comprehend the meaning of the content. Therefore, potential technology approach would be improving the reading fluency as Wolf and colleagues (2000) conducted a research by using RAVE-O Program in relation to multimedia language and reading training program. It was found that the program address three goals which are fluency and comprehension, orthographic and phonological awareness and engagement. In line with that, intervention using song lyrics with multimedia animation may help to improve students’ reading fluency. (Alise Brann, Tracy Gray, Judy Zorfass, 2009)

7. Methodology

To perform the current study, an innovative approach of learning was initiated for the three participants. This called for a monitoring plan which was developed to measure the effectiveness of the reading fluency that was aimed at fulfilling the goals of this study. At the beginning of the study, the measurement of the three participants’ reading fluency and their initial CWPM rates were standardized. The participants were assessed formally on their reading fluency before and after the repeated reading of a regular passage. This procedure was then followed by the repeated reading of a set of song lyrics that were specially selected from Arsalan Tosifi, who was the founder of the ‘Englishseedkids’. Woodcock-Johnson’s Reading fluency subtests were then applied to measure the participants’ CWPM scales. The reading rates of these three participants were recorded daily in terms of seconds. This process was referred to as the monitoring plan.

The monitoring plan was performed for both types of reading activities: the repeated reading of a regular passage and the repeated reading of a set of song lyrics. The length of both the regular passage and the set of song lyrics ranged within 62 - 111 words. Following the recording of the participant’s reading rate, each participant’s CWPM was calculated by counting all the words which were read correctly and dividing these by the total time spent. The calculation will determine the number of words read correctly per minute. The procedure was applied to the repeated reading of the regular passage only. The two tables below show the result of the three students’ progress.

Table 2: CWPM Gains for Phase 1: Repeated Readings of Regular Passages

<table>
<thead>
<tr>
<th>Passage 1a: 62 words</th>
<th>Berlynda</th>
<th>Muhammad</th>
<th>Suriana*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1b.:25 words</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read 1</td>
<td>35</td>
<td>44</td>
<td>9</td>
</tr>
<tr>
<td>Read 2</td>
<td>40</td>
<td>48</td>
<td>11</td>
</tr>
<tr>
<td>Passage 2a: 87 words</td>
<td>2b: 43 words</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read 1 43 66 10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read 2 44 68 23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read 3 55 70 33</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Passage 3a: 107 words</th>
<th>3b: 55 words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read 1 58 60 12</td>
<td></td>
</tr>
<tr>
<td>Read 2 62 61 34</td>
<td></td>
</tr>
<tr>
<td>Read 3 67 66 46</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Passage 4a: 111 words</th>
<th>4b: 62 words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read 1 50 63 15</td>
<td></td>
</tr>
<tr>
<td>Read 2 57 65 36</td>
<td></td>
</tr>
<tr>
<td>Read 3 61 71 58</td>
<td></td>
</tr>
</tbody>
</table>

Note: There is a variance in word count in the passages that Suriana read, since she was not in the same class as Berlynda and Muhammad.

Table 3: CWPM Gains for Phase 2: Repeated Readings of Song Lyrics

<table>
<thead>
<tr>
<th>Song 1 (98 words)</th>
<th>Berlynda</th>
<th>Muhammad</th>
<th>Suriana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read 1 60 65 40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read 2 80 86 60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read 3 98 98 65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read 1 40 50 23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read 2 54 65 30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read 3 74 74 44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read 1</td>
<td>84</td>
<td>90</td>
<td>40</td>
</tr>
<tr>
<td>Read 2</td>
<td>90</td>
<td>97</td>
<td>64</td>
</tr>
<tr>
<td>Read 3</td>
<td>111</td>
<td>111</td>
<td>67</td>
</tr>
</tbody>
</table>

| Read 1 | 40 | 51 | 20 |
| Read 2 | 53 | 60 | 35 |
| Read 3 | 63 | 63 | 41 |

Table 4: Gains in CWPM Between First Three Repeated Reading Trials.

<table>
<thead>
<tr>
<th></th>
<th>Berlynda</th>
<th>Muhammad</th>
<th>Suriana</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Gains</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeated Readings of Regular Passages Condition</td>
<td>56.58</td>
<td>68.17</td>
<td>54.83</td>
<td>59.86</td>
</tr>
<tr>
<td>Repeated Readings of Song Lyrics Condition</td>
<td>81.16</td>
<td>87.83</td>
<td>50.5</td>
<td>73.16</td>
</tr>
</tbody>
</table>

All the three participants were requested to plot their reading rate and their reading accuracy individually. This is conducted for every activity done during the repeated reading of the song lyrics. During the reading evaluation, the reading errors committed by the participants and the total time taken by each participant were documented. Upon completion, the teacher would meet the participants individually to discuss their respective reading errors and the time taken. After that the participants would chart out their errors and time in a bar graph. This is for monitoring their own improvement.

For assessing the reading motivation among the three participants, the teacher would engage the participants in a group discussion. The aim was to understand the student’s perception and feelings about the intervention. The teacher would then gather the information by posing certain informal questions such as “Do you like the fluency activity we just did?”, “What did you like/dislike about the fluency activity?” As the discussion progressed, the participants’ behavior would also be observed their facial gestures, level of energy and excitement and
spontaneous comments. The participant’s reading was also observed for prosody while everyone was reading the passage or the set of song lyrics. The aim of focusing on prosody was for the following reasons:

a. to ensure that reading was not choppy, robotic or monotonous,
b. to ensure that the participants were not rushing to finish their reading,
c. to ensure that all evaluations consider the intonation, natural pauses and punctuation in sentences

During the reading of the passage, the teacher would explicitly and overtly read the passage first. The teacher also provided the intonation, phrasing, rate and tone as a guide for the three participants. The participants were then reminded to emulate the model provided by the teacher earlier. At the end of the reading activity, the teacher would discuss the observation with the participants.

8. Findings

Both the interventions applied on evaluating the participants’ reading fluency showed an increase in their CWPM. The result of the repeated reading of the regular passage showed that the average gain was 51.4 CWPM. The result of the repeated reading of the set of song lyrics showed that the average gain was 83.2 CWPM. These two results clearly indicate that there was a greater gain of 31.8 CWPM during the repeated reading of the song lyric as compared to the repeated reading of the regular passage. This outcome was also highlighted by Hasbruck and Tindal (2006) who observed that the average fluency rate for sixth graders in their study was 140 CWPM with a range of 82 – 195 whereas the average fluency rate for seventh graders was 136 CWPM which is within the range of 88 – 192. In this study, the Primary two (Suriana) achieved 55.83 CWPM which was still very much behind the rate of the average result. In contrast, the Primary Three (Berlynda and Muhammad) in this study had achieved 56.58 and 68.17 CWPM respectively during the initial stage. As both Primary Three reached the final stage of this study, results showed a significant improvement. At the end of the reading evaluation, the Year Two primary student, Suriana, had also acquired 50.5 CWPM and both year three primary students, Berlynda and Muhammad had achieved 81.16 and 87.83 CWPM respectively. In this regard, the results indicate that two out of the three participants had come almost close to the mean and one had surpassed the mean. This is illustrated in the table below which shows the individuals’ growth scores.

Table 5: Individual CWPM Growth between each repeated reading trial of both stages
According to the Woodcock-Johnson’s Reading fluency subtests, the overall results noted from the pretests monitored prior to the intervention, had achieved an increase, on an average of three months, as shown in the final fluency rate. Particularly for Berlynda and Muhammad’s scores, both had increased their CWPM following the repeated reading of the regular passage. At the same time, only Suriana’s scores had increased following the repeated reading of the song lyrics with animation.

9. Discussion

This study provides evidence to suggest the effectiveness of using song lyrics with animation to increase the reading fluency measurement (CWPM) of weak readers. In addition, this study also indicates that song lyrics with animations can be used as an approach to assess the immediate gain of the repeated reading of a regular passage and this gain can eventually, be transferred to the reading of new and unfamiliar texts. Results indicate that upon following each of the interventions for all the three participants, the number of CWPM noted during each repeated reading trial (non-transfer fluency measures) had increased. Therrien (2004) states that this indicates the effectiveness of repeated reading in improving oral reading rates. In addition, the outcome of this study also shows that all the three participants had a collective improvement, based on Woodcock-Johnson’s Reading fluency subtests which assessed transfer gains. There was an increase in the participants’ reading fluency rate when compared to their initial pre-test fluency scores, following the final comprehensive post-test after both interventions had been conducted. These gains were less dramatic than those made by the CWPM rate increases. The repeated reading of the regular passage showed a slightly higher gain. It is possible that the gain measured by Woodcock-Johnson’s Reading fluency subtests may have been subjected to the order by which the interventions were delivered. Studies (Torgessen, 2005) have observed that during the initial stage of an intervention, a greater gain is often observed and this can be quite impressive during the second phase where a greater CWPM gain was recorded when the repeated readings of the song lyrics with animations were conducted.
In retrospection, had the song lyrics with animations intervention been done first, it is quite possible that Woodcock-Johnson’s Reading fluency scores would have shown greater gains and the CWPM gains would then have been even higher. In looking at the lower transfer gains, this study had not placed much emphasis on the kind of reading strategies that could have facilitated transfer (Wong, 1994). Nonetheless, based on the results, it is suggested that teachers use both interventions of song lyrics with animations used as supplements to the repeated reading of regular passages since using both approaches can lead to noteworthy gains. The result of the repeated reading of the song lyrics with animations shows a good and steady increase in the CWPM measures unlike the results gained through the repeated reading of the regular passage. This large jump noted in the CWPM rate could be attributed to the repetitive nature of the song lyrics with animations. It is also possible that as the participants listened to the songs daily, they had indirectly, also acquired their reading rate as well as increased their reading accuracy. The participants had been listening to the song on a constant basis and this had led them to cluster the words into appropriate phrases which ultimately, enabled them to join the text together. Consequently, they saw the words in units rather than as individual words. This observation is supported by the responses drawn from Suriana and Muhammad who had mentioned that the lyrics were organized like poems. Muhammad had even suggested that the song lyrics be read with more expression.

From the informal discussions and observations conducted, it was realized that during the repeated reading of the song lyrics, student motivation and interest in fluency also appeared to increase. This can be traced to the few instances where during the repeated reading of the song lyrics, the participants had proactively asked the teacher to return their fluency reading rate in class. However, no such mention was made during the reading of the regular passage activity. Based on the informal questions asked, the teacher had also elicited more favorable responses during the song lyric activity. It was also noted that although the participants enjoyed the goal-setting aspect of the study, they were passive with their responses. They seemed to think that the fluency assignment was part of their homework in the class. The participants had assumed that the teacher was being nice to them by allowing them to do something different such as listening to songs outside their formal classroom time. The participants also thought that the class was more interesting during intervals where song lyrics with animations were introduced and so, they were more focused as they listened to the song although they were not allowed to sing the song. This suggests that there is a link between repeated reading of song lyrics and accurate reading rate which encompass the engagement of prosodies that were expressed through expressions, intonations, parsing and tone.

10. Conclusion

This study has shown that using song lyrics with animations to better engage students in reading and to arouse their interest in the reading task is effective (Douville & Wood, 2001). The excitement of reading among weak readers can be achieved through song lyric reading activities. This approach using song lyrics with animations can also increase readers’ interest to the language as well as enhance their understanding of what reading fluency means. In the context of this study, this approach can be the most important part as it was found to maintain the student's motivation level in reading. It is thus deduced that if transfer gains can be achieved
using various fluency approaches such as song lyrics with animations, then it would be logical and reasonable for classroom teachers to apply the route that is most enjoyable and most motivating for the learners.

At the initial stage of the study, there were doubts as to whether the approach would be effective and viable. Nonetheless, from the results noted, it is evident that all the three participants had increased their CWPM reading fluency overall, upon following both interventions using regular passage and song lyrics with animations. Thus, it can be deduced that song lyrics with animations can be implemented as a part of an overall language programme for building reading fluency. Moreover, the increase in motivation for reading suggests that song lyrics can be more inspiring because they are accompanied by melodies and animations thus, they become more enjoyable and better appreciated by learners. As stated above, song lyrics with animations can improve reading rate and prosody thereby, enhancing word recognition faster (Ridout, 1990). Undeniably, music does facilitate reading readiness, language acquisition and learners’ intellectual development all of which when gathered together, promotes creativity (Weinberger, 1998). Learning through music is an effective way because music stimulates the brain while it is processing information (Brown & Brown, 2008). Thus, music should be incorporated into every classroom learning activities. Nonetheless, as this study was confined to the observation of only three participants, it is recommended that future study be conducted of more participants to be able to verify that the organization of the text, as is pervasive in song lyrics, play a role in increasing the CWPM rate and the prosody of readers. Additional research should also control the format of both the song lyrics and the excerpts extracted from regular texts to validate current and future outcomes. To sum up, even though technology may help but traditional and technology should be integrated in teaching reading.

11. Implication

In the 21st century using traditional methods in teaching reading may not appropriate in the classrooms. However, a difference should be implemented to improve students’ reading fluency. It was found that technology has given a positive impact in reading. The student may engage on singing along with songs with animations for listening and later for reading. The students found more motivated that improved in reading with the currently technology.

12. Limitations

There were several limitations encountered from the present study. First, the internet may delay the connection if there was failure. Second, student may have difficulty in connecting programme or application outside of the house. This may have misinterpreted the instructions. Third, the students may not be able to access to computer as they may not have such facilities thus, they may have a little difficulty practicing at home. As we are in in the twenty-first century, we should prepare for the upcoming changes therefore we are not avoided from the upgraded technology.
References

Alise Brann, Tracy Gray, Judy Zorfass, PowerUp WHAT WORKS (2009)


Education of the Other Backward Classes in India

Pulak Chandra Devnath, Government Kamalanagar College, India

Introduction

Education is not merely the teaching of shapes of alphabets and later on literature and theories, but a training of the pupils for a perfect operation of their minds and bodies and attaining true knowledge. It is the key factor in the development of human potentials. Every country gives due importance to her education system through which all types of challenges are possible to be faced, it is possible to reach all the people with the benefits of economic and technical developments through well-planned and well-implemented system of education. The links between education and reduction in the rate of population growth, between education of women and family health, between education and equitable economic growth, etc. are by now well-documented in many third world countries. Backwardness is expressed in lack of adequate opportunity for group and individual self-development, especially in economic life and in matters of health, housing and education. It is measured in terms of low levels of income, the extent of illiteracy, and the low standard of life demonstrated by living conditions. In the constitution Other Backward Classes are described as “socially and educationally backward class”. This backwardness is expressed in lack of adequate opportunity for group and individual self-development in areas of health, housing, education and economic opportunities upholding dignity of life. It is measured in terms of low levels of income, the extent of illiteracy, and the low standard of life demonstrated by living conditions. The chief amongst the underprivileged or es-specially handicapped groups are the scheduled castes, the scheduled tribal population groups which were known as criminal tribes and other groups that constituted the weaker sections. In the Indian Constitution the ‘Other Backward Classes’ are described as “socially and educationally backward class”.

Keywords: Education, Backward classes, India
Objective of the Study

The study was conducted on the following objectives –

1. To study the present status of Other Backward Classes in India with special reference to
   (a) Educational condition and
   (b) Socio-economic condition.
2. To study the Other Backward Classes attainment in higher education.
3. To study the participation in jobs of Other Backward Classes.
4. To suggest some measures to overcome finding drawbacks.

Selection of Tools

Family information blank has been prepared and used for the purpose of data collection. Percentage analysis, mean, etc. is used for the treatment of data.

Methodology

The research work is done by adopting the descriptive cum normative survey method of research. The details as under:

Population and Sample

The present study has covered the total no. of population of other backward classes of Dhubri district of Assam in India. The total population in Dhubri district is 16,37,344 among them other backward classes are 2,73,577 (approximately), i.e., 16.71%. There are 7 blocks in Dhubri district of Assam in India. But the concentration of OBC population is mainly in 3 blocks (Agomani, Golakganj and Rupshi). So the researcher has selected 300 OBC families for the sample of the study from all the 3 blocks i.e. 100 OBC families from each block.

Analysis and Interpretation

The section describes the socio-economic and educational conditions of the Other Backward Classes in India. A family's socioeconomic status is based on family income, parental education level, parental occupation, and social status in the
community such as contacts within the community, group associations, and the community's perception of the family. Families with high socioeconomic status often have more success in preparing their young children for school because they typically have access to a wide range of resources to promote and support young children's development. They are able to provide their young children with high-quality child care, books, and toys to encourage children in various learning activities at home. Also, they have easy access to information regarding their children's health, as well as social, emotional, and cognitive development. In addition, families with high socioeconomic status often seek out information to help them better prepare their young children for school.

**Number of Members in a Family**

Table no-1

<table>
<thead>
<tr>
<th>Members</th>
<th>No. of Family</th>
<th>Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>59</td>
<td>177</td>
</tr>
<tr>
<td>4</td>
<td>71</td>
<td>284</td>
</tr>
<tr>
<td>5</td>
<td>70</td>
<td>350</td>
</tr>
<tr>
<td>6</td>
<td>60</td>
<td>360</td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td>70</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>64</td>
</tr>
<tr>
<td>9</td>
<td>6</td>
<td>54</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>1448</td>
</tr>
</tbody>
</table>

The population of OBCs of 300 samples is 1448 and it is found that most of the families have 3-6 member. 5 families were found where each has more than 10 members.

**Family-wise total Literacy**

Table no-2
The table shows that out of 300 sample family, the member of 174 families are fully literate. But in other 126 families, they have both literate and illiterate member.

### Number of Literate Member in Family

Table no-3

<table>
<thead>
<tr>
<th>No. of Literate</th>
<th>No. of Family</th>
<th>Total no. of Literate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>47</td>
<td>94</td>
</tr>
<tr>
<td>3</td>
<td>68</td>
<td>204</td>
</tr>
<tr>
<td>4</td>
<td>72</td>
<td>288</td>
</tr>
<tr>
<td>5</td>
<td>56</td>
<td>280</td>
</tr>
<tr>
<td>6</td>
<td>17</td>
<td>102</td>
</tr>
<tr>
<td>7</td>
<td>11</td>
<td>77</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
<td><strong>1126</strong></td>
</tr>
</tbody>
</table>

The 2 families are found that they don’t have a literate member that means they are fully illiterate.

### Number of illiterate member in Family

Table no-4

<table>
<thead>
<tr>
<th>No. of Member</th>
<th>No. of Family</th>
<th>Total no. of illiterate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>174</td>
<td>0</td>
</tr>
</tbody>
</table>
N. B: The child who has less than 5 years of age is not included in both literate and illiterate list. But it is seen that some of them got admission at the age of 4 years.

**Educational qualification/Level of Education of Household-owner**

Table no-5

<table>
<thead>
<tr>
<th>Level of Education/EQ</th>
<th>No. of Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
<td>58 (19.33%)</td>
</tr>
<tr>
<td>Primary (I-IV)</td>
<td>70 (23.33%)</td>
</tr>
<tr>
<td>Upper Primary(V-VIII)</td>
<td>68 (22.67%)</td>
</tr>
<tr>
<td>High School(IX-X)</td>
<td>40 (13.33%)</td>
</tr>
<tr>
<td>H. S. L. C</td>
<td>40 (13.33%)</td>
</tr>
<tr>
<td>H. S (Arts)</td>
<td>13 (4.33%)</td>
</tr>
<tr>
<td>B. A</td>
<td>10 (3.33%)</td>
</tr>
<tr>
<td>B. Sc</td>
<td>1 (0.33%)</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
</tr>
</tbody>
</table>

Education is perhaps the most important social indicator. It is a first step in improving the socio-economic status of an individual or a community. The above table shows that the literacy rate of OBC people in Dhubri district is very high. In sample, only 15.15 percent persons are found to be illiterate and another 84.85 percent are found literate. But it does not mean all are educated, most of them can write their names only. In 300 samples, 19.33 percent household-owner did not receive any kind of education and other 80.67 percent household-owner had received some formal schooling, mostly at the primary and secondary levels. It is found that only 11 household-owners are graduates.
Number of Members engaged in Job in a Family

Table-6

<table>
<thead>
<tr>
<th>Members</th>
<th>No. of Family</th>
<th>Total job holder</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>268 (89.33%)</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>26 (8.67%)</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>4 (1.33%)</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>2 (0.67%)</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>40</td>
</tr>
</tbody>
</table>

Employment status of a person not only determines his/her income level, but also social status as well as self-esteem. The table shows that only 32 families are found to have members who are engaged in job and the total number of job holder is 40 in 1448 population of 300 OBCs family.

Number of House wife in service

Table no-7

<table>
<thead>
<tr>
<th>Response</th>
<th>No. of Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>11 (3.67%)</td>
</tr>
<tr>
<td>No</td>
<td>267 (89%)</td>
</tr>
<tr>
<td>Question does not arise</td>
<td>22 (7.33%)</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
</tr>
</tbody>
</table>

The above table shows that only 3.67 percent housewives are engaged in job and 7.33 percent household respond ‘question does not arise’ that means some of the house owner are unmarried, wife dead and female household.
Number of household engaged in other occupation

Table no-8

<table>
<thead>
<tr>
<th>Occupation</th>
<th>No. of Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultivation</td>
<td>89 (29.67%)</td>
</tr>
<tr>
<td>Animal husbandry</td>
<td>0</td>
</tr>
<tr>
<td>Skilled labour</td>
<td>22 (7.33%)</td>
</tr>
<tr>
<td>Manual labour/Unskilled labour</td>
<td>115 (38.33%)</td>
</tr>
<tr>
<td>High businessman</td>
<td>1 (0.33%)</td>
</tr>
<tr>
<td>Car owner</td>
<td>2 (0.67%)</td>
</tr>
<tr>
<td>Shop owner</td>
<td>17 (5.67%)</td>
</tr>
<tr>
<td>Job holder</td>
<td>21 (7%)</td>
</tr>
<tr>
<td>Others</td>
<td>33 (11%)</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
</tr>
</tbody>
</table>

The table shows that over 38.33 percent sample households are engaged in manual labour and 29.67 percent households are engaged in agriculture or cultivation. About two-fifth of the households reported manual labour as their main occupation for their livelihood. 11 percent of households opined that they are engaged in some other occupation like car driver, rickshaw driver, private coaching, tube well mechanic, pujari, decorators etc.

Number of Girls married before 18 years of age

Table no-9

<table>
<thead>
<tr>
<th>No. of Girls</th>
<th>No. of Family</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>277 (92.33%)</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>20 (6.67%)</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>3 (1%)</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>26</td>
</tr>
</tbody>
</table>

Marriage at early age is also an indicator of social and health unconsciousness of any community. The above table shows that 7.67 percent household-owner has given their daughter marriage before 18 years of age and most of them are manual labour in occupation.
Information about married life

Table no-10

<table>
<thead>
<tr>
<th>Information</th>
<th>No. of Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wife Dead</td>
<td>4 (1.33%)</td>
</tr>
<tr>
<td>Husband Dead</td>
<td>13 (4.33%)</td>
</tr>
<tr>
<td>Married for second time</td>
<td>7 (2.33%)</td>
</tr>
<tr>
<td>More than one living wife</td>
<td>5 (1.67%)</td>
</tr>
<tr>
<td>Divorced</td>
<td>3 (1%)</td>
</tr>
<tr>
<td>Question does not arise</td>
<td>268 (89.33%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
</tr>
</tbody>
</table>

The above table shows that 4.33 percent households are widow and 2.33 percent house hold get married for second time. The study also shows that 1.67 percent household has more than one living wife.

Number of daughter and wife goes for manual labour

Table no-11

<table>
<thead>
<tr>
<th>Response</th>
<th>No. of Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>25 (8.33%)</td>
</tr>
<tr>
<td>No</td>
<td>154 (51.33%)</td>
</tr>
<tr>
<td>Question does not arise</td>
<td>121 (40.33%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
</tr>
</tbody>
</table>

Those who response ‘Question does not arise’ means they may have job or good business that means their economic condition is good. But other (yes/no) response indicates that they depends on manual labour but they do not send their daughter or wife for manual labour. 8.33 percent of households opined -that their daughter goes for manual labour.

Type of house

Table-12

<table>
<thead>
<tr>
<th>Type</th>
<th>No. of Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kutcha</td>
<td>231 (77%)</td>
</tr>
<tr>
<td>Pucca</td>
<td>33 (11%)</td>
</tr>
</tbody>
</table>
While analyzing the housing conditions of the OBCs in Dhubri district, it was observed that the OBCs have lesser proportion of Pucca and mixed or semi-pucca houses which is only 11 and 12 percent respectively. The study shows that 77 percent household live in kutcha houses with their family and the wall of the house is of bamboo fence with tin roof. Mixed or semi-pucca houses which meant the wall of the house is of half-wall and bamboo fence with tin roof which are found only 12 percent.

**Availability of Electricity in houses**

Table no-13

<table>
<thead>
<tr>
<th>Response</th>
<th>No. of Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>42 (14%)</td>
</tr>
<tr>
<td>No</td>
<td>258 (86%)</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
</tr>
</tbody>
</table>

Electricity is also an important indicator of socio-economic development which indicates the forwardness and backwardness of the society. Only 14 percent of household viewed that they have electricity in the houses and 86 percent household viewed that they don’t have electricity in their houses. 10 percent of household viewed that they have television and fan in their home and only 1 percent household have refrigerator in their home. But most of the household viewed that they have mobile phone those who don’t have electricity also.

**Number of household having water supply point nearby home**

Table no-14

<table>
<thead>
<tr>
<th>Response</th>
<th>No. of Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>40 (13.33%)</td>
</tr>
<tr>
<td>No</td>
<td>260 (86.67%)</td>
</tr>
</tbody>
</table>
Pure drinking water is one of the most important factors of maintaining good health. The study reveals that only 13.33 percent household have water supply facility nearby their home but they viewed that those supply point are not functioning at present and 86.67 percent household viewed that they don’t have water supply point nearby their home.

**Number of household having lavatory facility in home**

Table no-15

<table>
<thead>
<tr>
<th>Response</th>
<th>No. of Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>118 (39.33%)</td>
</tr>
<tr>
<td>No</td>
<td>182 (60.67%)</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
</tr>
</tbody>
</table>

The lavatory facility is also another important indicator of health consciousness. The table shows that only 39.33 percent of household have lavatory in their home and other 60.67 percent household viewed that they don’t have lavatory in their home. They use their backyard to respond to the ‘call of nature’.

**Concluding Remarks**

To conclude, the findings of the study reveal that in 300 OBC families, total population is 1448 and among them 1126 are literate. So, literacy rate of OBCs in Dhubri district is 84.85% which is higher than the district literacy rate (48.2%). But level of education of the OBCs household-owner is not high which is more necessary for the household-owner because all decision-making and problem-solving tasks depend on him. It is found that only 3.66% household-owner reached in higher education and most of the household-owner received some formal schooling, mostly at the primary and secondary levels. The Other Backward Classes of Dhubri district is mainly depends on manual labour and only 10.67% OBCs family depends on job. But nobody is found as Grade-I officer. Those who depend on manual labour, their level of education, level of income and housing condition with other facilities is also very poor. Early marriage is also prevalent among the OBCs of Dhubri district which is an indicator of ignorance of health consciousness. Social participation of the OBCs household is very less which is only 7.33%. The facilities like water supply facility, health facility are also not available in all places.

Skilled labor and high craftsmanship, residents of urban area, commanding sufficient capital, government service of the upper grades, having educated parents or guardians with an atmosphere of self-confidence and culture, having adequate income and resources, having a fair amount of education, belief in science or develop scientific attitude etc. are the indicators
of non-backwardness. On the basis of this, the following steps should be taken for removing Backwardness:

- Women should be given special help in education so that they may come up to the level of men, and they should be given all opportunities in public service by giving them equality of status.
- Rural areas must be made attractive by better and healthy amenities.
- Special training should be given to the unskilled laborers to improve their efficiency, and they should be encouraged to raise the standard of efficiency, precision, dexterity grace and quickness. All labour should be educated labour.
- People should not wait for the government to take initiative for the backward classes. Social workers should enthusiastically start work for them.
- Curriculum should be changed according to the needs and problems of the society.
- Systematic classes must be held throughout the country, and all the educational methods and psychological aids should utilized to enthuse, both social servants and the masses, for the spread of correct ideas about health, use of money, system of administration, laws of psychology, sociology, ethics and spirituality.
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Investigating employees’ length of service and employee retention factors: Hotels in Cape Town, South Africa

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Abstract

Employee retention can be measured quite accurately with the actual number of years that employees have worked in an organisation. This study investigates relationships between hotel employees’ length of service and responses to individual variables explaining employee retention factors. A structured questionnaire survey of 217 hotel employees in Cape Town, South Africa was used to obtain information that were subjected to bivariate and multivariate analyses. Key results show that the employees who have worked longer in the hotel have particular characteristics: they perceive that working hours in the hotel do not infringe on their personal quality time with friends; they perceive it will be difficult for them to leave the hotel; they want to remain in the hotel for a long time; and quite interestingly, they perceive they do not receive continuous training in the hotel. Further costs of hiring and developing new employees can be reduced if loyal and talented employees are retained for longer periods through continuous career development. This study is of particular interest to the hotel sector management, as it is focussed on retaining those staff who really want to build a career in the hospitality industry.

Keywords: Employee turnover, Loyal employees, Long service, Hotel sector, Sub-Saharan Africa
1. Introduction

Much study has been done on hotel employee retention (such as Davidson & Wang, 2011; Mohsi Journal of the International Association of Buddhist Studies, Lengler & Kumar, 2013; Pearlman & Schaffer, 2013), but there remains little literature about this in sub-Saharan Africa. Employees have stated unfair compensation, long working hours, little growth opportunities, and poor working relationships as causes of problems related to employee retention (AlBattat, Som & Halalat, 2014; Davidson & Wang, 2011; Kuria, Alice & Wanderi, 2012; Mohanty & Mohanty, 2014). Hotel managers strive to reduce costs resulting from staff turnover. These costs are also said by previous researchers to be those of hiring and training new employees, inconsistent service quality as previous and new staff may perform differently, and loss of customer loyalty (Kuria et al., 2012; Mohanty & Mohanty, 2014; Yam & Raybould, 2011; Yang, Wan & Fu, 2012). Mohsin et al. (2013) posit that high staff turnover in hotels is a problem that is not unique to a particular nation, but a worldwide issue. It seems from previous studies that employee satisfaction is directly linked to employee retention, hence exploring the working conditions that enhance employee satisfaction and retention is a desired study focus.

This study will therefore investigate relationships between hotel employees’ length of service and responses to individual variables explaining employee retention factors. These employee retention factors can be seen as the working conditions that can cause employees to work for a short or long time in a hotel. The results of this study are of particular interest to the hotel sector management, as it is focussed on retaining those staff who really want to build a career in the hospitality industry. Cape Town, in South Africa, with its many hotels, is chosen as the study area, due to its importance as a world tourism destination. The survey was done in selected three, four and five star hotels, who are more likely to employ non-family members and are usually bigger in size than one or two star hotels.

2. Research Design and Method

Most tourism and hospitality research need quantitative data to get required information (Ezeuduji, 2013; Ezeuduji & de Jager, 2015; Veal, 2011). We used structured questionnaire survey to obtain data that were subsequently analysed to reach conclusions in this study.

Variables in the questionnaire were mostly close-ended and ordinal. We used 5-point Likert scale variables (1 to 5; strongly agree to strongly disagree) to measure respondents’ level of agreement to variables explaining employee retention. Employee profile variables were mostly categorical in nature, and length of service item in the questionnaire was a ratio variable. Employee retention variables in the questionnaire originated from literature review done. Our study used a non-
probabilistic sampling approach - convenience sampling, to recruit hotel employees from three, four and five star hotels in Cape Town as the study respondents.

We obtained permission from these hotels to conduct our research. 217 hotel employees were randomly surveyed, out of which 210 questionnaires were returned and found usable for data analysis.

We used IBM’s statistics software for data analysis (IBM Corporation, 2016). Descriptive analyses of all the variables in the questionnaire, reliability tests of grouped employee retention variables, and correlation tests of length of service versus employee retention variables were performed. Reliability tests checked for internal consistencies among grouped variables used to explain employee retention factors. We used Cronbach’s Alpha score in the reliability tests to check for internal consistency among variables explaining each employee retention factor (Gliem & Gliem, 2003). We used a Cronbach Alpha cut-off score of 0.6 in our reliability analyses due to the relatively few variables that were used to explain each employee retention factor. Veal (2011) proposed the use of correlation test to explore relationships between ordinal and/or ratio variables. Our study accepted relationship between variables at 95% confidence interval, which is very common in social science research.

3. Results and Discussion

3.1 Profile of Respondents and Level of Satisfaction

The respondents’ profile results (Table 1) show that female employees dominate the hotel sector. Many (about 58%) of the employees are relatively young, less than 36 years of age. Employees from the Black and Coloured communities dominate the sample (about 71%), about 47% of the employees have no higher than high school education, and the majority (about 64%) have not worked in the hotel for more than 5 years. Most of the employees (about 66%) work in the rooms, and food and beverage sections; with first line staff dominating the entire sample (41%). In as much as hotel employment has been widely portrayed to have dire working conditions (AlBattat, Som & Halalat, 2014; Davidson & Wang, 2011; Kuria, Alice & Wanderi, 2012; Mohanty & Mohanty, 2014), about 60% of the employees surveyed reported that they are either mostly or totally satisfied, while about 27% reported being neither satisfied nor dissatisfied, and about 14% are mostly or totally dissatisfied (Table 1). This is good news for the hotel sector as the majority of workers are satisfied with their employment. This result can be related to those in Table 2.

Table 1: Profile of the respondents and level of satisfaction (N = 210)

<table>
<thead>
<tr>
<th>Profile of respondents</th>
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<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Gender</td>
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<tr>
<td></td>
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<tr>
<td>Age group</td>
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<tr>
<td>-------------------</td>
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<tr>
<td></td>
</tr>
<tr>
<td>Cultural group</td>
</tr>
<tr>
<td>Black</td>
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<tr>
<td>Coloured</td>
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<tr>
<td>Indian</td>
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<tr>
<td>Asian</td>
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<tr>
<td>White</td>
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<tr>
<td>Immigrant</td>
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<tr>
<td>Highest level of</td>
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<tr>
<td>education attained</td>
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<td></td>
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<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td>Number of years</td>
</tr>
<tr>
<td>working in hotel¹</td>
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<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td>Current department</td>
</tr>
<tr>
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</tbody>
</table>
Current position

<table>
<thead>
<tr>
<th>Current position</th>
<th>Mean score</th>
</tr>
</thead>
<tbody>
<tr>
<td>First line staff-reservations/bell service/concierge/valet/waiter/waitress/counter reception</td>
<td>41.0</td>
</tr>
<tr>
<td>Grassroots leader or supervisor</td>
<td>13.7</td>
</tr>
<tr>
<td>Unit chief (deputy manager or manager)</td>
<td>6.7</td>
</tr>
<tr>
<td>Department supervisor</td>
<td>11.0</td>
</tr>
<tr>
<td>General manager</td>
<td>1.4</td>
</tr>
<tr>
<td>Other(^3)</td>
<td>26.2</td>
</tr>
</tbody>
</table>

Hotel employees’ general level of satisfaction

<table>
<thead>
<tr>
<th>Level of satisfaction</th>
<th>Mean score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totally satisfied</td>
<td>21.9</td>
</tr>
<tr>
<td>Mostly satisfied</td>
<td>37.2</td>
</tr>
<tr>
<td>Neutral</td>
<td>27.1</td>
</tr>
<tr>
<td>Mostly dissatisfied</td>
<td>9.5</td>
</tr>
<tr>
<td>Totally dissatisfied</td>
<td>4.3</td>
</tr>
</tbody>
</table>

1 Originally ratio variable that was recoded into categorical variable for simple presentation.

2 ‘Other’ here denotes managerial staff and staff in specialised units such as Spa and games.

3 ‘other’ here denotes managerial staff and staff in specialised units such as Human Resource, Spa, Accounts, Kitchen, Maintenance, Housekeeping and Security.

3.2 Length of Service and Employee Retention Factors

Hotel employees who responded to the questionnaire responded mostly positively to the employee retention statements (Table 2), validating the favourable general level of satisfaction reported earlier (Table 1). Their general responses in Table 2 raise no major concerns.

Table 2: Employee statements compared with years of service in hotel (N = 210)

<table>
<thead>
<tr>
<th>Statements</th>
<th>Mean score (Level of agreement) (a)</th>
<th>Compared with employees’ length of service (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 I feel attached to this hotel</td>
<td>2.35 N.S.</td>
<td></td>
</tr>
<tr>
<td>1.2 It would be difficult for me to leave this hotel</td>
<td>2.86 *the more employees agree, the longer they have worked in</td>
<td></td>
</tr>
</tbody>
</table>
1.3 Working in this hotel is a labour of love for me 2.50 N.S.
1.4 It would be easy for me to leave this hotel 3.12 N.S.
1.5 I want to remain in this hotel for a long time 2.80 *the more employees agree, the longer they have worked in hotel.
1.6 I cannot wait to leave this hotel 3.79 N.S.

Reliability Statistics (employee retention), Cronbach's Alpha =.857, N of Items = 6
Valid cases = 207(98.6%), Excluded cases = 3(1.4%), Total = 210

### 2 Compensation

2.1 The amount of pay I receive in this hotel is the industry wage for my position 2.58 N.S.
2.2 My monthly salary in this hotel is not satisfactory 3.18 N.S.
2.3 My salary in this hotel is fair for my responsibilities 2.98 N.S.
2.4 Benefits provided as a package in this hotel (e.g. sick leave, maternity & paternity) give me stability 2.16 N.S.
2.5 My pay in this hotel is not necessarily subject to organisational performance 2.81 N.S.
2.6 Employee initiative in this hotel is always compensated 2.81 N.S.

Reliability Statistics (compensation), Cronbach's Alpha =.676, N of Items = 5 (when item 2.5 in the Table – ‘pay’, is deleted)
Cronbach's Alpha =.616, N of Items = 6 (when all items in the Table are included)
Valid cases = 210(100%), Excluded cases = 0(0%), Total = 210

### 3 Employee development

3.1 If I do good work in this hotel, I can count on being promoted 2.70 N.S.
3.2 I did not receive extensive customer service training in this hotel 3.60 N.S.
3.3 Continuous training is provided in this hotel 2.20 *the more employees disagree, the longer they have worked in hotel.
3.4 Support for my long term career development is provided in this hotel 2.60 N.S.
3.5 My supervisors in this hotel explain the key success factors on the job 2.36 N.S.
3.6 This hotel has opportunities for skills development 2.32 N.S.
### Reliability Statistics (employee development), Cronbach's Alpha = .829, N of Items = 6

Valid cases = 210 (100%), Excluded cases = 0(0%), Total = 210

<table>
<thead>
<tr>
<th>4 Work engagement</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 In my job in this hotel, I have sufficient opportunities to use my initiative</td>
<td>2.45</td>
<td>N.S.</td>
</tr>
<tr>
<td>4.2 For a large part I determine how I work in this hotel</td>
<td>2.69</td>
<td>N.S.</td>
</tr>
<tr>
<td>4.3 I am not empowered to solve customer problems in this hotel</td>
<td>3.51</td>
<td>N.S.</td>
</tr>
<tr>
<td>4.4 I am not strictly supervised or controlled in this hotel</td>
<td>3.25</td>
<td>N.S.</td>
</tr>
<tr>
<td>4.5 I enjoy meeting and serving customers in this hotel</td>
<td>1.70</td>
<td>N.S.</td>
</tr>
<tr>
<td>4.6 I am afforded an opportunity to decide how to do my work from time to time in this hotel</td>
<td>2.42</td>
<td>N.S.</td>
</tr>
</tbody>
</table>

### Reliability Statistics (work engagement), Cronbach's Alpha = .639, N of Items = 6

Valid cases = 210 (100%), Excluded cases = 0(0%), Total = 210

<table>
<thead>
<tr>
<th>5 Working relations</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 I have a good working relationship with my supervisors in this hotel</td>
<td>2.22</td>
<td>N.S.</td>
</tr>
<tr>
<td>5.2 I work very well with everyone in this hotel</td>
<td>1.77</td>
<td>N.S.</td>
</tr>
<tr>
<td>5.3 I enjoy good communications with my supervisors in this hotel</td>
<td>2.25</td>
<td>N.S.</td>
</tr>
<tr>
<td>5.4 I enjoy good communications with my colleagues in this hotel</td>
<td>1.62</td>
<td>N.S.</td>
</tr>
<tr>
<td>5.5 I think of the workplace as my second home and my colleagues as my family in this hotel</td>
<td>2.31</td>
<td>N.S.</td>
</tr>
<tr>
<td>5.6 I have good working relationships with my colleagues in this hotel</td>
<td>1.76</td>
<td>N.S.</td>
</tr>
</tbody>
</table>

### Reliability Statistics (working relations), Cronbach's Alpha = .803, N of Items = 6

Valid cases = 210 (100%), Excluded cases = 0(0%), Total = 210

<table>
<thead>
<tr>
<th>6 Working hours</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 My working hours are adequate in this hotel</td>
<td>2.34</td>
<td>N.S.</td>
</tr>
<tr>
<td>6.2 My job schedule in this hotel does not interfere with my family life</td>
<td>2.82</td>
<td>N.S.</td>
</tr>
<tr>
<td>6.3 In this hotel, I am given enough time to do what is expected of me in my job</td>
<td>2.35</td>
<td>N.S.</td>
</tr>
<tr>
<td>6.4 Working hours in this hotel</td>
<td>3.12</td>
<td><strong>the more employees</strong></td>
</tr>
</tbody>
</table>
infringe on my personal quality time
with friends
disagree, the longer they have
worked in hotel.

6.5  Long working hours are not a
problem to me
2.94  N.S.

6.6  The hotel’s long working hours
are unreasonable
3.41  N.S.

Reliability Statistics (working hours), Cronbach’s Alpha =.717, N of Items = 6
Valid cases = 210 (100%), Excluded cases = 0(0%), Total = 210

Notes: aQuestionnaire were itemised along a 5-point Likert-type scale ranging from 1,
strongly agree; 2, tend to agree; 3, neutral; 4, tend to disagree; 5, strongly disagree

bSpearman’s Rank correlation test significance. N.S., no significant results.*, p < 0.05;
**, p < 0.01.

Hotel employees were asked to indicate the number of years they have worked
in the hotel, and this variable was compared with the employee retention statements.
Results reveal that the longer the employees have worked in the hotel; the more they
perceive that working hours in the hotel do not infringe on their personal quality time
with friends, the more they perceive it will be difficult for them to leave the hotel, the
more they want to remain in the hotel for a long time, and interestingly, the more they
perceive they do not receive continuous training in the hotel. This shows that
employees who have worked longer time in hotels have adapted and accepted the
hotels’ working conditions like long working hours and nature of compensation.
However, training and career development of these loyal employees need to be taken
seriously by management to support their retention in the hotel sector. Kong et al.
(2012) asserted that career management and continuous learning opportunities are
now being expected to be driven by employees themselves, but advised organisations
to not neglect their responsibility towards the career management of their employees.
Yang, Wan and Fu (2012) reported on the positive effects that training and
development have on minimizing employee turnover, and Nasurdin et al (2015)
depicted employee training and development as a worthwhile investment, pointing to
the benefits of employee training to include higher employee satisfaction, improved
productivity and commitment, and increased retention.

4. Conclusion

High employee turnover within the hotel sector has been blamed on hotel
employees’ perception of factors such as unfair compensation, long working hours,
little growth opportunities, and poor working relationships. This study however found
continuous training and development, a major concern for hotel employees who have
worked in the hotel for a long time. It has been reported that when employees are
given continuous opportunities for training and career development, they feel valued
by their employers, and this will increase their level of confidence, up-selling
willingness and service quality, leading to customer satisfaction and increased
revenues for the hotels. Hotel managers who want to retain their loyal and talented
employees should therefore, among others, put in more effort towards their employees’ career development.

References


Antecedents of employee retention: Hotels in Cape Town, South Africa

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Thandokazi Lulu Mbane, Cape Peninsula University of Technology, South Africa

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Abstract

High turnover of employees in the hotel sector has been widely reported in academic papers. This high turnover has associated costs, such as financial costs, inconsistency in delivering service quality, and probable loss of customer loyalty. This empirical study investigates hotel employees’ responses to statements that relate to work conditions that support employee retention. Selected three, four and five star hotels in Cape Town, South Africa participated in this study. A structured respondent-completed questionnaire was used to collect data that were subjected to descriptive, bivariate and multivariate analyses. Result highlights suggest that hotel employees, dominated by the female population, are mostly not so desperate to leave their employment soon, however not many of them have worked in the hotel for more than five years. There are positive inter-correlations among ‘employee retention’ factor and other factors that relate to work conditions that support employee retention (compensation, employee development, work engagement, work relations, and working hours). Results also show that ‘strict supervision’, ‘long working hours’ and ‘perceived unfair salary’ are the top major concerns for hotel employees. This findings will enable hotel employers address employee concerns in order to curb the high employee turnover costs. Possible comparative research in other nations and continents will help establish cultural similarities and differences among nations or continents.

Keywords: Employee retention, Employee turnover, Cape town hotels, Hotel sector, Sub-Saharan Africa
1. Introduction

Employee retention in the hotel sector has been a major concern, as several studies have reported high employee turnover in hotels (such as Davidson & Wang, 2011; Mohsin, Lengler & Kumar, 2013; Pearlman & Schaffer, 2013). Researchers (such as AlBattat, Som & Halalat, 2014; Davidson & Wang, 2011; Kuria, Alice & Wanderi, 2012; Mohanty & Mohanty, 2014) attributed the cause of this reported high employee turnover in hotels to be among others: employees’ perception of their salaries and benefits being unfair compared with their responsibilities; minimal employee development opportunities; insufficient job involvement or work engagement; poor work relationships between managers and subordinates; and long working hours. High employee turnover has associated costs, such as financial costs (when hotels will have to replace employees), inconsistency in delivering service quality (as the performance of different employees vary), and the likely subsequent loss in customer loyalty (Kuria et al., 2012; Mohanty & Mohanty, 2014; Yam & Raybould, 2011; Yang, Wan & Fu, 2012). In as much as there is much international research on hotel employee retention, the situation in Africa, especially sub-Saharan Africa is not well reported. Mohsin et al. (2013) posit that hotel employee turnover is a global problem, not particular to any given nation.

This research explores the relationships between and among employee retention and related work conditions factors that support employee retention in hotels operating in Cape Town, South Africa. It also seeks to explain which variables may support or deter employee retention in the hotel sector, and also check if there are socio-demographic differences among employees regarding how they perceive hotel employment or their willingness to remain in this employment for a long time. South Africa is a highly diverse nation in terms of cultural groups who are South Africans and those who live and work in South Africa. It is usual to classify employees in South Africa, not only as females or males, but also as Black, White, Coloured, Indian and Asian. These cultural groups may also perceive hotel employment and the working conditions differently. The findings of this study will help hotel employers to address employee concerns so as to reduce the high employee turnover costs. It is envisaged that possible comparative research in other nations and continents will help establish cultural similarities and differences among nations or continents. Cape Town is globally renowned as a ‘must visit’ tourism destination. There are so many hotels of different grades in Cape Town, but this study focusses on three, four and five star hotels, which are relatively larger, have more employees, and likely to employ non-
family members in relation to one or two star hotels. The theoretical background of this study is built on literature review of previous academic articles.

2. Research design and method

The nature of the tourism and hospitality research requires much quantified data to arrive at conclusions (Ezeuduji, 2013; Ezeuduji & de Jager, 2015; Veal, 2011). This study used respondent-completed structured questionnaire survey to obtain data that were analyzed for information on employee retention and related factors. Most of the questions were close-ended and the responses scaled as ordinal variables. Employee retention and related factors’ variables were measured along a 5-point Likert Scale (1 to 5; strongly agree to strongly disagree). Other variables are categorical or nominal in nature (employee profile). Questionnaire variables emanated from literature review done. Literature on employee retention or employee turnover identified factors related to employee retention (Jung & Yoon, 2015; Mohsin et al., 2013; Wells & Welty Peachey, 2011); namely employee development (Jung & Yoon, 2015; Kong et al, 2012), compensation (Hong, Hao, Kumar, Ramendran, & Kadiresan, 2012; Jung & Yoon, 2015), work relations (Lee, Teng & Chen, 2015; O’Neill & Davis, 2011), work engagement (Hong et al., 2012; Jung & Yoon, 2015; Karatepe & Ngeche, 2012), and working hours (Davidson & Wang, 2011; Hon, Chan & Lu, 2013; Mohanty & Mohanty, 2014).

A non-probabilistic sampling approach (convenience sampling) was used for this research to recruit respondents from three, four and five star hotels operating in Cape Town. These hotels identified their interest to participate in this research. Within these hotels, 217 employees were randomly surveyed, and from these, 210 returned questionnaires were found usable for data analysis.

IBM’s statistics software was used for data analysis (IBM Corporation, 2016). First stage of analyses used descriptive analysis (frequencies) for all variables, followed by the second stage of analyses using multivariate analysis (reliability tests) of employee retention variables and related factors’ variables. Reliability tests were done to check for internal consistencies among variables used to explain particular factors. The third stage of analyses used correlation test (Spearman’s - as all variables were found not normally distributed) to check for relationships among employee retention factor and related factors (compensation, employee development, work engagement, work relations, and working hours). Veal (2011) supported the use of Correlation test to explore relationships between ordinal and/or ranked variables. This study accepted relationships between variables at 99% confidence interval. Cronbach’s Alpha coefficient is used in the reliability tests to predict internal consistency among variables explaining a particular factor (Cortina, 1993; Gliem & Gliem, 2003). The authors Gliem and Gliem (2003) posit that Cronbach Alpha’s reliability coefficient does range between 0 to 1. The benchmark score to use to determine adequate internal consistency among variables explaining a particular factor has been much debated (authors such as George & Mallery, 2003; Gliem & Gliem, 2003; Nunally, 1978). In as much as George and Mallery (2003) advocated the use of Cronbach’s Alpha coefficient of between 0.5 and 0.7 to explain adequate consistency; Tavakol and Dennick (2011) posit that low Cronbach’s Alpha scores
might result when few variables are being used to explain a factor or when there is a weak interrelation among variables that are being used in the analysis. For this study’s reliability analyses, a Cronbach Alpha score of 0.6 or above was accepted owing to the relatively few numbers of variables that were used in each factor (employee retention, compensation, employee development, work engagement, work relations, and working hours). Subsequently, at the fourth stage of analyses, a Pearson Chi-Square test was conducted between employee retention and related variables (recoded into categorical variables) on the one hand and the employees’ socio-demographic variables (also categorical), on the other hand (see Veal, 2011). This test was done at 95% confidence interval. The next section discusses the findings of this study.

3. Results and Discussion

Employee Profile: Results from the hotel employee respondents show that females dominate males, and close to 60% of hotel staff are relatively young in age (less than 36 years old). Black and Coloured employees make up more than 71% of the sample, and close to 50% of the employees have no higher than a high school education (Table 1).

Table 1: Profile of the respondents (n = 210)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>63.8</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>36.2</td>
</tr>
<tr>
<td>Age group</td>
<td>18 – 25 years old</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>26 – 35 years old</td>
<td>41.4</td>
</tr>
<tr>
<td></td>
<td>36 – 45 years old</td>
<td>30.5</td>
</tr>
<tr>
<td></td>
<td>46 – 55 years old</td>
<td>8.6</td>
</tr>
<tr>
<td></td>
<td>56 – 65 years old</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>65+ years old</td>
<td>0.4</td>
</tr>
<tr>
<td>Cultural group</td>
<td>Black</td>
<td>35.7</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>35.2</td>
</tr>
<tr>
<td></td>
<td>Indian</td>
<td>5.2</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>13.0</td>
</tr>
<tr>
<td>Highest level of education attained</td>
<td>Immigrant</td>
<td>9.5</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>Matriculation or below</td>
<td>46.7</td>
<td></td>
</tr>
<tr>
<td>College</td>
<td>25.2</td>
<td></td>
</tr>
<tr>
<td>University national diploma or first degree</td>
<td>26.7</td>
<td></td>
</tr>
<tr>
<td>University Master's degree or above</td>
<td>1.4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of years working in hotel</th>
<th>1 – 5 years</th>
<th>63.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 – 10 years</td>
<td>19.5</td>
<td></td>
</tr>
<tr>
<td>10 years and above</td>
<td>16.9</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current department</th>
<th>Food &amp; Beverage- food production/food services/room service/convention &amp; catering</th>
<th>20.5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rooms- reservations/front office/housekeeping/laundry</td>
<td>45.2</td>
</tr>
<tr>
<td></td>
<td>Personnel- relations/recruitment/training</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>Finance / accounting</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>Marketing and sales- sales</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td>Maintenance &amp; Security – maintenance / security</td>
<td>9.5</td>
</tr>
<tr>
<td></td>
<td>Other¹</td>
<td>5.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current position</th>
<th>First line staff- reservations/bell service/concierge/ valet/ waiter/waitress/counter reception</th>
<th>41.0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grassroots leader or supervisor</td>
<td>13.7</td>
</tr>
<tr>
<td></td>
<td>Unit chief (deputy manager or manager)</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>Department supervisor</td>
<td>11.0</td>
</tr>
<tr>
<td></td>
<td>General manager</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>Other²</td>
<td>26.2</td>
</tr>
</tbody>
</table>

¹ ‘Other’ here denotes managerial staff and staff in specialised units such as Spa and games

² ‘other’ here denotes managerial staff and staff in specialised units such as Human Resource, Spa, Accounts, Kitchen, Maintenance, Housekeeping and Security.
About 64% have not worked in the hotel for more than 5 years, and majority of the employees surveyed are working in the rooms, food and beverage, convention and catering sections.

**Employee Retention Factors:** From Table 2 results, it can be deduced that hotel employees agreed favourably to most of the employee retention and related factors’ statements, however hotel employees raised serious concerns towards ‘strict supervision’ (about 46%), ‘long working hours being a problem’ (about 34%) and ‘perceived unfair salary in relation to responsibilities’ (about 34%) as clear demotivating factors. Good news for hotel managers lie in the results that about 67% of the hotel employees disagreed that ‘they cannot wait to leave the hotel’, about 63% of them ‘feel attached to the hotel’, and about 42% ‘want to remain in the hotel for a long time’.

**Table 2: Employees’ level of agreement to employee retention statements (n = 210)**

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Employee retention</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 I feel attached to this hotel</td>
<td>24.3</td>
<td>39.0</td>
<td>20.0</td>
<td>10.5</td>
<td>6.2</td>
</tr>
<tr>
<td>1.2 It would be difficult for me to leave this hotel</td>
<td>14.8</td>
<td>23.8</td>
<td>32.4</td>
<td>18.6</td>
<td>10.4</td>
</tr>
<tr>
<td>1.3 Working in this hotel is a labour of love for me</td>
<td>18.1</td>
<td>36.7</td>
<td>28.6</td>
<td>10.5</td>
<td>6.1</td>
</tr>
<tr>
<td>1.4 It would be easy for me to leave this hotel</td>
<td>9.1</td>
<td>22.5</td>
<td>30.1</td>
<td>23.4</td>
<td>14.9</td>
</tr>
<tr>
<td>1.5 I want to remain in this hotel for a long time</td>
<td>20.0</td>
<td>22.4</td>
<td>26.7</td>
<td>19.0</td>
<td>11.9</td>
</tr>
<tr>
<td>1.6 I cannot wait to leave this hotel</td>
<td>8.2</td>
<td>5.8</td>
<td>18.8</td>
<td>33.6</td>
<td>33.6</td>
</tr>
<tr>
<td><strong>Reliability Statistics (employee retention)</strong>, Cronbach's Alpha = .857, N of Items = 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valid cases = 207(98.6%), Excluded cases = 3(1.4%), Total = 210</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2 Compensation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 The amount of pay I receive in this hotel is the industry wage for my position</td>
<td>15.2</td>
<td>42.8</td>
<td>21.0</td>
<td>11.0</td>
<td>10.0</td>
</tr>
<tr>
<td>2.2 My monthly salary in this hotel is not satisfactory</td>
<td>10.5</td>
<td>19.0</td>
<td>23.8</td>
<td>35.2</td>
<td>11.5</td>
</tr>
<tr>
<td>2.3 My salary in this hotel is fair for my responsibilities</td>
<td>7.1</td>
<td>35.2</td>
<td>23.8</td>
<td>20.0</td>
<td>13.9</td>
</tr>
<tr>
<td>2.4 Benefits provided as a package in this hotel (e.g. sick leave, maternity &amp; paternity) give me stability</td>
<td>25.2</td>
<td>46.2</td>
<td>19.0</td>
<td>6.2</td>
<td>3.4</td>
</tr>
<tr>
<td>2.5 My pay in this hotel is not necessarily subject to organisational performance</td>
<td>10.5</td>
<td>30.5</td>
<td>33.3</td>
<td>19.0</td>
<td>6.7</td>
</tr>
</tbody>
</table>
### 3 Employee development

#### 3.1 If I do good work in this hotel, I can count on being promoted

<table>
<thead>
<tr>
<th></th>
<th>21.9</th>
<th>28.6</th>
<th>19.5</th>
<th>17.6</th>
<th>12.4</th>
</tr>
</thead>
</table>

#### 3.2 I did not receive extensive customer service training in this hotel

<table>
<thead>
<tr>
<th></th>
<th>7.1</th>
<th>9.5</th>
<th>21.9</th>
<th>39.0</th>
<th>22.5</th>
</tr>
</thead>
</table>

#### 3.3 Continuous training is provided in this hotel

<table>
<thead>
<tr>
<th></th>
<th>31.4</th>
<th>42.9</th>
<th>10.0</th>
<th>5.7</th>
<th>10.0</th>
</tr>
</thead>
</table>

#### 3.4 Support for my long term career development is provided in this hotel

<table>
<thead>
<tr>
<th></th>
<th>20.0</th>
<th>36.2</th>
<th>20.0</th>
<th>11.9</th>
<th>11.9</th>
</tr>
</thead>
</table>

#### 3.5 My supervisors in this hotel explain the key success factors on the job

<table>
<thead>
<tr>
<th></th>
<th>23.8</th>
<th>43.3</th>
<th>15.7</th>
<th>7.6</th>
<th>9.6</th>
</tr>
</thead>
</table>

#### 3.6 This hotel has opportunities for skills development

<table>
<thead>
<tr>
<th></th>
<th>32.9</th>
<th>33.3</th>
<th>12.9</th>
<th>10.5</th>
<th>10.4</th>
</tr>
</thead>
</table>

Reliability Statistics (employee development), Cronbach's Alpha =.829, N of Items = 6

Valid cases = 210 (100%), Excluded cases = 0(0%), Total = 210

### 4 Work engagement

#### 4.1 In my job in this hotel, I have sufficient opportunities to use my initiative

<table>
<thead>
<tr>
<th></th>
<th>15.2</th>
<th>48.6</th>
<th>19.0</th>
<th>10.5</th>
<th>6.7</th>
</tr>
</thead>
</table>

#### 4.2 For a large part I determine how I work in this hotel

<table>
<thead>
<tr>
<th></th>
<th>11.9</th>
<th>39.5</th>
<th>26.2</th>
<th>12.4</th>
<th>10.0</th>
</tr>
</thead>
</table>

#### 4.3 I am not empowered to solve customer problems in this hotel

<table>
<thead>
<tr>
<th></th>
<th>6.2</th>
<th>13.8</th>
<th>20.0</th>
<th>42.9</th>
<th>17.1</th>
</tr>
</thead>
</table>

#### 4.4 I am not strictly supervised or controlled in this hotel

<table>
<thead>
<tr>
<th></th>
<th>8.6</th>
<th>23.8</th>
<th>21.9</th>
<th>25.7</th>
<th>20.0</th>
</tr>
</thead>
</table>

#### 4.5 I enjoy meeting and serving customers in this hotel

<table>
<thead>
<tr>
<th></th>
<th>49.5</th>
<th>37.6</th>
<th>8.1</th>
<th>3.3</th>
<th>1.5</th>
</tr>
</thead>
</table>

#### 4.6 I am afforded an opportunity to decide how to do my work from time to time in this hotel

<table>
<thead>
<tr>
<th></th>
<th>22.4</th>
<th>41.9</th>
<th>16.7</th>
<th>9.5</th>
<th>9.5</th>
</tr>
</thead>
</table>

Reliability Statistics (work engagement), Cronbach's Alpha =.639, N of Items = 6

Valid cases = 210 (100%), Excluded cases = 0(0%), Total = 210
5 Work relations

5.1 I have a good working relationship with my supervisors in this hotel  

5.2 I work very well with everyone in this hotel

5.3 I enjoy good communications with my supervisors in this hotel

5.4 I enjoy good communications with my colleagues in this hotel

5.5 I think of the workplace as my second home and my colleagues as my family in this hotel

5.6 I have good working relationships with my colleagues in this hotel

Reliability Statistics (working relations), Cronbach's Alpha = .803, N of Items = 6

Valid cases = 210 (100%), Excluded cases = 0(0%), Total = 210

6 Working hours

6.1 My working hours are adequate in this hotel

6.2 My job schedule in this hotel does not interfere with my family life

6.3 In this hotel, I am given enough time to do what is expected of me in my job

6.4 Working hours in this hotel infringe on my personal quality time with friends

6.5 Long working hours are not a problem to me

6.6 The hotel’s long working hours are unreasonable

Reliability Statistics (working hours), Cronbach's Alpha = .717, N of Items = 6

Valid cases = 210 (100%), Excluded cases = 0(0%), Total = 210

These numbers may not be highly satisfactory, however it shows some level of commitment towards the hotels by the respondents and gives hope to the employers that the work conditions in the hotels are not very alarming. Regarding the negative result on ‘strict supervision’, Cloete and Allen-Payne’s (2012) suggested coaching and mentoring would be adequate development plans to be harnessed in hotels over the long-term to develop employees to the level where they will no longer require strict supervision to do their work satisfactorily. Without proper training, employees
may not be able to perform their jobs optimally (Ford et al., 2012). Strict supervision can be implemented at the early phase of employment, but not on the long-term, else employees will become demotivated, having someone to ‘look over their shoulders’ all the time. This study’s employees concern on strict supervision can be redirected to employee engagement. Karatepe and Ngeche (2012) advised hotel managers to engage or involve their employees in the hotel operations and decision-making, as engaged employees are known to have high levels of energy, are excited in their job and are mostly absorbed in their work. They posit that work engagement does lead to excellent performance in the workplace.

This study results are similar to Mohsin et al.’s (2013) finding that long working hours and the accompanying job pressures and stress in hotel employee’s personal life have impacts on employees’ intention to leave the hotel. The hotel sector is associated with long and antisocial working hours (Davidson & Wang, 2011). Hwang et al. (2014) posit that some of the common occupational stresses experienced by hotel employees are long working hours and heavy workloads. Davidson and Wang (2011) found that hotel sector employees are often not compensated for their long working hours. This study argues that when employees accept a job in a hotel, they are usually advised that they may have to work long hours and over the weekends. When employees need a job desperately, they are likely to accept whatever is on offer, no matter the conditions attached to it. However those with hospitality education and those who truly want to work in hotels, know that this condition exist not only in the hotels but in other businesses operating within the hospitality industry. This study therefore posit that fairness in hotel employment can be achieved if the employee remuneration is linked to the employees working hours and be properly communicated to both part-time and full-time staff so that individuals can clearly observe the impact that longer working hours have on their salary. Problems will however continue to exist if this link is perceived to be unfair among employee clusters, and also where employees are paid differently though they have similar qualifications, and do same work at same period of time.

As earlier reported, fair pay is perceived to improve employee job engagement, and at the same time, decrease job withdrawal (Jung & Yoon, 2015). Till and Karren (2011) therefore stated that pay satisfaction is arguably a function of the difference between perceived pay level and the employees’ perception of how much their pay should be. Perceptions of unfair compensation are usually encountered when the amount of pay that an employee receives is not aligned to the industry wage for the position which the employee is holding, or when the compensation that an employee receives is considered unfair compared to the employee’s responsibilities. In certain cases, there could also be unequal pay between male and female employees, between racial groups or between ‘able’ and ‘disabled’ employees. It is therefore imperative that management consider and implement staff compensation that is based on the nature of work, and also use performance-related-pay to support a work environment that promotes equity, ownership of responsibilities, and creativity among hotel staff. Nasuridin et al.’s (2015) finding support the implications of these results that monetary rewards are very relevant to hotel employees because these job is normally associated with low wage and minimal tangible rewards. As Yang et al. (2012), put it, employees who feel that promotion opportunities, fair pay and better working hours are lacking in an organisation, are very likely to withdraw their employment. However, Wu et al.
(2013) posited that when employees perceive their salary to be fair, they will make every effort to deliver proper service.

The results of Chi-Square statistics between employee retention and related variables on the one hand, and the employees’ socio-demographic variables, on the other hand, show that:

- Immigrant employees agreed less than South African employees that ‘their salary in the hotel is fair for their responsibility’,
- Female employees disagreed more than their male counterparts that ‘benefits provided as a package in this hotel give them stability’,
- Black and Coloured employees agree less than other cultural groups that ‘employee initiative in the hotel is always compensated’,
- Coloured employees agree less than other cultural groups that ‘if they do good work in this hotel, they can count on being promoted’, ‘support for their long term career development is provided in hotel’, and ‘the hotel’s long working hours are unreasonable’,
- Black employees agree less than other cultural groups that ‘in their job in the hotel, they have sufficient opportunities to use their initiative’, and
- White employees agree more than other cultural groups that ‘they are not strictly supervised or controlled’.

It is revealed therefore, that significant numbers of immigrants, females, Black and Coloured employees perceive they are not fairly compensated. Managers need to take note of this and endeavour to create a working environment that fosters equity, creativity and ownership of responsibilities among hotel employees.

We conclude this study and address management implications in the next section.

4. Conclusion and Management Implication

The findings of this study are beneficial to hotel employers as they will help them address employee concerns and reduce the high employee turnover costs. A significant number of hotel employees are concerned about strict supervision, long working hours, and unfair salary in hotels, however the majority of the employees have favourable attitude towards hotel employment. More immigrants, females, black and coloured employees perceive they are not fairly compensated. This study therefore suggests (a) that employee development plans should focus on coaching and mentorship instead of on strict supervision, (b) that fairness in hotel employment can be achieved if the employee remuneration is linked to the employees working hours and be properly communicated, and (c) that management implement staff compensation that is based on the nature of work, and use performance-related-pay to support a work environment that is non-racial but promotes equity, ownership of responsibilities, and creativity among hotel employees. Further research is encouraged in hotels in other countries of the world to establish cultural comparisons and
contrasts among nations or continents, regarding employee retention and its related factors.

References


Gliem, J. & Gliem, R. (2003). Calculating, interpreting, and reporting Cronbach’s Alpha Reliability Coefficient for Likert-type scales. Midwest Research-to-Practice conference in Adult, continuing, and community Education, the Ohio State University held in Columbus, OH, October 8-10, 2003.


### Relating tourist activity and destination brand perception: Cape Town, South Africa

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Chelsea Haupt, Cape Peninsula University of Technology, South Africa

*Corresponding Author

**Abstract**

A respondent-completed questionnaire in Cape Town, South Africa was used to check how the activities that tourists enjoyed in Cape Town relate to how they perceive this destination using brand descriptive variables (brand essence, brand image and brand loyalty). 200 questionnaires were received for bivariate and multivariate analyses. This study finds that although tourists found most activities in Cape Town enjoyable; nature and outdoor, food and wine, and shopping enjoyment have more impact in determining the general experience satisfaction of tourists, than beach, and surprisingly, history and cultural activities. Nonetheless, tourists generally perceive Cape Town quite positively. From analyses, this study strongly suggests that the brand position statement for Cape Town should revolve around unique and diverse tourists’ attractions in Cape Town, and the memorable experience with which tourists go home from Cape Town. The brand position statement should be linked to Cape Town tourism’s integrated marketing communications. This study can assist tourism business owners in Cape Town to evaluate and improve tourism offerings to meet the expectations of visitors, contributing to visitors forming a positive perception towards Cape Town. The findings have implications for similar destinations in the developing economies.
1. Introduction

Recently, many authors studied tourism destination brand perception (such as Artuğer, Çetinsöz, & Kılıç, 2013; Beerli & Martin, 2004; Bertan & Altıntaş, 2013; Gursoy, Chen & Chi, 2014; Hosany, Ekinci & Uysal, 2007; Ibrahim & Gill, 2005; Jraisat, Akroush, Alfaouri, Qatu & Kurdieh, 2015; Kılıç & Sop, 2012; Lopes, 2011; Molina, Gómez & Martín-Consuegra, 2010; Nel & Strydom, 2004; Prayag, 2010; Puh 2014; Qu, Kim & Im, 2011; Rajesh, 2013; Tasci & Gartner, 2007). These aforementioned authors did research the impacts of tourist perceptions, tourists’ satisfaction, destination brand, destination personality, destination image, and destination loyalty, mostly outside Africa. Research with a focus on destination brand perception in Africa is limited; hence this study will provide more insight into tourists’ perception of a popular South African tourism destination (Cape Town). This study will take the angle of tourists’ activity and how these relate to how they perceive different brand descriptive variables (brand essence, brand image and brand loyalty) in a destination (Cape Town). Studies by Nel and Strydom (2004), and Prayag (2010) were done in Bloemfontein and Cape Town respectively in South Africa, focussing on brand image perceptions of international tourists. This research however will compare domestic and international tourists’ perceptions in Cape Town. Globally, the tourism industry like any other industry is characterised by customers’ ever-changing behaviour and demands (Ezeuduji, 2015). Hence, studies on tourism destination brand perception always need to be updated. This study will provide updated information on the tourists’ activity and how they compare to destination brand perception in Cape Town, South Africa. Results from this study could be compared with related findings in the international literature. This study can also assist tourism business owners in Cape Town to evaluate and improve tourism offerings to meet the expectations of visitors, contributing to visitors forming a positive perception towards Cape Town. Integrated marketing communications in Cape Town can be positioned as consistent and coherent forces to reinforce behaviour (as in advertising), or as an avenue of achieving mutual understanding between Cape Town and her publics (as in public relations) in order to justify and preserve its asset of reputation (O'Sullivan, 2010). The findings of this study can have significant implications for similar destinations in the developing economies, globally.
2. Research Design and Methods

Primary and secondary data have been used to obtain information relevant to this research. This study used a deductive approach, where theory is tested against the data collected, as the activities that tourists enjoyed in Cape Town and their relationship to how they perceive this destination using brand descriptive variables (brand essence, brand image and brand loyalty) are being investigated. Two hundred and twenty (220) tourists in Cape Town were surveyed using a structured questionnaire (respondent-completed, mostly close-ended). These tourists were surveyed at the three most visited attractions in Cape Town, namely Victoria and Alfred Waterfront, Table Mountain National Park and Kirstenbosch National Botanical Gardens (The Western Cape destination marketing, investment and trade promotion agency- South Africa, 2015). Contemporary tourism is understood to be a mass phenomenon that requires much involvement from governmental, not-for-profit and for-profit organisations, as well as tourists, relying on quantified information for important aspects of decision-making (Ezeuduji, 2013; Veal, 2011). Questionnaire survey is accepted as an ideal way of getting some of this information (Veal, 2011); including tourists’ perception. Questionnaires were therefore administered using non-probabilistic convenience sampling of tourists, based on key attractions’ selection, availability and willingness of tourists to partake in the study. Two hundred (200) usable questionnaires were eventually returned, resulting in a 91% response rate. The study involved domestic and international tourists visiting Cape Town. A screening question was asked by the researchers in order to identify the targeted respondents. The screening question asked was “Are you living and/or working in Cape Town?” This ensured that local residents of Cape Town were not included in the study. The exclusion of local residents who may be day visitors ensures that only ‘actual tourists’ were targeted.

The questionnaire battery included respondents’ profile, level of visit satisfaction, activities done in Cape Town, brand essence perception, brand image perception, and brand loyalty. Questionnaire design used variables emanating from previous research: tourists’ perceptions towards brand essence of Cape Town (Chen, 2012; Quintal & Polczynski, 2010); tourists’ perceptions towards the brand image of Cape Town (Nel & Strydom, 2004; Prayag, 2010); tourists’ brand loyalty towards Cape Town (Artuğer et al., 2013; Oom do Valle et al., 2006; Rajan, 2015); and level of overall experience satisfaction in Cape Town (Oom do Valle et al., 2006; Rid, Ezeuduji, & Pröbstl-Haider, 2014).

IBM’s SPSS version 23 software was used for statistical analysis (IBM Corporation, 2015). The first stage of analysis used descriptive statistics to derive frequency of respondents’ profile (in percentages), mean and standard deviation of brand essence, brand image and brand loyalty variables. Multivariate analyses of the data collected were done at the second stage of data analysis, to reveal the consistency of items in brand essence, brand image and brand loyalty sections. Cronbach’s Alpha was calculated as reliability parameter to check the internal consistency of the variables within each section. Commonly, a cut-off point of 0.5 - 0.7 is used for Cronbach Alpha values (Buehl & Zoefel, 2005; George & Mallery, 2003), therefore we confidently accept that a Cronbach Alpha coefficient of 0.7 and above indicates internal consistency of items, hence we can rely on those items to explain a common feature such as brand essence, brand image and brand loyalty. Finally, at the third
stage of analysis, Pearson Chi-Square test was used to check for relationships between categorical variables (in this case, ordinal variables were recoded into nominal/categorical variables), and Spearman’s Correlation tests was used to check for relationships between ordinal variables (Cessford, 2003; Veal, 2011; Zondo & Ezeuduji, 2015).

3. Results and Discussion

Tourists’ profile: From Table 1, this study results show that female tourists dominate within the sample, and most tourists visiting Cape Town during the survey are relatively young, where 70% of them are 40 years and below, and mostly coming from abroad. More than 46% of tourists stayed 8 days or longer in Cape Town, mostly on holidays. Good news for Cape Town tourism is that repeat visits account for over 43% of the sample (depicting destination loyalty) and more than 92% of tourists indicated they were either mostly or highly satisfied with their visits. Rajesh (2013) suggests that overall destination loyalty is influenced by the perceptions that tourists have before coming to the destination, the perceptions that tourists have towards the destination image as well as the overall satisfaction of experience received while at the destination. It seems from this study therefore that Cape Town is positively perceived by its visitors.

Table 1: Profile of the respondents (N = 200)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>42.0</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>58.0</td>
</tr>
<tr>
<td>Age group</td>
<td>Less than 20</td>
<td>11.5</td>
</tr>
<tr>
<td></td>
<td>21 – 30</td>
<td>36.0</td>
</tr>
<tr>
<td></td>
<td>31 – 40</td>
<td>22.5</td>
</tr>
<tr>
<td></td>
<td>41 – 50</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>51 – 60</td>
<td>12.0</td>
</tr>
<tr>
<td></td>
<td>61 – 70</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>More than 70</td>
<td>2.0</td>
</tr>
<tr>
<td>Origin</td>
<td>South African</td>
<td>35.5</td>
</tr>
<tr>
<td></td>
<td>Non-South African</td>
<td>64.5</td>
</tr>
<tr>
<td>Continent of origin, if not South Africa</td>
<td></td>
<td>8.6</td>
</tr>
<tr>
<td>Region</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td>Asia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia/Oceania</td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>46.9</td>
<td></td>
</tr>
<tr>
<td>North America</td>
<td>16.4</td>
<td></td>
</tr>
<tr>
<td>South America</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>Repeat visit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>43.5</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>56.5</td>
<td></td>
</tr>
<tr>
<td>Source of information about Cape Town</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word of Mouth</td>
<td>39.3</td>
<td></td>
</tr>
<tr>
<td>Internet</td>
<td>33.3</td>
<td></td>
</tr>
<tr>
<td>Media (TV, magazines, books)</td>
<td>13.7</td>
<td></td>
</tr>
<tr>
<td>Travel Agency</td>
<td>12.0</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>Group travel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>50.8</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>49.2</td>
<td></td>
</tr>
<tr>
<td>Length of stay in Cape Town</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – 3 days</td>
<td>16.6</td>
<td></td>
</tr>
<tr>
<td>4 –7 days</td>
<td>37.2</td>
<td></td>
</tr>
<tr>
<td>8-11 days</td>
<td>13.6</td>
<td></td>
</tr>
<tr>
<td>12 days or longer</td>
<td>32.7</td>
<td></td>
</tr>
<tr>
<td>Purpose of visit to Cape Town</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holiday</td>
<td>70.6</td>
<td></td>
</tr>
<tr>
<td>Business (attending conference /seminar/ event)</td>
<td>12.2</td>
<td></td>
</tr>
<tr>
<td>Business (importing/ exporting goods)</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>Visiting friends and relatives</td>
<td>12.8</td>
<td></td>
</tr>
<tr>
<td>Medical care</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Academic exchange</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>Level of experience satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highly or mostly satisfied</td>
<td>92.4</td>
<td></td>
</tr>
<tr>
<td>Moderately satisfied</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>Mostly or highly dissatisfied</td>
<td>1.5</td>
<td></td>
</tr>
</tbody>
</table>
Tourists’ activity versus level of experience satisfaction: Tourists were asked to indicate how they enjoyed the main activities in Cape Town. Table 2 shows that in as much as tourists in Cape Town indicated that they enjoyed much of the activities they engaged in; there are no statistical relationships between activity enjoyment and level of experience satisfaction for beach, historical and cultural activities. Nature and outdoor, food and wine, and beach activities seem to be quite popular among tourists in Cape Town. However, only nature and outdoor, and food and wine have strong positive correlation with the tourists level of general experience satisfaction. Shopping activity also was found to have some relationship with general experience satisfaction. It can therefore be interpreted that nature and outdoor, food and wine, and shopping enjoyment have some impact in determining the general experience satisfaction of tourists in Cape Town. As Pawitra and Tan (2003) and Vengesayi (2003) posited, the quality of the physical infrastructure and facilities of a destination such as accommodation and transportation network systems form the foundation upon which tourism services are produced in a destination, while the variety of attraction and activities of a destination serves as a pull factor during the decision making of potential tourists. Puh (2014), also stated that the overall perceptions that a tourist has of a destination is a multidimensional construct, as it is influenced by a number of external information sources as well as by the direct destination experience.

Table 2: Activities in Cape Town versus level of general experience satisfaction (N =200)

<table>
<thead>
<tr>
<th>Activities in Cape Town</th>
<th>Not enjoyable or mostly unenjoyably (%)</th>
<th>Moderately enjoyable (%)</th>
<th>Mostly enjoyable or highly enjoyable (%)</th>
<th>Compared with level of general experience satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature and outdoors</td>
<td>4.1</td>
<td>8.2</td>
<td>87.7</td>
<td>*** The more the tourists enjoyed ‘nature and outdoor’ activities, the higher the level of general experience satisfaction.</td>
</tr>
<tr>
<td>Food and wine</td>
<td>5.4</td>
<td>14.5</td>
<td>80.1</td>
<td>** The more the tourists enjoyed ‘food and wine’, the higher the level of general experience satisfaction.</td>
</tr>
<tr>
<td>Beaches</td>
<td>5.2</td>
<td>15.1</td>
<td>79.7</td>
<td>NS</td>
</tr>
<tr>
<td>History and culture</td>
<td>4.5</td>
<td>20.5</td>
<td>75.0</td>
<td>NS</td>
</tr>
<tr>
<td>Shopping</td>
<td>8.3</td>
<td>26.3</td>
<td>65.4</td>
<td>*The more the tourists enjoyed</td>
</tr>
</tbody>
</table>
‘shopping’, the higher the level of general experience satisfaction.

Notes: Spearman’s Correlation test significance. *, \( p < 0.05 \); **, \( p < 0.01 \); ***, \( p < 0.000 \).

NS, no significant results.

**Brand perception:** The internal consistencies of variables used in measuring brand statements (essence, image and loyalty) were tested using Cronbach’s Alpha reliability test. Results show a Cronbach’s Alpha values of more than 0.7 (Buehl & Zoefel, 2005; George & Mallery, 2003), indicating internal consistency of items within the brand essence, brand image and brand loyalty dimensions. Hence we can rely on those items to explain a common feature such as brand essence, brand image and brand loyalty.

**Table 3: Brand statements’ reliability tests (N=200)**

<table>
<thead>
<tr>
<th>Brand essence</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Town provides tourists with authentic visitor experience</td>
<td>4.14</td>
<td>.801</td>
<td>192</td>
</tr>
<tr>
<td>My visit to Cape Town has been valuable to me</td>
<td>4.28</td>
<td>.795</td>
<td>192</td>
</tr>
<tr>
<td>My visit to Cape Town will be memorable</td>
<td>4.50</td>
<td>.752</td>
<td>192</td>
</tr>
<tr>
<td>I have gained new knowledge and experience during my visit to cape Town</td>
<td>4.26</td>
<td>.833</td>
<td>192</td>
</tr>
<tr>
<td>The local people in Cape Town are friendly and hospitable</td>
<td>3.94</td>
<td>.944</td>
<td>192</td>
</tr>
<tr>
<td>Reliability Statistics, Cronbach's Alpha = .812, N of Items = 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valid cases = 192(96%), Excluded cases = 8(4%), Total = 200; Overall mean= 4.22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale: 1(strongly disagree); 2(disagree); 3(neutral); 4(agree); 5(strongly agree)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand image</td>
<td>Mean</td>
<td>Standard deviation</td>
<td>N</td>
</tr>
<tr>
<td>I feel safe while travelling around Cape Town</td>
<td>3.61</td>
<td>1.024</td>
<td>184</td>
</tr>
<tr>
<td>Cape town has unique and diverse attractions</td>
<td>4.38</td>
<td>.766</td>
<td>184</td>
</tr>
<tr>
<td>The price of facilities and services (food &amp; beverages, accommodation, entry fees, souvenirs) in Cape Town are reasonable</td>
<td>4.02</td>
<td>1.002</td>
<td>184</td>
</tr>
<tr>
<td>The overall service received at facilities (restaurants, accommodation, attractions) is of high quality</td>
<td>4.07</td>
<td>.744</td>
<td>184</td>
</tr>
<tr>
<td>Cape Town provides tourists with good value for money</td>
<td>4.11</td>
<td>.870</td>
<td>184</td>
</tr>
<tr>
<td>Reliability Statistics, Cronbach's Alpha = .765, N of Items = 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Valid cases = 184(92%), Excluded cases = 16(8%), Total = 200; Overall mean = 4.04

Scale: 1(strongly disagree); 2(disagree); 3(neutral); 4(agree); 5(strongly agree)

<table>
<thead>
<tr>
<th>Brand loyalty</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Town is one of the best places I have ever been to</td>
<td>3.94</td>
<td>.927</td>
<td>198</td>
</tr>
<tr>
<td>Cape Town would be my preferred choice when choosing a destination to visit</td>
<td>3.88</td>
<td>.879</td>
<td>198</td>
</tr>
<tr>
<td>I would consider visiting Cape Town in the future</td>
<td>4.26</td>
<td>.878</td>
<td>198</td>
</tr>
<tr>
<td>I would recommend Cape Town to my family and friends</td>
<td>4.43</td>
<td>.693</td>
<td>198</td>
</tr>
<tr>
<td>I would say positive things about Cape Town to my family and friends</td>
<td>4.39</td>
<td>.751</td>
<td>198</td>
</tr>
</tbody>
</table>

Reliability Statistics, Cronbach's Alpha = .861, N of Items = 5

Valid cases = 198(99%), Excluded cases = 2(1%), Total = 200; Overall mean = 4.18

Scale: 1(strongly disagree); 2(disagree); 3(neutral); 4(agree); 5(strongly agree)

Results show that tourists generally perceive Cape Town well, agreeing or strongly agreeing to the items in Table 3. Amongst all the items used in measuring brand perceptions, “I feel safe while travelling around Cape Town” had the lowest mean score. This means that tourists in Cape Town do still have some reservations concerning safety issues, in terms of crime. Ezeuduji (2013) therefore advised that strong police presence and proper policing in South Africa (such as, instilling the values of zero-tolerance for crime and responsiveness within the South African Police service) will be effective in dealing with crime in South Africa, and reducing the negative perception of tourists towards South African destinations. Local community collaboration with the police force can also help to curb crimes in South Africa.

As Rajesh (2013) and Lopes (2011) posited, brand image is a multidimensional construct as it is influenced by a number of factors from the tourist’s perspective, such as cognitive images (destination attributes), and affective images (emotional evaluation of destination attributes).

**Brand statements versus activities in Cape Town:** Tourists were asked to indicate how they enjoyed or not enjoyed main tourists’ activities in Cape Town, and also indicate their level of agreement with brand perception statements (brand essence, brand image and brand loyalty) about Cape Town in Table 4. This study found mostly that the more tourists enjoyed these activities, the more they agree to most of the brand statements. However, the questionnaire brand essence item – “the local people in Cape Town are friendly and hospitable” did correlate positively with “nature and outdoor” activities, only. Tourists’ most likelihood to encounter many locals doing ‘nature and outdoor’ activities may have influenced them to perceive Cape Town local population as being friendly and hospitable. A brand essence questionnaire item (“my visit to Cape Town will be memorable”), and a brand image item (“Cape Town
has unique and diverse attractions”) stand out from the rest items (see Table 4), as all the tourists’ activities correlated positively with these two brand statements. We can therefore deduce that the brand position statement for Cape Town should strongly revolve around unique and diverse attractions, and memorable experience.

Cape Town’s brand essence (consisting of the functional and emotional benefits of visiting this destination) can therefore be linked to its competitive advantages of unique and diverse attractions, and providing a memorable experience to its tourists (Ezeuduji, 2015). These unique and diverse attractions that can impact on visitor experience include the popular Victoria and Alfred Waterfront, Table Mountain, Cape Point, Cape wine routes, Kirstenbosch, Robben Island, etc.

Table 4: Brand statements versus activities in Cape Town (N =200)

<table>
<thead>
<tr>
<th>Brand essence</th>
<th>Nature &amp; outdoor</th>
<th>Food &amp; wine</th>
<th>Beaches &amp; culture</th>
<th>History &amp; culture</th>
<th>Shopping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Town provides tourists with authentic visitor experience</td>
<td>NS</td>
<td>**</td>
<td>NS</td>
<td>*</td>
<td>***</td>
</tr>
<tr>
<td>My visit to Cape Town has been valuable to me</td>
<td>***</td>
<td>*</td>
<td>NS</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>My visit to Cape Town will be memorable</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>I have gained new knowledge and experience during my visit to Cape Town</td>
<td>**</td>
<td>NS</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>The local people in Cape Town are friendly and hospitable</td>
<td>***</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>

**Brand image**

<table>
<thead>
<tr>
<th></th>
<th>Nature &amp; outdoor</th>
<th>Food &amp; wine</th>
<th>Beaches &amp; culture</th>
<th>History &amp; culture</th>
<th>Shopping</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel safe while travelling around Cape Town</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>NS</td>
<td>*</td>
</tr>
<tr>
<td>Cape Town has unique and diverse attractions</td>
<td>**</td>
<td>***</td>
<td>***</td>
<td>**</td>
<td>***</td>
</tr>
<tr>
<td>The price of facilities and services (food &amp; beverages, accommodation, entry fees, souvenirs) in Cape Town are reasonable</td>
<td>NS</td>
<td>**</td>
<td>NS</td>
<td>NS</td>
<td>*</td>
</tr>
<tr>
<td>The overall service received at facilities (restaurants, accommodation, attractions) is of high quality</td>
<td>***</td>
<td>**</td>
<td>NS</td>
<td>NS</td>
<td>*</td>
</tr>
</tbody>
</table>
Cape Town provides tourists with good value for money

| Brand loyalty                      |   * | *** | ** | NS |   *
|------------------------------------|-----|-----|----|----|-----
| Cape Town is one of the best places I have ever been to | *   | NS  | ** | *  | **
| Cape Town would be my preferred choice when choosing a destination to visit | NS  | NS  | ** | *  | *  |
| I would consider visiting Cape Town in the future | NS  | *   | *** | ** | **|
| I would recommend Cape Town to my family and friends | NS  | *   | ** | ** | *  |
| I would say positive things about Cape Town to my family and friends | *** | *   | NS | NS | NS |

Notes: Spearman’s Correlation test significance. *, $p < 0.05$; **, $p < 0.01$; ***, $p < 0.000$.

NS, no significant results.

Interpretation of results: Where result is significant, the more tourists enjoyed an activity, the more they agree to the corresponding brand statements.

This Cape Town’s tourism position statement communicates core functional benefits (unique and diverse attractions) and emotional benefit (memorable experience). Cape Town tourism may therefore integrate this brand position statement into its integrated marketing communications, in its continual endeavour to justify and preserve her assets of reputation (Ezeuduji, 2015).

4. Conclusions

This study finds that although tourists found most activities in Cape Town enjoyable; nature and outdoor, food and wine, and shopping enjoyment have more impact in determining the general experience satisfaction of tourists, than beach, history and cultural activities. Tourists in Cape Town do have some reservations concerning safety issues, in terms of crime. Strong police presence and proper policing in Cape Town will be effective in dealing with crime, and reducing the negative perception of tourists towards this destination. Local community collaboration with the police force can also help to curb crimes in Cape Town. Nevertheless, tourists generally perceive Cape Town quite positively. This research also deduced that the brand position statement for Cape Town should strongly revolve around unique and diverse tourists’ attractions in Cape Town, and the memorable experience with which tourists go home from Cape Town. Thus suggesting that Cape Town tourism’s brand position statement could read - “To tourists seeking highly memorable experience, Cape Town offers unique and diverse attractions”. This brand position statement, communicating both the functional and emotional benefits of
visiting this destination, should be linked to Cape Town tourism’s integrated marketing communications, such as in advertising and public relations.

References


**Colonial Identity: A Review of Postcolonial Study in Plantation Female Labors**

Roro Retno Wulan, Telkom University, Indonesia

**Abstract**

Plantation in Indonesia was built in colonial era. The development of tea plantations in West Java was constructing the identities for its workers. In this research, Postcolonial theory points out the way in which tea-picker female labors continued to be stereotyped and marginalized. Patriarchy culture produced double oppression on tea-picker female labour life. The oppression constructed the colonial identity on female labor. As an analysis of colonial concept, this paper could serve as a new insight for communication science and became a bridge to open another research about Gender and Postcolonial theory. Analysis covered the assumption of postcolonial theory: the colonial ruler had the power to shape attitudes and to perpetuate the status quo. The impact of the colonial law in plantation proved in the way of female labor’s living and working patterns in tea plantation. This research has revealed the identity of tea-picker females in colonial mechanism environment. The method is critical ethnography and researcher using depth interview to reveal the life of female labors that have been living in the plantation area for generations. The research pictured the struggled life of tea-picker female labours to overcome their problems and how their identity constructed socially. Conclusion of this research shows tea picker females’s action of communication reflected in their social life. It is a representation of the repressive identity and divided into three categories of colonial identity.

**Keywords**: Colonial identity, Postcolonial theory, Gender, Female labor
1. Introduction

In the life of a plantation in Indonesia, the story of Western domination has not been revealed much. The unbalanced condition between labour and employer is still happening nowadays. Our history is not “created” alone by those elite groups who come out as winners, but the lower society must be able to make their own history. How they struggled must be pictured in the way they know. Therefore, the life of the tea picker females would be an interesting matter when it becomes an issue of a research in term of postcolonial case study.

Colonialization history always exhibits winners who dominate the history. In many countries its rather difficult to find the history of common people. It because many stories of marginalized sub society have been forgotten. They were not important for the winner. There was Ranajit Guha (1982), an Indian historian who took and developed the idea of Gramsci- about subaltern- then re-write the Indian history in his book On Some Aspects of the Historiography of Colonial India. The idea was carried on afterwards by Gayatri Chakravorthy Spivak (1985) through her well- known article, “Can the Subaltern Speak?: Speculations on Widow-Sacrifice”. In this article, Spivak wrote about ‘sati’, widow-sacrifice in India. Spivak questioned out about the role of postcolonial intellectuals who were supposedly capable to speak up on behalf of the voice of the subaltern, the voice of the oppressed society, the voice of females. In her research, females are subaltern. The subaltern society or the oppressed society had no power to speak their minds. They muted by the culture. They were forcefully put to be silent since they have suffered under patriarchy and colonials domination.

In the feminist view, the condition is stated as “Females are characterized as a singular group on the basis of a shared oppression. What binds females together is a sociological notion of the ‘sameness’ of their oppression” (Mohanty, 1995: 337). Eventhough actually, females’ problems are very complex, they share the same pain. This condition was stated by Simone de Beauvoir as ‘second sex’. The first sex is male and female on lower class, the second.

In the life of tea picker female in tea plantation, patriarchy exploitation is on the foreman’s decision. The foreman (called mandor) has position as representation of men as superior. In a group of tea picker (usually 10-15 females) foreman has authority and can easily define the luck of the tea picker females. For example whether or not they can still work tomorrow or whether they can have a loan from the
company or not. Foreman’s position is very crucial in organization structure. Foreman has contact with the tea picker in their daily routine. The foreman controlled the life of those females. The tea picker females often felt afraid to their foreman. The condition was constructing the females identity in plantation area. These females seem obedient and muted. They are polite but can speak to stranger. Assumptions come out from the powerful domination of patriarchy culture. In plantation life there were two symbol of powerful patriarchy: foreman as the closest symbol to the females, and plantation manager as the highest symbol- all of them are men. There never been any female foreman or manager. The condition is constructed by plantation colonial authorities over hundreds of years. Over the years the condition of life affected females identity. The living and working pattern of their daily routines was colonial constructed.

2. Methods

The research conducted in West Java tea plantation in one and a half year. Critical ethnography helps to describe the powerful patriarchy and how the females were living in domination of colonialism. From previous articles (Kalra, 2006; Nevell, 2009) believe that postcolonial research always political and described the colonial culture in colonialized countries. Research showed culture in plantation was different from any places surrounding. The action and mind set of labour seemed never changed. They were still living as if in colonial era. The use of foreign language also explained how the technical words never substituted. It was proved in the used of Dutch language for area naming and production circle.

Reseacher used depth interview to gain information. Triangular source method and cross check method used as validity technique. According to Mulyana (2010:201) researcher works thoroughly and in every way to evaluate a large numbers of variables on a special case. This time, it was the case of revealing the identity of tea picker females. What factors that influenced females’ identity in colonial mechanism.

Madison (2005) said in balancing act between being an ethnographer and an advocate, you cannot allow your ideological position as an advocate to distort or misrepresent ethnographic information. The field research proved that research on tea picker females had many difficulties including uncover their life experience. As the subject of study, they were realize that their hidden identity will open. Their willingly to speak because they aware and need to improve their life. These females need a new insight to change their children destiny.

3. Theoretical Background

Postcolonial often concerned with representation and language that are crucial to identity formation. Identity can not be separated from the historical background, political factor and environment where these females lived. This research used Identity theory to explain all the females’s experiences in colonial enviroment in tea plantation. Stella Ting-Tookey explains Identity Negotiation Theory (Littlejohn &
Foss, 2008: 90). It helps to uncover the identity of tea-picker females. Ting-Toomey in her research sees that identity is always negotiating actively in interaction among others. Identity becomes a kind of self-reflective image, because it changes, challenged, and modifies itself, every time. This is what had happened in tea plantation. Modified by colonializer and taught from generations. The theory also explains that value of identity usually begins in the family as an initial process of identity formation. Littlejohn & Foss (2008: 90) stated that “The development of initial gender identity also occurs in the family and subsequently becomes a very important part of social identity”. Ting-Toomey’s theory refers to the actor who delivers the message. In reality, life in the plantation with all its symbols, naming, dan exact same location as those in the colonial era, have resulted in understandable mutual relations as a negotiation between the society’s genuine culture and colonial culture. The negotiation was done to create secure feeling for the native people. By opening up to the education, values, norms of the European people, indigenous people can be more adaptive and acceptable in the relationship with white man. It does not necessarily be a mutually balanced relation, but it might avoid more harmful repressions.

To build the model of the identity construction of tea-picker females in tea plantation it is crucial to include Social Identity Theory (Tajfel, 1978; Breakwell, 1993). This theory attempts to explain intergroup relationships, is a model which focuses upon the needs and motivation. In this research it is proved that tea picker females tried to cope with their need of life, tried to fulfill their dream to have a better life. It explains interpersonal and intergroup dynamics. By addressing the issues of social representation, it can provide a model of the broader role of identity process in directing the social construction of what passes for reality (Breakwell, 1993: 2).

4. Findings

Researcher found that these tea-picker females had housing facility with water supply and electricity from the plantation. The houses like huts in the middle of the tea plantation. In the earlier years of the plantation it was free, but since the year 2000 they had to pay. Pay for electricity only. For water facilities, the land had supply them with abundant water source. In Malabar and Pangalengan plantation they built water reservoir to support electricity needs since 1900. At the plantations, there are afdelings (area of work) and tea picker villages. Common villages are different from the settlements of the plantation workers. Ever since the colonial era, there have been some norms or unwritten rules that if a plantation worker intend to keep the facilities (the hut) as his/her own, she has to inherit the job to her heirs – daughter or son. Otherwise, when she retires and no one replaces her, she has to leave the settlement, or in their term, ‘pulang kampung’ (move to their home village). This rule has been constructed since colonial era. Until now finally the huts have captured their freedom.

This was the result of mutual relations in communication between workers and the authority throughout the years. This mutual relationship has formed individual identity which was spread out as social identity among the tea picker females. Feodalistic values and norms have also took part in creating this worse condition of tea picker females become harder and they suffered from double oppression by both
the colonial and feodalistic of patriarchy system. On the other side, colonial ideology was attached to the plantation society, aware or not. Their social conditions depend on the condition of the company policy. The richer and bigger the company, it does not mean that the workers will gain any benefit from that. But when the company is in loss, the workers –especially tea picker females- will be the most oppressed party. For consideration, as tea picker females, their wages since 2005 – 2015 has only raised by 10% in 10 years. This condition has no difference compare to the time when they employed by the Dutch. The colonial brought the money to build and develop their own country leaving the labors in poverty.

According to theory, there were three reasonable ways to describe how the identity became more attached to tea picker females:

a. Feeling, Thought, and Action: internally these females learn the way they lived and kept it in their mind. Since young age they learned colonial mechanism role and norms. They never left the plantation and rarely contact to other people. They lived in the middle of plantation, far away from civilization.

b. Colonial culture: the culture brought by the Dutch and English man who ruled the plantation. They learnt to use clothes, take shower with soap and many European ways of life. They became second class people. They learnt the colonial language but the colonializer never understood theirs. These labor learnt and adapted new culture from their ruler. But not become smart just become lower class labor in plantation.

c. Society: the patriarchy society is not the only obstacle in tea picker females life. The colonial mechanism also made the females life in poverty until now. Teapicker females need security and appreciation in their life. They thought the society of plantation had given what they need. But years they realized the society never help them. They are still marginalized in the plantation society.

Derived from those theories and facts in the field, the identity of tea-picker females can show as below:

Figure 1: Tea Picker Females Identity Constructs in West Java Tea Plantation
(Source: filed research, 2015)
5. Discussion

The result of this research showed colonial hegemony is coloring strongly characteristic of tea picker females’s identity. The identity built up historically and geographically. Colonial mechanism influenced the community strongly (Wulan, 2015). The line between man and female as worker in plantation made females more marginalized. Females captured in poverty. There are two situation which built tea picker females identity. First, there was silent resistancy towards foreign culture and tradition. Meaning, these females had never protested openly upon the authorities’ misdoings, even it was Dutch nor Indonesian. They fight to get better life through their offspring. They believe the ideas or intention to get higher education for their children, for example pursue education until SMA or SMK (Senior High School). They try hard to get the children out from the plantation’s circle of life in a modest way. These females just keep on working and waiting for the result. Secondly, this research defined description about colonalized people, as to foreign people or towards the existency of repressive local patriarchal power. This means that as females, these tea pickers accept the double roles burdened on them. They never realize about double oppression in their life. In their humble life, good female is a female who never hesitated to work for her family. They taught to be respectful to their parents and life peaceful with other. Like tea plant, they beauty outside and trembling inside.

References


The Effect of Self Leadership and Self Concept Towards Commitment of Teaching Profession on Elementary Preservice Teacher

Nur Atikoh, Yogyakarta State University, Indonesia

Abstract

This study is aimed to explore the effect of self leadership and self concept towards commitment of teaching profession on elementary preservice teacher. Further investigation is to explore those relationship. Students of elementary preservice teacher are employed on this study. Structural equation modeling is used to analize the data. It is suggested that different self leadership and self concept influence commitment of teaching profession on elementary preservice teacher. Implications of the result are discussed.

Keywords: Self leadership, Self concept, Commitment of teaching profession.
Introduction

Education plays a paramount role in the development of a society (Farah, Fauzee & Daud: 2016). In the real sense, education civilizes, enlightens and makes life much progressive of the human-being. Therefore, education is very much important for the development of individual and entire society (Prasad: 2013). Education is a never ending procedure of internal development, progress; knowledge and even it begin from the crib to the grave. It has been observed that education is one of the vital components which supply to the development of a country and the success of the mob (Frier & Macedo: 1987).

Teaching at its core is a moral profession. Scratch a good teacher and you will find a moral purpose (Fullan, 1993). Teachers are on the front lines of a changing society (Lieberman & Pointer, 2008). The important characteristic of the learning society is the learners’ own initiatives and responsibilities for their own progress (Niemi, 2002). Preservice teachers had to demonstrate proficiency on numerous competencies as part of the process of gaining their initial teaching license. These competencies were assumed by many to be based on empirically demonstrated relationships of “teacher effectiveness” established by researchers between particular teacher behaviors and student achievement test scores, despite evidence to the contrary (Heath & Nielson, 1974). Many of the assessments in teacher education programs were casting the form of behavioral competencies that could be observed because of the heavy influence of behavioral psychology and systems theory on education at that time (McDonald, 1973). These efforts to strengthen teacher education and teaching through the articulation of a “knowledge base” for teaching in the form of teaching competencies was not the only vision for how teacher education programs could be strengthened. At the same time that efforts were being made to expand the professional education component of programs, others were advocating for less emphasis on methods courses, foundations courses, and so forth and arguing for a greater attention to preparation in the content knowledge to be taught by teachers.

What happens in teacher preparation, the early years of teaching, and throughout the career, however, is another story. Those with a clear sense of moral purpose often become disheartened, and those with a limited sense of purpose are
never called upon to demonstrate their commitment. In an extensive study of teacher
burnout, Farber (1991) identifies the devastating effects of the growing "sense of
inconsequentiality" that often accompanies the teacher's career. Many teachers, says
Farber, begin their careers "with a sense that their work is socially meaningful and
will yield great personal satisfactions."

Most of these graduate students are interested in doing an outstanding job in
teaching and/or supervising preservice students, many of them are not interested in
teacher education as a field of study and do not participate in any of the graduate
courses that are available to them that address the literature on teacher education and
learning to teach. Although they may be experts in the teaching of reading or
mathematics and have a number of years of successful teaching experience, they are
often not aware of what is known from research about how to support teacher learning
and its transfer to the early years of teaching in the context of a university-based
teacher education program (e.g., Cochran-Smith & Zeichner, 2005; Darling
Hammond, 2006; Smagorinsky, Cook, & Johnson, 2003), and they do not necessarily
think of themselves as teacher educators. Even when graduate students have the
knowledge and expertise related to supporting student teacher learning and do a good
job in their work, their time in the program is limited and each fall a new cohort of
graduate students enters the department with little knowledge of the specifics of the
work that has gone on before, and the process of inducting them into an ongoing
process of program renewal begins anew. Because graduate student supervisors often
come to Madison from around the world to complete their studies, they are often not
familiar with the local schools, and the manner in which their roles are often
structured has them working in several different schools at any moment and in
somewhat different schools each semester. Also, with the exception of the two
elementary education professional development school cohorts where students stay
with the same university supervisor and the same two schools over four semesters,
each semester a supervisor is responsible for working with a different group of
practicum students or student teachers, a situation that makes it more difficult to go
into depth in the supervision process (Zeichner & Miller, 1997).

Commitment has received a great deal of attention in business and
organizational studies for important reasons (Kacmar, Carlson, & Brymer, 1999;
Keller, 1997). The outcomes of commitment are fairly clear. Committed people are
more likely to remain with the organization, work toward organizational goals, and
invest more effort in their job (Mayer & Schoorman, 1992; Yousef, 2000). There are
two distinct approaches to the definition of commitment in the literature: an exchange
approach (continuance commitment), which views commitment as an outcome of an
inducements-contributions transaction between an individual and an object (i.e., the
organization) (e.g., Morris & Sherman, 1981; Stevens, Beyer, & Trice, 1978), and a
psychological approach (affective commitment), which depicts a positive, high-
intensity orientation toward an object (Mowday, Porter, & Steers, 1982). The most
widely accepted and used the mein most definitions of commitment focuses on the
psychological bond or identification of the individual with an object that takes on a
special meaning and importance and that goes beyond calculated involvement
(Buchanan, 1974; Etzioni, 1961; Mowday et al., 1982). Objects of commitment vary
considerably. Committed teachers may have strong psychological ties to their school,
their students, or their subject matter, and their patterns of behavior might vary
depending on which commitments are stressed (Cohen, 2000; Firestone &
Commitment is one of the more commonly suggested outcome variable in the self-leadership literature (e.g. Houghton and Yoho, 2005; Manz and Sims, 2001). Individuals engaging in self-leadership often develop a sense of ownership over their tasks and work processes. As a result, self-leading individuals may demonstrate higher levels of commitment to their tasks, goals, teams or organizations than individuals who are not engaging in self-leadership (e.g. Bligh et al., 2006; Houghton and Yoho, 2005; Manz and Sims, 2001). Likewise, individuals practising self-leadership may experience greater feelings of control and autonomy, leading to heightened levels of independence in behavior and decision making (Manz and Sims, 2001). In contrast, individuals who are not actively practising self-leadership may become dependent on external influences from traditional leaders to guide their actions, becoming increasingly incapable of independent thought and action (Houghton and Yoho, 2005). Although these outcomes have often been suggested in the literature, no empirical examinations to date have attempted to substantiate these claims. Future researchers should undertake to examine these hypothesized relationships in greater deal.

In addition, there are many factors can influence of commitment of teacher profession, one of them is self-efficacy and status. Self-efficacy is one’s perception of one’s competence and ability to act. The importance of self-efficacy as a predictor of all three outcomes can be understood if we relate to the original concept of self-efficacy developed by Bandura (1997). According to Bandura, self-efficacy is based on two dimensions that he labelled “outcome expectancy”. “outcome expectancy” implies that an individual estimates that a given behaviour will result in certain outcomes. Efficacy expectations refer to behaviors toward the expected outcomes (Bogler & Somech, 2004).

Self-efficacy connected with self-leadership. To enhance self-efficacy, it connected with self-leadership which supposed it, which in turn results in higher performance levels (Houghton et al., 2003; Prussia et al., 1998). Self-leadership is an influence-related process through which individuals (and working groups) navigate, motivate and lead themselves towards achieving desired behaviors and outcomes (Manz, 1992). People who possess good self-leadership qualities know how to achieve high levels of self-direction and self-motivation (Houghton et al., 2003; Manz, 1986; Manz and Neck, 1999). Self-leadership is about people who learn to lead themselves and others. Self-leadership is a process through which people influence themselves to achieve the self-direction and self-motivation necessary to behave and perform in desirable ways. (Manz, 1983, 1986, 1992 and Neck 1999). However, while a plethora of conceptual (non-empirical) self-leadership research exists, a sparse amount of empirical research has examined self-leadership theory and its application in organisational settings (Anderson and Prussia, 1997). One possible explanation for this lack of empirical research is that no valid scale for the assessment of self-leadership skills makes it difficult to advance empirical research in this promising area.
Another important and under researched phenomenon in relationship commitment of teacher profession is self-concept. The self-concept is undergoing something of a renaissance in contemporary social psychology (Gecas, 1982). Self-concept is generally defined as an individual’s overall evaluation of his or her traits and abilities (Rosenberg, 1975, 1977; Rosenberg & Simmons, 1971). According to Rogers (1951), the self-concept consists of one’s perception of self (traits, abilities, and aims) in relation to others and the environment. This “social” aspect of self-concept is linked to concepts such as the significant other (a person with whom one has a personally meaningful relationship and whose opinion is critically important) and the reference group (the group or groups with which one identifies or wishes to be a part of). Several studies have suggested that the more importance one ascribes to significant others, the more influence those individuals have on one’s self-concept (Mead, 1934, Rosenberg, 1973; Wylie, 1979) and self-satisfaction (Meir, 1989). Self-concept may be affected by discrepancies among its different constituent elements, for example, the putative differences between feelings of worth in one’s personal life and feelings of worth in other domains of functioning. But even within specific domains of functioning, discrepancies can exist. For example, a discrepancy in self-concept exists when a person thinks he or she is a “good” professional (i.e., performing at a high level) but also feels a low level of professional self-satisfaction (low self-acceptance) (Super, 1951). Another type of discrepancy occurs when there is incongruence between a person’s perception of self and his or her perception of what the significant other thinks (Holland, 1985; Rogers, 1951). For example, a person may believe that he or she is a “good” professional (performing at a high level) but also believe that his or her significant other does not share that perception. Incongruence among different dimensions of self-concept has been found to be a significant source of stress (Rogers, 1968). According to the objectives above.

Based on the above description, research on student work commitment is important to do. Moreover, lately the issue of work commitment is often associated with professional ethics. The ethics of the profession began to be questioned by the increasing spread of academic and professional deviations. The lack of commitment to work values seems to be one of the root causes (Kusmaryani, 2007: 92). Changes in the changes that occur in the community gives the consequences of the emergence of a shift in value, even a value crisis. Especially with the fact in the field that many students who often choose educational programs that actually do not really want. Many students also end up working out of line with their educational background. Even now as it begins to develop, more and more students are looking for jobs just to get status alone. Estuary of it all is a matter of commitment to low work, which affects the low professional ethics among students. This research purpose to exploring the the effect of self leadership and self concept towards commitment of teaching profession on elementary preservice teacher.

**Literature Review**

**Self Leadership**

The self-leadership concept first appeared in a 1983 practitioner-oriented book (i.e. Manz, 1983) that expanded upon the existing concept of self-management (e.g.
Manz and Sims, 1980). Self-leadership is a self-influence process through which people achieve the self-direction and self-motivation necessary to perform (Manz, 1986; Manz and Neck, 2004). Although individuals are motivated to accomplish tasks, not everyone is capable of displaying innovative behavior, because of the absence of self-navigation, a key element in the concept of self-leadership (Latham and Locke, 1991). People who possess good self-leadership qualities know how to achieve high levels of self-direction and self-motivation (Houghton et al., 2003; Manz, 1986; Manz and Neck, 1999). During this process, people learn to lead themselves. For instance, constructive thought patterns become essential during the first stage of the innovation process recognizing a problem and generating new ideas and solutions. Unlike dysfunctional thought patterns, through constructive thoughts an individual is able to tackle a problem and suggest solutions more effectively. Self-leadership is about people who learn to lead themselves and others. In the innovation process, it is clear that self-leadership skills are critical for displaying innovative behaviors. However, the innovative process also entails the leading of others. For instance, the second stage of the innovation process is concerned with the individual’s effort and ability to promote her or his new solutions and ideas, as well as the creation of legitimacy and support both inside and outside the organization. To this end, individuals with high levels of self-leadership can lead others to support their new ideas and solutions.

Self-leadership also operates within the context of Bandura’s (1986, 1991) social cognitive theory. Social cognitive theory suggests that human behavior may be best explained by a triadic reciprocal relationship among internal influences, external influences and behavior. Self-leadership consists of specific behavioral and cognitive strategies designed to positively influence personal effectiveness. Self-leadership strategies are usually grouped into the three primary categories of behavior-focused strategies, natural reward strategies and constructive thought pattern strategies (Manz and Neck, 2004; Manz and Sims, 2001; Prussia et al., 1998). Behavior-focused strategies strive to heighten an individual’s self-awareness in order to facilitate behavioral management, especially the management of behaviors related to necessary but unpleasant tasks (Manz and Neck, 2004). Behavior-focused strategies include self-observation, self-goal setting, self-reward, self-punishment and self-cueing.

Empirical evidence provides some support for the existence of relationships between self-leadership and various personality concepts. For example, Williams et al. (1995) have shown significant relationships between self-management and the Myers-Briggs Type Indicator (Myers and McCaulley, 1985) trait preferences of extraversion, judging, and sensing. In addition, Stewart and his colleagues (Stewart et al., 1996) demonstrated significant correlations between conscientiousness, neuroticism, and supervisor evaluations of self-leadership behaviors. On the other hand, the findings of Stewart and his colleagues (Stewart et al., 1996) seem to suggest that self-leadership is nonetheless a distinct concept from personality. Their findings revealed an interaction effect between conscientiousness and self-leadership training such that those scoring lowest in conscientiousness subsequently showed the greatest increase in self-leadership behaviors as a result of the training. This lends support to the assertion that self-leadership behaviors are amenable to change (e.g. Manz, 1986), while personality characteristics are relatively stable across both time and situation (e.g. Block, 1981; Conley, 1985; Costa and McCrae, 1988. If self-leading behaviors are malleable while personality is not, then these concepts may not be synonymous. Based on the theoretical and empirical evidence outline above, it would appear that
self-leadership dimensions are distinct from, yet related to, certain key personality traits. Houghton et al. (2004) have recently provided some additional empirical evidence in support of this position. They reported significant relationships between the three self-leadership strategy dimensions and the personality traits of extraversion and conscientiousness. Nevertheless, a comparison of the hierarchical factor structures of self-leadership and a constellation of personality traits (including extraversion and conscientiousness) utilizing factor analysis and structural equations modelling techniques suggested that the three self-leadership strategy dimensions are distinct from personality traits, particularly at lower levels of abstraction (Houghton et al., 2004).

H1: Self-leadership has a positive effect on commitment of teacher profession.

**Self Concept**

The "self-concept," on the other hand, is a product of this reflexive activity. It is the concept the individual has of himself as a physical, social, and spiritual or moral being. Rosenberg defines the self-concept broadly as "the totality of an individual's thoughts and feelings having reference to himself as an object" (1979:7). Similarly broad is Snygg & Combs's statement that "the phenomenal self includes all those parts of the phenomenal field which the individual experiences as part or characteristic of himself" (1949:58). A more specific definition is provided by Turner: "Typically my self-conception is a vague but vitally felt idea of what I am like in my best moments, of what I am striving toward and have some encouragement to believe I can achieve, or of what I can do when the situation supplies incentives for unqualified effort" (1968 :98). In Turner's (1968, 1976) formulation, the self-concept also involves (to some extent) the sense of spatial and temporal continuity, a distinction of essential self from mere appearance and behavior (which he terms "self-image"), and the identification of the person in qualitative and locational terms as well as in evaluative terms.

Calhoun and Acocella in Desmita (2010: 166) mentions three main dimensions of self-concept, namely dimension of knowledge, dimension expectations, and assessment dimensions. The dimension of knowledge (cognitive) of the concept of self includes everything that is thought about oneself as a person. The second dimension of self-concept is the hope or self that is captured. In the future. This expectation is the ideal self (self-ideal) or the aspired self. The third dimension of self-concept is self-assessment own. Self-assessment is a view of pricing or fairness as a person. Assessment will shape acceptance against self (self-acceptance), and self-esteem (self-esteem) someone. The three dimensions of self-concept as described above are not something that stands alone, but a mutual unity related and interdependent with each other. Based on the above description of self-concept is a view thoroughly about ourselves both about the characteristics of personality, values of life, principles of life, morality, weakness, its potential formed from experience and interaction with others who can helping a person or individual in self-actualizing free and responsible in achieving a goal like what is expected.

The structure of self-concept is viewed as a hierarchical organization of an individual's role-identities (Stryker 1968; McCall & Simmons 1978; Heiss 1968). Stryker developed the idea of self-concept as a salience hierarchy of identities most
fully through the concept of commitment. He proposes that "one is committed to an identity to the degree that one is enmeshed in social relationships dependent on that identity" (1979: 177). In this view of self-structure, the greater the commitment to an identity, the more consequential it is for the individual's conduct [elaborated in Stryker (1980), especially pp. 83-84]. Note that Stryker's conception of commitment emphasizes the relational aspect of role-identities: The nature and extensiveness of the "role-set" (Merton 1957) or "identity-set" (i.e. the network of identities and role relationships a given identity implies) affect the degree of commitment to the identity.

H2: Self-concept has a positive effect on commitment of teacher profession.

Commitment of Teaching Profession

Commitment to work is a multidimensional perspective in the form of the development of organizational commitment theory. In a multidimensional approach, commitment to work as well as organizational commitment provides a complex understanding of one's attachment to its work (Meyer et al, 1993). Mowday, et al (1982: 27) defines organizational commitment as a relative strength of the individual in identifying his or her involvement into the organizational part. A commitment can be characterized by three things: (1) Acceptance of organizational values and goals. (2) Preparedness and willingness to earnestly attempt on behalf of the organization. (3) The desire to maintain membership within the organization (becoming part of the organization). Organizational commitment as a sense of identification (trust in organizational values), involvement (willingness to do the best possible for the benefit of the organization) and loyalty (the desire to remain a member of the organization concerned) expressed by a teacher to the organization. Organizational commitment is a condition where the teacher is very interested in the goals, values, and objectives of the organization. Commitment to the organization means more than just formal membership, as it includes an attitude of liking to the organization and a willingness to seek high levels of effort for the benefit of the organization for the achievement of goals. Under this definition, organizational commitment includes loyalty to the organization, job involvement, and identification of organizational values and objectives.

Teachers as educators or teachers are the determining factors of success of every learning effort. The management of learning according to Muhibbin Shah (2003: 229) is the ability of a teacher in carrying out obligations responsibly and feasible responsibilities that include the preparation of renacana, renaca management and evaluation actions. Proficient teachers in carrying out their profession can be called as a competent and professional teacher. The same thing was also put forward by Broke and Stone, (in Uzer Moh. 2000: 14): Descriptive of qualitative nature or teacher behavior appears to be entirely meaningful. This opinion emphasizes that commitment is a picture of the qualitative nature of teacher behavior that seems very meaningful. "Teacher's commitment in learning management emphasizes the mastery of science or management skills and its implementation strategy, not just knowledge of technology and management but rather an attitude, self-development to have High skill and have a required behavior ". The conclusion of the two opinions above is the teacher's commitment is a set of responsibilities, authorities, rational behaviors that include skills and skills and knowledge that are carried out properly and responsibly. Commitment refers to the ability to implement something gained through education,
commitment points to performance and rational action to meet certain specifications in the management of educational tasks.

Muhibbin Shah (2003: 230) states that: "In carrying out obligations, teachers are required to have psychological competencies, which include (1) cognitive commitment (inventiveness); (2) affective commitment (flavor sense prowess); And (3) psychomotor commitment (prowess). In addition, there is one kind of commitment that teachers need, that is personality commitment". Gumelar and Dahyat (2003: 120) said: As an indicator, educational personnel who are considered competent professionally if they have the characteristics: (a) The education personnel are able to develop responsibilities as well as possible. (B) The education personnel are capable of performing roles successfully. (C) The education personnel are able to compete in trying to achieve the goal of school education. (D) The education personnel shall be able to carry out their role in the teaching and learning process in the classroom.

Rohani and Ahmadi 1991: 66): "The Teacher as a Decision Maker says that teachers should have 4 commitments: (1) Have knowledge of the" learn and behavior "of human beings (learners) and be able to translate the theory into situations that Real. (2) Have the right attitude toward self, school, learners, peers and the subjects being fostered (3) Mastering the subjects to be taught. (4) Have technical skills in teaching, among others: skills to plan lessons, ask questions, assess the achievement of learners, use teaching strategies, manage the class and motivate learners. Based on the various theories that have been described above, the teacher's commitment in the management of learning in this study is the ability that must be owned by a teacher in the management of the learning process that includes the skills and ability of a teacher in planning learning to organize, evaluate learning outcomes and create an atmosphere of relationships Conducive to the students, so that the learning objectives will be achieved as planned.

Method

Respondents

The respondents for this study are undergraduate students who were taking major of elementary teacher education in Ahmad Dahlan University, Yogyakarta, Indonesia in academic year of 2016/2017. Data collection from respondents resulted in responses from 53 subjects to the questionnaire. Of these, fully complete, usable data were provided by 115 of the responding sample population.

Measures

All variables were measured using multi-item Likert-type scales. Questionnaire consists of 4 possible answers that are “Strongly agree”, “Agree”, “disagree”, and “Strongly disagree”. “Strongly agree” interpreted as an absolute done or occurred as stated in the statement or always done so, given a score of 4. “Agree” is defined as what it means to tend done or often happens as what is stated in statement, but not absolutely as stated in question, given a score of 3. “Disagree” answers are defined as things tend not to be done, tend not to happen as they are
expressed in the item statement, but absolutely different, so it can be said sometimes happens, or done what is stated in the statement on the implementation of daily tasks, given a score of 2. “Strongly disagree” answers, with no or no statement, does not mean it is absolutely not done / does not happen as it is which is described in the statement, so it can be said not never done or never happened as in the execution daily tasks, then given a score of 1. The scale items used in this study are given below:

**Self-leadership**

Self-leadership was measured with the 12 item self-leadership questionnaire. This questionnaire is based on earlier work on self-leadership conducted by Manz and Sims (1987). Result from an early study were used to develop indicators of the self-leadership construct. The indicators include 1) behaviour focused strategies; 2) natural reward focused strategies; dan 3) constructive thought focused strategies.

**Self-concept**

Self-concept was based on sections from both the Tennessee Self Concept Scale (Fitts, 1965). A total of 25 items were used to construct this measure. The indicators include 1) identifying self-identity; 2) recognize self-behavior; 3) recognize self-assessment; 4) recognize the physical self; 5) recognize morals and self-ethics; 6) recognize the personality of self; 7) recognize oneself in the family; And 8) recognize themselves in social.

**Commitment of Teaching Profession**

Commitment of teaching profession was assessed using Carson and Beldeian’s (1994), which measures one’s motivation to work in a chosen vocation (Hall, 1971). There are three concepts such as career identity, i.e. establishing a close emotional association with one’s career; career planning, i.e. determining one’s developmental needs and setting career goals; and career resilience, i.e. resisting career disruption in the face of adversity. A four-point Likert scale ranging from “strongly agree” to “strongly disagree” was also used. The scale consists of 15-items with a relativity high internal consistency.

**Result**

ANOVA test the difference between the means of two or more groups. First, analysis of variance was used to determine self-leadership and commitment of teacher profession.

Table 1.
a. Dependent Variable: Commitment_Profession

Based on Table 1, it can be made a simple linear regression equation for self-leadership variables as follows:

\[ Y = 11,328 + 0,555X_1 \]

The significance of \( t \) for self-leadership can be seen from the above equation (\( X_1 \) of 0.000 at the 0.05 significance level) Furthermore, \( t \) arithmetic in Table 2 is compared with \( t_{\text{table}} \) The amount of \( t_{\text{table}} \) can be seen from Table Critical Values For The \( t \) Distribution \((\alpha = 0.05)\) with \( \text{df} \) of 51 (from the formula \( \text{df} = n - k = 53 - 2 \) and the significance of \( \alpha \) of 0.05 (5%), so obtained \( t_{\text{table}} \) magnitude 1.675.

Significance of self-leadership variables 0.000 smaller than significance \( \alpha \) of 0.05 (5%) and \( t \) count 3,934 bigger than \( t_{\text{table}} \) (1.675) Based on this calculation can be proved that independent variable (self-leadership) have positive influence and significant to the dependent variable (commitment of teacher profession)

Table 2.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
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<tr>
<td>1</td>
<td>(Constant)</td>
<td>11,328</td>
</tr>
<tr>
<td></td>
<td>Kepemimpinan_Diri</td>
<td>0,555</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Commitmen_Profession

Based on Table 2 we can make simple linear regression equation for self-concept variable as follows:

\[ Y = 7,562 + 0,313X_2 \]

The significance of \( t \) for self-concept can be seen from the above equation (\( X_2 \)) of 0.000 at the 0.05 significance level. \( t \) count in Table 2 is compared with \( t \) table. The amount of \( t_{\text{table}} \) can be seen from Table Critical Values For The \( t \) Distribution \((\alpha = 0.05)\) with \( \text{df} \) of 51 (from formula \( \text{df} = n - k = 53 - 2 \) and \( \alpha \) significance of 0.05 (5%) , So obtained \( t_{\text{table}} \) magnitude 1.675. The significance of self-concept
variable 0,000 is smaller than the significance of alpha (α) 0.05 and t-count 4,237 is greater than t-table (1.675). Based on this calculation can be proved that the independent variable (self-concept) have a positive and significant effect on the dependent variable (commitment of teacher profession).

Table 3.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>.650</td>
</tr>
<tr>
<td></td>
<td>.338</td>
<td>.159</td>
<td>.294</td>
<td>2.130</td>
</tr>
<tr>
<td></td>
<td>.216</td>
<td>.084</td>
<td>.353</td>
<td>2.562</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Commitment_Prosfession

Based on Table 3 above, seen constant value of 3.431 self-leadership coefficient of 0.338 and self-concept coefficient of 0.216, then obtained the regression line equation as follows:

\[ Y = a + b_1 X_1 + b_2 X_2 \]

\[ Y = 3.431 + 0.338X_1 + 0.216X_2 \]

The equation of a double linear line can be explained as follows:

a) \( a \) is a constant whose magnitude 3.431 states that if the independent variable (self-leadership and self-concept) is considered constant, then student entrepreneurship interest \( Y \) increases by 3.431 units

b) \( b_1 \) is the regression coefficient of self-leadership \( X_1 \) = 0.338 states that each addition of self-leadership variable \( X_1 \) of 1 unit, it will increase the amount of professional commitment \( Y \) of 0.338 units.

c) \( b_2 \) is the regression coefficient of self-concept \( X_2 \) regression coefficient 0.216 states that each addition of self-concept variable \( X_2 \) of 1 unit, it will raise the amount of professional commitment \( Y \) of 0.216 units. Hypothesis testing using SPSS version 17 statistical software with results on Table 4 as follows:

Table 4.
a. Predictors: (Constant), Self_leadership, Self_Concept
b. Dependent Variable: Commitment_Profession

Based on Table 4 it is known that the significance value of F is 0.000 at the alpha (\(\alpha\)) 0.05 significance level. Figures in Table 25 are compared with F-Tables. The magnitude of F-table can be seen from the table of critical values for the F distribution (\(\alpha = 0.05\)). Based on Table 4 the value of df1 is 2 and the value of df2 is 50 with an alpha (\(\alpha\)) significance of 0.05 (5%), so that the F-table is 3.18. The significance of F (0,000) is smaller than the significance of alpha (0.05) and F-count (11.866) greater than F-table (3.18). Based on the results of data processing above means it can be proved that all independent variables (self-leadership and self-concept) have a positive and significant effect simultaneously on the dependent variable (commitment of teacher profession). The results of the overall calculation of self-leadership and self-concept of professional commitment can be seen in Table 5 as follows:

Table 5

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>403,521</td>
<td>2</td>
<td>201,761</td>
<td>11.866</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>850,177</td>
<td>50</td>
<td>17,004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1253,698</td>
<td>52</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[
\text{a. Predictors: (Constant), Self\_leadership, Self\_Concept}
\]

Based on Table 4 above it is known that the value of the coefficient of determination (R2) is 0.322. Independent variables (self-leadership and self-concept) are able to explain the dependent variable (professional commitment) of 32.2%. The contribution of these two predictors is 32.2% of the dependent variable, meaning that the rest of the entrepreneurship interest variable can be influenced or explained by other independent variables outside the equation of multiple regression model in this research that is equal to 67.8%. Based on these results can be concluded that the independent variables in explaining the dependent variable is not too strong or small value. This means that the independent variables used in this study influence is not very significant to the dependent variable.

**Discussion**

**The Effect of Self-Leadership on Professional Commitment**
The first hypothesis which states that there is a positive and significant influence between self-leadership towards professional commitment can be answered by looking at the results of T-count > T-table (3.934 > 1.675) and the level of significance alpha (α) career guidance <5% significance (0.000 < 0.05). This means Ha accepted and H0 rejected that can be proved that there is a positive and significant influence between self-leadership towards student professional commitment of 23.3%. The magnitude of these influences indicates that self-leadership affects the commitment of the student profession. Self-leadership can self-motivate, self-organize and self-control so that with good self-leadership students who are prospective elementary school teachers will have a good level of independence so as to position itself into a good model for its students. According to the above explanation can be concluded that the greater the level of student self-leadership then will foster the desire of students in choosing a career as an elementary school teacher. Leadership itself will produce a strong teacher, firm in the establishment so as to contribute positively to educational innovation.

Influence Self Concept of Professional Commitment

The second hypothesis which states that there is a positive and significant influence between the self-concept and the commitment of the student profession can be answered by looking at the result of T-count > T-table (4.237 > 1.675) and the level of significance of alpha (α) self-concept <5% significance (0.000 <0.05). This means Ha accepted and H0 rejected that there is a positive and significant influence between self-concept to the professional commitment of students of 26.0%. The amount of influence states that the concept of self affects the commitment of the student profession. Everyone is born with different potentials, to cultivate that potential one needs to recognize himself. This self-introduction process includes all the attitudes, behaviors, and habits that exist within the person both positive and negative. In self-knowledge is not independent of self-concept. The concept of self requires awareness of the person in recognizing himself and the other person's view of himself. Through self-knowledge is expected other people are able to know the potentials that exist in him, if someone has been able to recognize the potential that is in him and have awareness of the shortcomings and strengths that exist in him, it is expected that students will prefer to entrepreneurship. Based on the above exposure can be concluded that the higher the self-concept then the tendency of students in the professional commitment of teachers to be higher so that a professional teacher.

The Influence of Self-Leadership and Self Concept toward Professional Commitment

The result of data analysis to answer the third alternative hypothesis (Ha) which states that there is a positive and significant influence between self-leadership (X1) and self-concept (X2) together to the student profession commitment (Y) can be seen from F-count > F-Table (11,868 > 3.18) and the significance level of F <5% significance (0.000 <0.05). This means Ha accepted and H0 rejected that can be proved that there is a positive and significant influence between self-leadership and self-concept together to the commitment of the profession. The results of the study stated that self-leadership and self-concept together have an effect on professional commitment. Good self-leadership in a person will make the person has an awareness of himself that the person is able to control himself and influence others so that will
become a teacher who can guide the students. A teacher who has a good self-concept will better know who he is and what his potential is in him, so that person will be challenged to make learning innovations. Self-leadership and self-concept reinforce each other so that self-leadership and self-concept are equally high of course make the professional commitment of teachers to students is also high.

**Conclusion**

This primary goal of this research was to investigate self-leadership, self-concept toward commitment profession of teacher. Both self-leadership, self-concept were related to commitment profession of teacher. These findings support and extend the suggestions of other researchers (e.g., Blustein et al., 1995; Felsmen & Blustein, 1999; O'Brien et al., 2000) regarding the utility of applying attachment theory concepts to career commitment, in general, and to career-related self-leadership, in particular. Although we used only one domain of career-related, there was some evidence linking secure attachment to higher self-leadership.

**Limitations And Future Research Directions**

Imitations of the current study should be noted. The sample was smaller than preferred and may have restricted the power needed to obtain significant results. Future research with larger samples is needed to support significant findings and re-evaluate ambiguous result from this study. Because this study was cross-sectional, causality cannot be inferred. Future research utilizing longitudinal design is needed to better evaluate the true causal flow of these relationship.

**Acknowledgment**

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**References**


**The China Connection: Key to building world-class private universities in Malaysia**

Yu Sing Ong, Southern University College, Malaysia

**Abstract**

This article explores the key issues and challenges of building world-class private universities in Malaysia. With China’s increasing investments in Malaysia, the latter could tap on the opportunities offered by the Chinese to build world class private
universities in the country. Private universities in Malaysia need to restrategise their operations to tap on the areas where they could collaborate. The article has both theoretical and practical significance for private university leaders to follow.

**Keywords:** World-class universities, University leadership, China, Malaysia

**Introduction**

The Chinese government introduced Project 21-1 in 1993 to elevate the educational and scientific levels of 100 universities to global standards. These universities were provided with extra financial support with the investment of approximately USD2.2 billion between 1996 and 2000 to enhance their competitiveness in the world. The Chinese government started another project in 1998 to accelerate the building of a few famous universities to be world-class universities. “Project 98-5” was introduced by President Jiang Zemin on May 4, 1998. A total of 34 universities were selected for Project 98-5 and they were given greater autonomy, including new levels of academic freedom and quality control processes.

The challenges facing Chinese higher education include increased income disparity and economic opportunities between rural and urban areas. Unemployment rates among university graduates remain high in the midst of rising demand for enrolment. Many Chinese universities still lack the ingredients of what constitute
world class universities. There is a lack of Nobel laureates, journal citations, and top international awards for faculty. China has lacked behind Europe, Australia and the United States in the internationalisation of its universities. Concerns also arise on how to improve the quality of Chinese universities. Engrained in many Chinese is the strong influence of Confucianism which emphasises social harmony and conflict-avoidance instead of the Socratic form of instructions adopted by most Western universities.

In 2013, President Xi Jinping introduced the Silk Road Economic Belt and 21st Century Maritime Silk Road policy initiatives to improve and stimulate growth and development along its geographic periphery and beyond. The initiative, more commonly known as “One Belt, One Road” aims to strengthen China’s political influence with its neighbours. OBOR is also an important security initiative for China to integrate its Western region with the rest of the country. China’s Silk Road initiative has been questioned by different countries in the light of growing disputes relating to the sovereignty of islands in the South China Sea and the use of its investment funding to dictate foreign policies of other countries.

OBOR aims to strengthen political and cultural communication, develop economic cooperation and build a community of common interests and mutual trusts. It comprises five main components below:

a) Policy Communication  
b) Road Linkage  
c) Trade  
d) Financial  
e) Non-governmental communication (people-to-people partnerships including the education sector)

Reform of the higher education sector include both institutional reform and workforce reform. The institutional reform involves reforming the education quality, appraisals and evaluation systems while workforce reform involves renewing philosophies of educating a qualified and innovative workforce.

We will look at how the globalisation and localisation of Chinese universities give impetus to new business models for Malaysian universities. The collaboration between Chinese and Malaysian universities will contribute to innovative activities in the academic sector. At the same time, the OBOR initiative will enhance China’s cultural soft power in Malaysia and the rest of South East Asia. Such collaborations have direct benefits for China as more Chinese businesses establish footholds in Asia. Figure 1 below shows a conceptual framework of the international collaborative process in education.

Chinese universities are largely influenced by Confucian epistemology (Li & Hayhoe, 2012). Common features include ethics-centred exploration of knowledge, directive role of government, societal mission of higher education, and a hierarchical system. Countries in the region could benefit from the Confucian model of higher education provided by Chinese universities. The Confucian model comprises four main interdependent elements: a) National policy shaping the education landscape; b) Universal tertiary participation; c) national examination and d) investments in
scientific research. The Confucian approach to education affirms that moral training is part of education and it must be reflected in behaviour. A teacher must be a role model for his students. Confucius taught that education should be open to all and there should be no class distinctions. With these two important teachings, Chinese universities are in a position to groom students with high moral standards and to remove the mentality that Western culture is superior to Eastern culture. China is well poised to end the dominance of Western countries and it could play an important role in assisting ASEAN countries to overcome the mental block of Western supremacy.

![Figure 1: International Collaborative Framework](image)

Student mobility is a means of enhancing competition among universities. Strong student mobility and strong preferences for research are necessary conditions to achieve world-class status. In China’s 13th Five-Year Plan Roadmap to 2020, the country set out policies for improving the higher education sector. University innovation, academic cooperation and autonomy for universities are among the issues given priority. Innovative teaching methods are to be raised to ensure some universities meet world standards. Cooperation between institutions and enterprises will be encouraged and skilled workers’ salaries to be raised. Universities and research institutes will be given increased autonomy with leaders having more freedom to make strategic decisions, including financial and personnel administration. The global implications of this reform is that more Chinese universities will rival American universities as research institutions and also make China an education hub for students from Asia. It is also becoming an important destination for foreign students. According to data from UNESCO, in 2015, there were 123,127 foreign students studying in China.

Chinese universities have opened branch campuses in Italy (by Ningbo University), Laos (by Soochow University), and Malaysia. The recent opening of Xiamen University in Malaysia with a target student population of 10,000 in its first year of operation was an encouraging development for both China and Malaysia. Internationalisation of Chinese universities serve three policy goals: a) as an international relations tool; b) as a global competitive building tool; and c) as a knowledge improvement tool.
The motivations and decisions to establish an international branch campus are many. These include financial considerations, host country incentives, potential market demand and loss of institutional legitimacy. Universities could adopt one of the following strategies for its branch campus. These are:

1) Adapting structures and processes to suit institutional context of host country
2) Using the same structures and processes as the home campus
3) Establishing a joint venture with a local partner

Marginson (2004) described internationalisation as “relations between nations as discrete entities, without implying any necessary change in those nations themselves or in the structuring of their relationship”. Globalisation, on the other hand, refers to “the spread of cross-national and worldwide phenomena, including their growing influence at local, regional and national levels”. Traditional internationalisation include study-abroad programs and international exchanges. Atkinson (2010) suggested that under certain circumstances, hosting foreign students can contribute to a policy change in the students’ county of origin.

Globalisation of universities has taken the form of distance learning, branching and franchising (Altbach, 2006). Education reforms could be financially driven emphasizing decentralisation, privatisation, and better performance (Carnoy 2000; Mok, 2003). The enrolment of a significant number of international students is a source of additional income as state funding to higher education institutions are reduced.

China’s education reforms have transformed the higher education system in China from one that emphasises elitism to one that promotes mass education. However, this process also results in higher unemployment among university graduates (Bradenburg & Zhu, 2007; Bickenburg & Liu, 2011). Many Chinese students prefer an overseas degree, especially from an English speaking country, as they believe there may be better employment opportunities for them.

The Chinese model of a world-class university is different from the Western model. Niland (2000) noted that a world-class university needs to satisfy nine benchmarks: quality of faculty; research; talented undergraduate body; large number of disciplines; resourcing; technically smart; good management; alliances and network; and international presence. World-class universities are research-oriented and based on the American model in particular (Altbach & Balan, 2007). However, Samil noted that they could include non-research universities which are characterised by a concentration of top talent (both faculty and students), abundant resources for learning and research, and good governance encouraging strategic vision, flexibility and innovation (Salmi, 2009). World class universities are also globally competitive, possess high value for humanity and has its primary goal in teaching and research (Shin & Kehm, 2013).

Chinese universities are becoming more globally engaged partnering with universities from the United States, Europe, Australia and Asia. The OBOR initiative
offers new opportunities for higher education cooperation with overseas institutions with increased mobility seen for both its students and faculty. Internationalisation has also raised new concerns about the infiltration of Western values such as academic freedom and the dilution of Chinese ideologies such as subservience to authority (Postliglione, 2015; Sharma, 2013). Thus, there is a paradox in China’s desire to be a leader in global higher education and its internal policies to restrict academic freedom and internet freedom. The internationalisation of Chinese universities is seen as mainly achieving a political and economic objective, rather than an educational goal. Education is a mechanism that enhances the soft power of a nation. It is a universal value that brings about well-being and prosperity of a country.

China’s attempt to develop world-class universities lead it to introduce the Academic Ranking of World Universities (ARWU), an annual publication of Shanghai Jiao Tong University. ARWU is regarded as a credible university ranking publication, alongside QS World Rankings and Times Higher Education World University Rankings. The impact of ARWU is that it inspires Chinese universities to be more competitive and drive towards excellence. Globalisation subjects universities to the pressure of an unequal knowledge system dominated by the wealthy universities (Altbach & Balan, 2007).

Internationalisation activities tend to improve the educational quality and standards of a university (Taylor, 2010b). They also increase the worldwide reputation of universities as they aim to improve their rankings. Improved rankings, in turn, help attract quality students and faculty to the universities (Chan, 2008; Lynch 2006).

Malaysia hopes to be a net exporter of higher education by 2020 (Knight, 2011). This will reduce the outflow of funds overseas for education purpose. Its universities are actively transforming themselves to tap on the opportunities offered by globalisation. In the Malaysia Education Blueprint 2015 – 2025 for Higher Education, the government listed 10 transformational initiatives (“shifts”) to spur continued excellence in the higher education system. These shifts aim to improve the quality and efficiency of the education system, as well as issues related to globalisation. The first four shifts relate to outcomes while the remaining six shifts are enablers for the system (Figure 2).
9Ps of Marketing for Education

Malaysian universities are strengthening their internationalisation strategies in the areas of student recruitment, international mobility and exchange programme, franchising, and MOUs with international institutions. It is essential for university leaders to be more responsive to students’ needs. Kotler & Fox (1995) provided a marketing mix model for education in the 7Ps: Program, Place, Promotion, Price, Process, Physical Facilities, and People. We could improve the model by adding two new elements of Psychological Support and Prospect for Jobs, which are essential especially for international students who come from different cultures. With these 9Ps, universities are able to rebrand themselves to attract the best of international students. Branding is important as a source of reassurance to students about the quality of education they will receive (Mourad et al., 2010). Figure 3 below illustrates the 9Ps of marketing for education.
Recruitment of Students

The recruitment of the right category of international students will determine the effectiveness of the student population as one with holistic and balanced graduates. Students with low academic preparedness or those who have not satisfy the entry requirements will have difficulties in coping with the rigours of the program. It is appropriate to ensure that students meet the admission and selection criteria before being enrolled into a program. McCarey, Barr and Rattray (2007) found that students with higher entry qualifications consistently attained higher grades than students with lower entry qualifications. Another study by Dalziel and Peat (1999) noted that students with higher level of secondary school performance achieved better results for their first semester of study in a Bachelor of Science program at the University of Sydney.

Potential benefits to Malaysian universities
Malaysian universities can benefit from the internationalisation of Chinese universities. The competition for admission into Chinese universities is so high that many families decide to send their children overseas for education. Culturally, Malaysia with its diverse ethnicity, is more attractive to Chinese students. The proximity of Malaysia compared to the United States or Australia is another advantage. In addition, there are at least 70 Malaysian universities and universities colleges recognised by China’s Ministry of Education. The affordability of a Malaysian education as compared to a United States or Australian education is another incentive for Chinese parents.

Many Chinese universities are willing to collaborate with Malaysian universities in academic mobility through student and faculty exchange, cooperative program offerings and research projects. The Chinese Ministry of Education recognises the need to reform curricula, teaching methods and assessment tools by incorporating international approaches to teaching.

The Malaysia government could consider supporting a small number of private universities that have the potential to become world-class universities. Smaller institutions could be encouraged to merge and transform into larger universities with more abundant resources. While there may be challenges in assimilating the cultures of different institutions in a merger exercise, there are also much opportunities in creating a new culture of excellence in a newly merged institution. For example, in China, the merger of Beijing Medical University with Beijing University in 2000 and the merger of four universities to create Zhejiang University in 1998, have created strong institutions with teaching and research capabilities.

Malaysia universities could ride the OBOR wave and develop a few world class private universities through closer collaboration with their Chinese counterparts. Collaboration in “talent”, faculty and staff mobility will encourage more knowledge exchanges between the institutions. There could also be more recognition of course credits taken by students in partner institutions. International collaboration of research projects is not without challenges. Researchers have to overcome the cultural differences and bureaucracies of the participants in the projects. However, international collaboration of research projects propels the researchers into a much larger global community. To achieve world class status, universities have to successfully encourage their academic staff to maximise their research capabilities. Globalisation brings the academic community closer through collaboration of research activities. At the same time, it also encourages institutions to be more competitive and develop the aspirations to become world class universities.

Visionary leadership is critical in creating world class universities. The environment has to foster creativity, innovation and academic freedom. University leaders need to have a strong strategic vision and practice a philosophy of excellence. Effective leadership is important in setting strategic goals and policies in higher education institutions (Bennette et al., 2003, Jonese et al. 2014). In today’s competitive environment, university leaders must also possess good commercial sense to address the demands of various stakeholders and be financially prudent in the management of their institutions. They have to reassess the 4Ps of higher education: policies, programmes, pedagogy and partnerships. With globalisation and increased
student and staff mobility, education policies need to be reviewed for universities to overcome the various challenges they face.

Globalisation has also created awareness for Malaysian and Chinese universities to benchmark their best practices with each other partners. These include areas of teaching pedagogy, course curriculum, quality assurance, quality of faculty, facilities and academic support. While they collaborate on one hand, they also compete on the other. Chinese universities are competing with Malaysian universities to attract international students. Governments have realised that globalisation of education creates national wealth and attract foreign exchange.

The trend of tertiary-level international students worldwide is expected to continue to increase over the next few years as student mobility remains strong. Data from the UNESCO Institute for Statistics showed the number of international students increased from 2.8 million in 2005 to 4.1 million in 2013. As at end 2014, Malaysia hosted around 135,000 international students studying in higher education institutions as well as international high schools. The most popular countries of origin were Bangladesh, China, Indonesia, Nigeria, India, Pakistan and Yemen. With the establishment of EduCity Iskandar and Kuala Lumpur Education City, together with the various education hubs in Nilai and Cyberjaya, Malaysia is well poised to be a strong competitor to Singapore and Taiwan. International universities such as Monash University, Curtin University, Swinburne University, University of Nottingham, Herriot-Watt University, University of Reading, Newcastle University, Manipal International University, Raffles University and Xiamen University, have opened branch campuses in the country.

The Malaysian government hopes to place at least one Malaysian university in the world’s top 50 by 2020. University of Malaya is ranked 133 by ranking agency QS in its 2016 World University Ranking. China produced the most number of rising stars among universities in Asia with three universities in the top 50. Tsinghua University, Peking University and Fudan University were ranked 24, 39 and 43 respectively by QS in 2016.

**Students as partners**

To achieve world class status, universities need to engage students as partners in learning and teaching. Students may act as partners in various areas including quality assurance, research strategies and institutional governance (Figure 4). University leaders should acknowledge that there is much to gain by engaging students as agents of change in learning and teaching. Dunne & Owen (2013) noted that partnerships with students are multifaceted and have a number of meanings and purposes depending on context. Students could be engaged in any of the following areas:

1) Learning, teaching and assessments
2) Subject-based research and enquiry
3) Curriculum design and pedagogic co-designing
4) Scholarships in teaching and learning
Resources for building world class status

The management styles of university leaders have been widely researched. Leadership styles influence employees’ wellbeing (Nyberg et al., 2011; Tafvelin et al., 2011) and job satisfaction, organisational commitment and turnover intention (Aydin et al., 2013). University leaders, therefore, have to explore the effects of their leadership styles and the organisational outcomes. World class universities are cradles for nurturing creativity and innovation. University leaders need to recognise the professional development needs of professors through research projects and not overburden them with administrative or teaching tasks. They have to understand that the purpose of educational development is to help create learning environments that enhance educational quality.

For private universities to achieve world class status, they must have abundant financial resources to fund their operational expenditures as well as research projects. The institutions have to be successful in their fund-raising exercises which could come from endowments and government research funding. Faculty members of private universities often have to compete for government research funding to supplement the resources provided by the universities. Private universities have more difficulties attracting professors with PhDs as they may lack the resources to support professors’ research activities and the environment to champion academic freedom.

Technology is a game changer. The use of technology in e-learning addresses some concerns related to budget cuts in universities. E-learning is shifting the paradigm of higher education and the way we understand the system. The
technological resources must be aligned with the university goals if universities wish to maximise the potential of technology. The higher education environment is characterised by growing Volatility, Uncertainty, Complexity and Ambiguity (VUCA). Universities are facing challenges on how to deal with changes and disruptions. New technologies can disrupt the manner of traditional course delivery and make teaching more challenging to instructors who have to learn to deliver content online. A gradual adoption of blended program offerings may reduce the disruptions of delivery modes and lessen the negative learning outcomes which may result from a rapid implementation of fully online delivery of programs. Blended learning allows students to reduce trips to campus while still have access to face-to-face instructions. Institutions can also use classroom space more effectively and to reduce costs.

University lecturers need to be equipped with the 4Cs of 21st century learning skills. At the same time, they have to be able to impart the 4Cs to their students. The essential elements are Critical Thinking, Creativity, Collaboration, and Communication (Figure 5). They have to be lifelong learners themselves and be provided with opportunities and support from universities to upgrade their professional development. Enhancing lecturers’ critical thinking include developing their systemic thinking skills to gain a better understanding of challenging situations and developing effective interventions for transforming them through collaboration and open communication with colleagues. Systematic thinking involves combining analytical thinking with synthetical thinking. Analytical thinking involves thinking about the parts or elements of a situation while synthetical thinking refers to thinking about how these parts or elements work together. Lecturers are role models to students and they have to exemplify the collaborative learning styles to their students who in turn are able to demonstrate their ability to collaborate and make their own contributions.

Systemic thinking has a powerful influence on organisational improvement. It offers strategies that can help in restructuring the way we think about organisational change. Systemic thinking focuses on the interconnectedness of all things and sees change as a natural process. Fullan (1993) noted that the problem in public education is not resistance to change, but the presence of too much innovations and the fragmented nature of these innovations. System thinking in education encourages a coordinated change effort in the entire education system: curriculum development, instructions, assessment and professional development.

In systemic curriculum evaluation plan, universities should aim to design high quality curriculum which respond to the needs of students and which reflect the best educational practices. Very often, there are gaps between the written curriculum and what is actually taught by teachers in the classrooms. The implementation monitoring process should give attention to learners’ outcomes to determine the curriculum effectiveness. Students need to develop mindsets that promote logical reasoning and problem solving instead of pure memorisation of text materials. In the context of internationalisation, universities have to develop curriculum with intercultural perspectives to prepare students in an increasingly interdependent world (Francis, 1993; Chichton & Scarino, 2007).
Globalisation pushes universities into a borderless network. Globalisation leads to real and virtual mobility of people and also leads to tension between national and international forces (van Damme, 2001). Marginson (2004) noted that the development of e-distance learning is driven by technological changes rather than educational changes or changes in government policies. Technology has facilitated the offering of distance learning courses across borders. In Malaysia, 20 public universities have launched more than 60 Massive Open Online Courses (MOCCs) for free and are open to students and members of the public. Liyanagunawardena et al. (2013) defined MOCCs as online courses which have a wide appeal to people interested in learning about specific subjects. These courses are guided by facilitators who are experts in the various subjects offered. McAuley et al. (2010) and Waard et al. (2011) defined these courses as both open and online and may be free.

The MOCC courses cover a wide range of topics and are free on OpenLearning.com. They are delivered in Malay language, English or Arabic, depending on the subject. To coordinate the implementation of online learning for public universities, the Malaysian government set up the Malaysian e-Learning Council for Public Universities (MEIPTA). With MOCCs, Malaysia hopes to increase the quality and accessibility of higher education to the larger population. The real value of universities will be realised when they are able to build creative solutions. Leveraging on big data networks through multi-communication channels, universities are in a position to facilitate a deeper understanding of human needs and promote social capital.

Malaysian universities could partner with top Chinese universities to develop MOCC courses in multiple languages to overcome cultural barriers in various ASEAN countries. MOOC movement needs to be aware of the value of cultural and linguistic diversity and not focusing on excessive profits if they wish to widen their access to a larger learner base. The increase academic link between China and Malaysia in the form of joint programs will become part of a broader pattern of collaboration in the OBOR initiative. Figure 6 illustrates the elements of a world class university in 4 broad categories: Talent; Favourable Governance; Resources; and Openess.
With increased Chinese investments into Malaysia, there is a possibility that other Chinese universities may follow Xiamen University’s decision to open a branch campus in Malaysia. The massive residential and commercial development projects by Chinese conglomerates will attract more Chinese nationals into the country. The RM100 billion Forest City Project by Country Garden in Johor and the RM160 – RM200 billion Bandar Malaysia Project by China Railway Group in Kuala Lumpur are just examples of China’s investments in property projects in the country. Any future move by Chinese universities to establish branch campuses in Malaysia is likely to be a foreign-policy move rather than based on pure economic reasons as most Chinese universities received their funding from the state government. Due to the relative similarities of Chinese and Malaysian cultures as compared to Western culture, Chinese students may find Malaysia a more hospitable destination for pursuing their higher education. Western academics often stereotype Asian students as lacking critical thinking and obeying authority (Kumaravadivelu, 2003; Ha, 2006). As such, many Chinese students may choose to study in Malaysia.
Conclusion

The OBOR initiative brings many opportunities for Chinese universities to expand overseas. Universities in Malaysia and the rest of South East Asia could tap into the myriad of opportunities by collaborating with their Chinese counterparts. It is important to consider the geopolitical implications of OBOR apart from the higher education implication. China is using OBR as a foreign policy tool to strengthen its influence and cooperation with the international community. International faculty has to be realistic in their expectations about new education settings and challenges that are frustrating due to different cultural forms. On the other hand, international collaboration brings about knowledge transfers, intellectual friendships and management improvements. The pursuit for excellence requires universities to adopt multidimensional approaches to teaching and research which include localisation of foreign programs to suit the needs of the local education system.

Globalisation also aggravate the brain drain situation of a country when students decide to stay in the host countries instead of going home and contributing the knowledge gained to their own countries. The influx of Asian students into the United States, United Kingdom and Australia also raises xenophobic feelings towards foreigners. Malaysia may benefit from this prejudice against students from Muslim countries as the Western world grapples with fear of terrorist threats. At the same time, Malaysia continues to be an attractive destination for students from Asia due to the affordability and quality of its education system. With the increase in trade and investments between Malaysia and China, both countries have a formed a special relationship in the areas of educational and cultural exchanges. The interaction of Malaysian students with Chinese students opens up opportunities in research collaboration as well as future business and cultural relationships when the Chinese students return home to their country.

Malaysia continues to attract foreign direct investments in education with the establishments of foreign branch campuses. While many Malaysian private universities aspire to achieve world class status, they may be far from their goals without some participation or collaboration from other high ranking universities or the government. While China offers many examples of developing world class universities, its universities are mainly publicly funded and receive special support from the central government as evidenced in the Project 985 and Project 211 universities.

China is using OBOR as a soft diplomatic tool to strengthen its influence with countries along the Belt and Road region. Economic development is also achieved by boosting exports, enhancing access to natural resources and supporting local industries. This strategy complements the formal political and trade relationships between China and other countries. Malaysia is an important node for China along the OBOR route. While most discussions of collaborative projects are infrastructure related such as ports and railroads, collaboration in higher education in the form of investments to date have been limited to the establishment of Xiamen University branch campus. Malaysia universities should consider forming formal strategic partnerships with Chinese universities to nurture research and innovation. Both parties could benefit from the sharing of advanced technology, knowledge and experience.
For Malaysian private universities to become world-class universities, they have to implement a number of strategies including investing in quality teaching and research faculty, offering quality and industry relevant programs, recruiting qualified students, promoting academic freedom, improving corporate governance and attracting inspiring university leaders. Perhaps the best model for Malaysia private universities is a private-public partnership with government budget funding for research and consultancy. Policy makers have to decide to what extent they will invest in a small number of private universities to make them world class. It is important for Malaysia to develop a few world class private universities which are at the forefront of science and technology research. The outreach of a world class university to international faculty and students will position Malaysia as an education hub. Smaller private universities could also explore the possibility of merger with other institutions to become more formidable as seen in the formation of Zhejiang University. Mergers of universities will enhance the breadth and depth of academic disciplines, develop critical mass of researchers, and improve efficiencies in non-academic areas. Alongside growing competition in the higher education sector, there is also a growing tendency of cooperation between universities. There is much to gain for Malaysian private universities to work closely with their Chinese counterparts.
References


**A Success or A Failure: Adaptive Strategy of Affected People in Jatigede Dam Tourism Program**

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**Abstract**

The basic purpose of a development program in one country is to improve people's welfare. The development of Jatigede dam supposed to have similar purposes as any development program. The dam construction was caused the loss of people’s land (terrestrial) and replaced it with a water/dam resource (aquatic). The interchange of resources, generate interchange of people’s livelihood. One of the potential sector to replace the source of livelihoods, is the water resource-based tourism sector (dam). This study intends to describe the adaptation strategies related to the tourism sector conducted by the affected people. This study uses a quantitative method, with a survey to 99 respondents. The results show that more than 50% of respondents are involved in the dam tourism activities. However, the survey also shows that tourism management has not yet conduct sufficiently. The study result shows that in one hand, tourism development can replace the livelihoods of affected people, but in the other hand, if not managed properly, it can threaten the sustainability of the whole dam’s operation. The applied of an adequate dam tourism program is needed in order to substitute the people's livelihood. Nevertheless, it will be such a failure if the dam tourism program is not plan and conducted properly.

**Keywords**: Development, Dam, Affected people, Tourism.
1. Introduction

Jatigede Dam in Sumedang, West Java, Indonesia has been operated since 2015. The development of the dam, in general, were affected the people who lived in the construction land. The majority of the affected people were chose to move around the dam construction. People resettlement to the land surrounding the dam will increase the population pressure on the land. Most of the people, who were farmer with no land will exploit the land around the dam. Excessive exploitation of the land can give negative impact to the dam. If the condition continues, it will become a threat to the sustainability of the dam itself.

To minimize the occurrence of the problems that could threaten the sustainability of the dam, it is required to identify the affected people’s source of livelihood. It is important to identify the potential source of livelihood that expected will reduce the pressure of the population on the land around the dam. It is also important in addition to search for potential program which can empower people.

The relocation of affected people should be accompanied by the ‘relocation’ of the people’s livelihood source. Relocated people without creating jobs in new places will only cause new problems. In addition to the creation of new jobs, efforts to empower people to adapt to new places and new jobs are also important.

As mention before, the majority of the affected people are chose to move to surrounding the dam location. This was lead to population pressure to the land. The pressures become higher due to the agriculture as their livelihood. The development of small scale agriculture and livestock seems to be the best choice in the development of affected people. Lacks of the land around the dam become the main factor. However, the construction of dam causing loss of land resource (terrestrial) replaced by water resource (aquatic) is basically a very potential resource that can be used to develop people. These water/aquatic resources can be utilized, for the various activities as source of income for the people. The creation of jobs by participating the affected people in the dam management.

To be able to enhance people participation in the dam management it is necessary to find out the potential of the people in the tourism sector and the potential of tourism sector that currently exists around the Jatigede Dam. The community development programs in the tourism sector will be work effectively if based on the accurate baselines. This study will discuss about how the affected people adapt to ‘water’ despite of land, as their new resource of livelihood.

2. Methods

The study used quantitative method. Data collection was conducted with a survey of 99 respondents. The interview with questionnaire was done to 99 respondents. The survey was conducted at several villages surround the Jatigede Dam. Those villages are: Tarunajaya Village (21 respondents), Pakualam (19 respondets),
Karangpakuan (18 respondents), Cisurat (14 respondents), and other villages with less than 10 respondents.

<table>
<thead>
<tr>
<th>Village</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tarunajaya</td>
<td>26</td>
<td>26.3</td>
</tr>
<tr>
<td>Karangpakuan</td>
<td>18</td>
<td>18.2</td>
</tr>
<tr>
<td>Pakualam</td>
<td>19</td>
<td>19.2</td>
</tr>
<tr>
<td>Sukaratu</td>
<td>6</td>
<td>6.1</td>
</tr>
<tr>
<td>Sukamenak</td>
<td>7</td>
<td>7.1</td>
</tr>
<tr>
<td>Ranggon</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Cisurat</td>
<td>14</td>
<td>14.1</td>
</tr>
<tr>
<td>Wado</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td>Mekarasih</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Ciranggem</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Survey, 2016

3. Result and Discussion

Based on interviews on respondents, only a few respondents know about the tourism potential around them. There is 11% of respondents said that there is tourism potential developed in the region where they live today. This condition indicates that people knowledge about dam tourism program is very low. Nonetheless, there is a substantial percentage stating that they have benefited from tourism activities. More than 50% of respondents stated that they had benefited from existing tourism activities.

There are various types of work related to existing tourism activities in the study area. Some of these jobs include works in the fishing sector, boat construction and rentals, and selling food and beverages. The largest percentage is the catching fishery sector which is about 40%.

<table>
<thead>
<tr>
<th>Type of Works</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Answer</td>
<td>48</td>
<td>48.5</td>
</tr>
<tr>
<td>Fishing</td>
<td>40</td>
<td>40.4</td>
</tr>
<tr>
<td>Boat rental</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Boat construction</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Food and cigarettes</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td>Food and beverages</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td>Selling fish</td>
<td>1</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Although quite a lot of people involved in existing tourism activities and benefited from the activities, they are also facing threats and risks. The biggest threat felt by the people is the increasing number of the affected people which relocated to the same area they live now. The increasing population can lead to the increasing competition for jobs and other livelihood opportunities. They also said that, the occurrence of foreign investors who are not responsible and do not pay attention to the people interests in tourism development.

The spread of information about the tourism development plan in the area around Jatigede dam, develop the opinion of the respondents to it. Most respondents stated that they were happy (49%) and indifferent (31%). Although there are also respondents who are worried (4%) with the program.

Various reasons are expressed by respondents for their feelings about tourism development plans in their area. The opportunity to improve the economy is the reason expressed by the respondents. They hope that with the presence of tourists can encourage economic development in their area. Such economic development can be achieved through trade and services activities.

Table 3. The Benefit of the Dam Tourism

<table>
<thead>
<tr>
<th>Type of Benefit</th>
<th>amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not answer</td>
<td>32</td>
<td>31.7</td>
</tr>
<tr>
<td>Fishery development</td>
<td>4</td>
<td>4.0</td>
</tr>
<tr>
<td>Retail</td>
<td>10</td>
<td>9.9</td>
</tr>
<tr>
<td>Parking services</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Tourism object</td>
<td>14</td>
<td>13.9</td>
</tr>
<tr>
<td>Participate in tourism program</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Boat production</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Business possibility</td>
<td>17</td>
<td>16.9</td>
</tr>
<tr>
<td>Small scale business</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Increase economic condition</td>
<td>16</td>
<td>15.8</td>
</tr>
<tr>
<td>Improvement of public facility</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Survey, 2016

The respondent believes that the tourism development program around the Jatigede dam will create jobs and business possibility. Currently, the majority of respondent has fishery sector as a source of livelihood. Therefore, the fishery product is expected as a promising income source when tourism activities develop in this area. The respondents also have an opinion that they can involve in the dam tourism.
People whom are already involved in existing tourism activities, most of them said they would continue develop their existing business. The dam tourism development is expected to provide mainly economic benefits.

Besides the existing activities in tourism sector, the people of Jatigede also have other product to develop. The products are processed fish, souvenir and handicraft products, and other local products. The people also mention that they can conduct art performance as tourist attraction.

People of Jatigede also gave their suggestions and inputs related to tourism development plan in the area around Jatigede dam. The most prominent suggestion is the tourism program has to involving Jatigede people.

<table>
<thead>
<tr>
<th>Type of Suggestion</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Answer</td>
<td>38</td>
<td>38.38</td>
</tr>
<tr>
<td>Financial aid</td>
<td>6</td>
<td>6.06</td>
</tr>
<tr>
<td>Financial aid and improvement of public facility</td>
<td>9</td>
<td>9.09</td>
</tr>
<tr>
<td>Cooperate with people</td>
<td>3</td>
<td>3.03</td>
</tr>
<tr>
<td>Jobs opportunity</td>
<td>3</td>
<td>3.03</td>
</tr>
<tr>
<td>Pro people</td>
<td>15</td>
<td>15.15</td>
</tr>
<tr>
<td>Rule/law setting and enforcement</td>
<td>9</td>
<td>9.09</td>
</tr>
<tr>
<td>Empower people</td>
<td>5</td>
<td>5.05</td>
</tr>
<tr>
<td>Waste management system</td>
<td>11</td>
<td>11.11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>99</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Source: Survey, 2016

Tourism, dam tourism, is something new for Jatigede people. However, the variety of suggestions provided by the people indicates their interest to engage in tourism activities. The new source of livelihood requires a bit of knowledge and expertise different from the knowledge and skills that people have before as farmer. Therefore, providing knowledge, education, and training related to tourism for the Jatigede people is an obligatory.

4. Conclusion

It is a must that any development program, including tourism, dam tourism, is planned and managed in such a way to provide a variety of economic benefits. The complex Jatigede dam tourism which involving the affected people of Jatigede dam construction have to reduce the social and environmental impact, which in this case is already emerged. The result of the study show that the current tourism sector in Jatigede Dam is not properly planned. The people, the affected people is in 'autopilot
mode’ change their livelihood from agriculture to aquaculture. They have no proper knowledge and skill to work in Dam (water) environment. Their work as a farmer, as long as their life. Their shift their source of income in a sudden. Besides the very quick change of people livelihood, the Jatigede Dam tourism program is not planned properly. For example, people of Jatigede have a very small knowledge about the program. They only act as a respond of market demand. If this condition continue, the tourism sector in Jatigede Dam will not only threat the social economic condition of the people, but also the sustainability management of the Dam. In this case, despite of a success, the Jatigede Dam tourism program will become a failure.

References


The consequences of ageing people and emigration in Romania

Gabriela Marinescu, Gr. T. Popa University, Romania

Abstract

The analysis of the demographic ageing phenomenon at a global, European and national level shows an increase of certain “problems” of elderly people with effects on the rest of the population and on the most important systems: economic, cultural, healthcare. Emigration is another important macroeconomic and social phenomenon which Romania is facing. The ageing population and emigration in Romania endanger the very future of the country itself. The research was carried out by combining quantitative and qualitative methodologies. The main objective of this paper is to draw attention to these phenomena and learn how to better manage these challenges.

Keyword: Ageing people, Emigration, Consequences
1. Introduction

Romania, country from south-eastern Europe, member of the EU since 2007, has almost 18 million people. Officially, the number of persons having their usual residence in Romania on 1 January 2016 was 19,760,314(http://ec.europa.eu/eurostat/data/database). The country is undergoing a demographic regression, due to the ageing phenomenon that is in turn caused by the increase of life expectancy, the decline in natality, and the increasing number of people who emigrate (Ghetau, 2007; Rotariu, 2009, www.insse.ro). Ageing population is a special social problem, as it affects not only the respective persons, but the entire society. Recent statistics indicate that in Romania there has been a significant increase of the number of elderly people and an accentuation of this process (World report on ageing and health.2015 www.insse.ro). Romania joins the worldwide demographic trends, marked by reducing birth rates and ageing population (United Nations, 2015). The changes to the population structure engenders major consequences for the labor market, as well as in terms of pension and retirement, healthcare, social services and economic systems. Young people and young adults have chosen to leave the country and build a future for themselves abroad. The decision to leave one’s motherland is a complex one and it entails costs, giving up certain things, as well as opportunities, although there have been cases of immigrants accepting jobs that were below their levels of qualification. Migration engenders significant consequences for the families of those who migrate, for their original communities and for their target communities. The migration flows in the last two decades have changed the economic and social coordinates of several countries (Bartram, 2015). Many communities have been faced with demographic changes, ethnic and cultural diversity and individualization of the values. For Romania, the number of those who emigrated between 2000- 2015 is over 3.5 million people, most of them being young people aged between 30 and 45 years old. Between 2000 and 2015, some countries have experienced a rapid growth in the size of their diaspora populations. Among the countries and areas with the fastest average annual growth rate during this period were the Syrian Arab Republic, Romania (7.3 per cent per annum), Poland and India ( United Nations, 2016, International Migration Report 2015: Highlights). The consequences of these phenomena can be extremely serious, not only economically, but also from a social, cultural and political perspective. The imbalances studied in this paper and their consequences focus exclusively on ageing population and emigration. Thus, in addition to the negative rate of natural increase, emigration has been the main cause for the decrease in the total population. The 2 million decrease in the total population between the 1st of July 1995 and the 1st of July 2015 was partly due to due to the negative rate of natural increase (33.6%) and the remaining 66.4% due to emigration (http://www.insse.ro/cms). The negative rate of natural increase is the main argument for the population contraction in Romania, the country having 75,655 less inhabitants at the beginning of this year compared to the previous year. The demographic ageing index has also increased from 109.6 (on the 1st of January 2015) to 112.3 elderly people for 100 young people (on the 1st of January 2016) (http://www.agerpres). Specialists are expecting a steeper demographic decline in Romania throughout the upcoming decades. Thus, the population of Romania is projected to reach 14.5 million inhabitants in 2050 according to a report

2. Methodology

The research is a statistical and experimental study regarding ageing population and Romanian emigration. The study used a contextual analysis, which required framing the research from a social, historic, and temporal point of view. In order to validate the data and information we have obtained, we used the methodological triangulation method. This required various techniques for drawing conclusions such as observation, documentary analysis, and statistical-managerial, psychological analysis. For a rigorous research a questionnaire has been elaborated. It has 59 questions regarding health and wellbeing of elderly and emigration process. The questionnaire is characterized by the following features:

- it ensures the anonymity of the participation and the confidentiality of the answers;
- it accepts the voluntary nature to the survey participation and the answer to all questions;
- it contains methodological information for guiding respondents regarding the content of the questionnaire, the manner of filling it in and other orientation information;

3. Research

Ageing is considered a multidimensional phenomenon including physical changes of the human organism after the adult life, psychological changes impacting the mind and mental capacities and the social changes in terms of how a person is seen, what he/she expects, and what is expected of such person. As such, this phenomenon must be approached from a multidisciplinary and interdisciplinary perspective. An important issue facing today’s modern society is the “growing grey” of the global population as a result of falling birth rate and increasing mortality among adults. Population ageing is a worldwide phenomenon and Romania is facing alarming demographic changes that are accentuated by its emigration country status. Recent population trends indicate that every country should anticipate significant growth in the number of older persons over the coming years, necessitating different policies to ensure that older persons are able to participate in life of their societies (Beard, Bloom, 2015). The consequences related to ageing will be amplified. Generational conflicts might occur in terms of resources’ distribution, as the elderly become more active and numerous. A larger number of elderly citizens will also mean a greater pressure on the healthcare and social assistance systems. It is in this context that the European Union drafted policies geared towards changing the perception that old people are a burden. For this purpose, it is necessary to identify feasible solutions for creating opportunities for the elderly, so that the latter may gain an active role in the society, have a healthy senescence and live an independent life.
On the other hand, the demographic changes also translate into economic opportunities, namely the development of new products and services that cater to the needs of the elderly. This is how the notion of “active ageing” was coined, defined by the World Health Organization as the “process of optimizing the opportunities for health, participation and security to enhance the quality of life as people age”. The definition provided by the WHO introduces the notion of expanding the activity of the elderly by raising the retirement age and the participation of the elderly in the social, cultural, economic and civic activity. The elderly people who remain active can significantly contribute to the wellbeing of society, remaining in the workforce and participating in the life of the family and the community (Waddell, Burton, 2006).

Contributing to the ageing of the population in some countries, migration is yet another challenge of the 21st century for specialists, for all the people involved in this process and for the communities. The characteristics of this phenomenon in Romania refer to the fact that the country has become a country of origin, as well as a destination for international migration, but the status is that of a net emigration country. Also, there has been an increase in the number of people migrating through the national territory, with Romania having additional responsibilities regarding its positioning at the eastern border of the EU (illegal migration, human trafficking and voluntary migration). The dynamics in the international flows create distortions on the Romanian labor market (structure, specialty and segmentation), imbalances in the demographic structure with implications in terms of economics (evolution of macroeconomic indicators, fiscal effects and remittances) and on the social security system.

3.1 The consequences of ageing population and emigration in Romania

Hypothesis no.1– Health and wellbeing of elderly Romanians are crucial aspects of life quality.

Hypothesis no.2 – Emigration for work purposes is a complex contemporary phenomenon that will have deeply negative long term effects on the future of Romania.

The state of health of Romanian elderly was measured by the subjects’ own descriptions of their state of health. This research was conducted on an experimental lot of 3,480 persons over the age of 65.

- Distribution by gender: 2,020 women and 1,460 men
- Distribution by urban/rural residence: 1,410 urban and 2,070 rural
- Distribution by education: 990 with higher education and 2,490 with secondary or elementary education
- Distribution by marital status: 1,200 married, 920 divorced, 780 widowed, 580 in cohabitation.

All the subjects participated on a strictly voluntary basis and none of them has been financially rewarded subsequently. The respondents were interviewed between
1.10.2015 and 1.10.2016 by the general practitioners that have accepted to participate in this experiment.

Fig. 1. Respondents' opinions on health status

The above figure 1 shows the results regarding the perceived opinion on the individual health status in Romania. Elderly women were noticed to be more pessimistic than elderly men, assessing their health as being bad or very bad at a higher rate. As far as differences by living environment were concerned, older people from rural environments consider their state of health either good or satisfactory at a higher rate than those in urban environments. The older the ages, the worse the health assessments.

60.00% of the people over the age of 65 declare that their state of health is bad and very bad, 26.00% deem it satisfactory, while 14.00% deem it good and very good. This goes to prove that bad health in these age categories can be the result of accumulating certain problems along the life cycle and not only that of age itself. Preventive behaviors are more marked in the 65 year old population. In Romania, the direct causes that have led to the population ageing process becoming more accentuated were the demographic causes, namely the dynamics of natality and mortality, as well as the influence of emigration.

In Romania, the falling birth rates were influenced by the uprooting phenomenon affecting young population from rural environments who, by moving into urban environments, has abandoned the traditional procreative behavior and switched to family (birth) planning. This determined a marked demographic ageing in
the rural environment and a disparity between the two environments. The phenomenon of leaving the country, mainly by the young and adult population, is also a factor that has led to accelerating the demographic ageing process in Romania.

The evolution of demographic phenomena and processes in Romania was also specifically affected by economic, social, political, cultural, medical, hygiene and quality of life factors, which directly impacted the levels and trends in demographic factors: natality, mortality and emigration.

Hypothesis no. 1 was validated: Aging and health of the elderly is a crucial aspect of declining quality of life in Romania.

Experimental research has highlighted the economic, social, psychological and cultural consequences of aging and deteriorating quality of life. Unlike the demographic consequences, which are more latent, economic consequences manifest their acute character, becoming particularly severe in the last few years. The costs of ageing processes do not have a proper coverage with funds and at least on the short and medium term, these problems will be very difficult to solve.

The experimental research showed that the main economic consequences of the ageing process in Romania focus on:

- economic dependence;
- consumption and adequate satisfaction of consumption needs for the elderly population;
- ensuring budget expenditure regarding pensions, welfare benefits and other forms of support.

97% of the respondents are financially dependent on their families, cannot ensure a decent living based on their pensions (an average of 200 $/month) and are not satisfied with the healthcare and/or social assistance system.

Social and healthcare consequences

The issue of social consequences entailed by the ageing of population groups is a field of research due to the multiple situations that population category is faced with and presents with various particular features. The social consequences vary depending on other aspects, such as the economic, socio-cultural, psycho-social and socio-medical aspects. Of the social consequences of demographic ageing as arising from this study, we mention the following:

a. Retirement and the cessation of professional activity

The research showed that women navigate this situation more smoothly than men, a result that can be explained by the different roles they play within the family. Women are busier with respect to homemaking activities and view retirement with a certain sense of detachment. Women accept changes more easily, manage their emotions more effectively, have flair, intuition and team spirit, and they are flexible
and unpredictable. This style is the most adequate for modern times, as well as for the elderly ages. Women prefer consultation and interactivity and they find occupations more easily after retirement. On the other hand, men that are less involved in such activities find themselves useless, showing signs of indisposition and sometimes even dissatisfaction and apathy. As far as the level of professional qualification is concerned, it was noted that the shock of retirement is apparently more intense among people with higher education and generally skilled people compared to those with a lower level of education or unskilled people.

In the time frame immediately following retirement, there is a series of changes that occur in connection with the lifestyle change, interruption of work-related relationships, the change of one’s position within the family and social group to which each individual belongs. The physiological decline quickly becomes the main preoccupation and the feelings of isolation and marginalization become more acute. Pensioners find themselves overcome by events, and within their families they feel that they have lost their authority and even their independence. Such manifestations occur when the activity interruption is sudden and when such an event does not always relate to the loss of one’s work capacity. It is believed that the population should be prepared before retirement so as to avoid the so-called “retirement disease”.

b. Loneliness, a negative and increasingly frequent social consequence

Loneliness has a significant share among women, who are more numerous in Romania as a result of higher mortality rates among men. The feelings of loneliness become more severe with age and trigger special problems for the society and family. An important role in solving the problem of loneliness is played by community services, other specialized structures for household assistance and providing qualified supply, care and monitoring services (in case of extreme situations, such as immobile people with physical and mental disabilities and/or chronic disorders).

c. Social relationships of the elderly

Isolation from the active life can have detrimental consequences for the elderly: loss of contacts built over time and interruption of socialization, support for overcoming the difficulties of life and everyday worries. The loss of social relationships accentuates the feeling of loneliness, favoring isolation and the onset of depressive states.

d. The demographic ageing processes are a particular public health problem

Ageing population influences the healthcare offer and its effects will become even more glaring in the upcoming decades. The public healthcare system is not adequate for the purpose of ensuring universal access to healthcare, a high level of quality and for maintaining the financial viability of the system. The healthcare system and its deficiencies multiply the problems that elderly people already can barely handle in the current socio-economic context. The social services provided and rendered do not manage to offset these gaps, but they further worsen the state of dependence and degradation of the living standards for the elderly.
e. The aging of the population and the consequences of this are an important cultural phenomenon

The cultural beliefs play an important role in influencing perceptions of older people.

The cultural consequences (Fleckman, 2015) often issues minimized in managerial research, are much more difficult to quantify through statistical indicators and can be analyzed more accurately with neuroscience, psychology and behavioral economics. The objective culture (buildings, constructions, machines, installations, technologies) and the subjective culture (concepts and values, beliefs, customs, stereotypes, prejudices) outline the environment in which people live. The culture of the place imprints individual and collective behavior (Mullins, 2008, p.464). Individual culture depends on origins, education, living standards and civilization. The Romanian cultural environment is vitiated with perplexing stereotypes regarding ageing population: The elderly are useless, they need pensions and health care. On the one hand, many young people live with their parents and grandparents because they do not have enough means to afford their own apartment. The tension between generations is amplified by material shortages. Elderly people are a material and psychological burden. Many have health problems, do not have the money to care, they are difficult, irritable, selfish. The TV replaces any other form of socialization. Cultural education, individualism and fear of the group's judgment turn them into socially autistic. They hide their shortcomings, they are ashamed to be poor, sick and old. The young people they live with are come from two main categories: the educated ones, who focus on their career, raise money to move on their own or emigrate; the less educated ones, who expect and live off social benefits. The society is divided, the gap between the poor and the rich is growing, the elderly are marginalized: the state by survivors' pensions, the ineffective and corrupt health system, the children they are confused with, the informational technology that they do not understand and not assimilate. On the other hand, young people who do not live with their parents have their own problems and the elderly become a supplementary responsibility that is culturally managed differently: they want and can be convinced that it is their duty to support the elderly or do it because the collective culture of the place requires this.

From the perspective of societal culture and behavioral psychology ( Marinescu, 2017; David, 2015), research pursued the following cultural-psychological dimensions relevant to the analysis: selfishness, heterodetermination - self-determination, avoidance of uncertainty, individualism-collectivism.

The essential tendencies of the variability of the answers given to the questions from the questionnaire were highlighted with the average score. The evaluation scale: the value judgments comprise the entire spectrum of opinions: from highly positive to highly negative, with intermediary degrees: total consent, partial consent, indecision, partial dissent, total dissent (Likert scale 5 –total consent and 1 – total dissent). One may notice that the respondents express a high consent regarding the features analyzed.

Suggestively, the economic indicators present in table 1 are highly concluding in this direction.
Table no. 1 - Synthesis indicators of some cultural-psychological features

<table>
<thead>
<tr>
<th>No. crit.</th>
<th>Cultural-psychological dimension</th>
<th>Econometric indicators/markers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Selfishness</td>
<td>4.87</td>
</tr>
<tr>
<td>2.</td>
<td>Heterodeterminism/ Selfdeterminism</td>
<td>3.97</td>
</tr>
<tr>
<td>3.</td>
<td>Uncertainty Avoidance</td>
<td>4.36</td>
</tr>
<tr>
<td>4.</td>
<td>Individualism - Collectivism</td>
<td>4.00</td>
</tr>
<tr>
<td>5.</td>
<td>Total</td>
<td>4.30</td>
</tr>
</tbody>
</table>

The image of the average score for each of the four questions that characterize cultural features of respondents – is reproduced by the graphic representation in fig. 2.

Fig. 2. Graphical representation of the average score for cultural-psychological features

Respondents have selfish tendencies. Religious and defensive, respondents are only interested in their family. Conformism is elevated to religion, although other studies show that Romanians do not follow the rules, although they are obedient to power (David, 2015, Marinescu, 2016). Respondents want life stability and they don’t like to be surprised by unknown situations. Respondents are individualists, but mimic the interest for the common good. Having lived with inferiority complexes, they try to diminish through selfishness towards children. They wanted an economic, political and social environment that could potentiate their own virtues. They have instead learned the obedience to the authorities. Fear, suspicion, and lack of trust in institutions is quasi-general inside, but behaviors are conformable outside. Lack of solidarity and obedience caused respondents to complain about the system, complying with the rules they do not believe. This picture is strictly necessary to explain the cultural consequences of the elderly, the paradoxes and the dilemmas that define the groups, not individuals isolated from the group. The consequences of aging cannot be studied rigorously in terms of black and white, because although scientific
conclusions are essential they do not coincide with reality, covering the infinity of the manifestations. The tension between what you think (the invisible part of the culture) and what you say (visible part) becomes dangerous by repetition and leads to skeptical, cynical behavior. Dominant culture allows for external adaptation and internal integration (Schein, 2010). It is a common learning process. Each personality structure permits both positive and negative expressions, depending on who dominates socio-cultural modeling. The socio-cultural environment in Romania does not allow expressing and capitalizing on the positive potential of the elderly (David, 2015). The elders of tomorrow may be autonomous/independent, capable of generous social solidarity. The seemingly collective culture, born out of the desire for safety and the fear of unsure citizens, will disappear through education and tolerance. All of this will then be able to support a good mental and physical health, with a positive impact on the increase in life expectancy and well-being.

The message of this paper is that each society will have to prove its respect and empathy for the old age people. Education, polities and new social media are able to develop a positive conception of the ageing people. Sharing experience and ideas fosters the desire of the different generations to learn together and to learn from each other.

3.1 The consequences of emigration

Legal migration engenders significant benefits both for the countries of origin, and for the destination countries. In the former case, it mitigates poverty and unemployment, it regulates the current imbalances on the labor market leading to the increase of wages, and stimulates the multiplication of investments in human capital. Excess workforce not only determines an increase and rejuvenation of the labor market offer, but it also boosts consumption, ergo the general offer, thus leading to an enhanced GDP and consequently an improved standard of living.

The foreign currency sent by immigrants to their families back home contribute to the improvement of their living standards. The flow of foreign currency of the immigrants also alleviates the pressure on the current account deficit and their external payments balance. Saving the emigrants’ incomes in the banking system also has a positive effect on the economic development. A classification of remittances drafted by the World Bank ranks Romania on the 10th place worldwide and on the 2nd place in the EU. (Ambrosini, 2015). However, the exodus of qualified personnel is a risk factor for their countries of origin. The specialists that leave Romania are a vital resource loss, with dramatic consequences for the future development of the country (slowing down economic growth and technological development, increasing the number of elderly people, decreasing incomes and leaving certain sectors exposed (Sarcinschi, 2014). A potential gain that Romania could score as a result of this phenomenon is that highly qualified Romanian emigrants could return after several years, bringing along new knowledge, skills, technologies, management strategies, contact networks, access to the international best practices and possibly a financial capital, all these contributing to the national development. This scenario is difficult to carry out due to the political and economic conditions that poorly favor educated individuals and highly skilled professionals.
The personal advantages of the Romanians’ migration to other countries significantly outbalance their disadvantages. As such, the advantages noted by highly skilled young Romanians as a result of emigration and/or as a result of graduating some form of university education abroad include:

- gaining specializations that are in line with the needs on the labor market;
- higher employment opportunities as a result of graduating from internationally acclaimed faculties;
- the valorization of work;
- earning higher incomes;
- the possibility of developing working knowledge, skills and abilities;
- gaining new social and cultural experiences;
- professional evolution;
- access to top notch technologies;
- working in an attractive and creative environment;
- obtaining a higher living standard.

Young Romanians that have graduated some form of higher university education abroad would return to Romania first of all to be “closer to their families”, if there were career development and/or professional evolution opportunities, if the workplace measured up to the level of education gained abroad, if assessments were carried out based on objective criteria and focused exclusively on quality and performance, if the activity they carried out enabled them to use the skills/knowledge acquired abroad, and if the advancement/promotion criteria respected the competency principle.

The negative collective effects resulting from the emigration of Romanians and particularly that of skilled youths are both numerous and difficult to assess:

- failure to recover the investments in the education and professional training of emigrants, as a result of the fact that young Romanians with higher education, post-graduate and doctoral studies are more inclined to emigrate;
- loss of budgetary contributions from the taxes and fees these persons used to pay;
- increasing the population ageing process as a result of young people being more inclined to emigrate. Once this young population leaves, so do the children that this population would have had;
- dropping quality in the education and research services, with dwindling numbers of specialists in fields such as: IT, medicine, research, development, innovation;
- slowing down the economic development, reduced level of labor productivity;
- deepening structural imbalances in the labor market and rising unemployment.

The brain drain in Romania, particularly among youths, has confronted us with a deficit of valuable individuals that could make medium and long term contributions to the economic and living standard growth in Romania. Considering
the gloomy projections regarding the economic and demographic future of Romania, the lack of public policies supporting the young graduates choosing to stay and work in the country and the lack of investments geared towards preserving the valuable human capital of this country will lead to an irreversible degradation of the society. This will ultimately reflect most strongly on the quality of public services, healthcare system and education system, as well as on the general living standard.

Hypothesis no. 2 was also validated: Labor emigration is a complex contemporary phenomenon that will have deeply negative long term effects on the future of Romania.

4. Conclusions

- The emigration of skilled and highly skilled individuals is a negative externality for Romania.
- Migration also leads to the erosion of the middle class, which is deemed the cornerstone of every modern society.
- Romania is facing a marked ageing of the population, a lack of adequate resources for this phenomenon, an increase of inequalities and a dramatic decrease in the quality of life.
- Romania bears the cost for training the young people that emigrate and also faces a lack of specialists in small towns and rural areas, where almost half of the Romanian population lives.
- The Romanian labor market is marked by major imbalances that lead to an increasing number of emigrants and a 22% rate of unemployment among youths under the age of 25 (www.insse.ro).
- Romania failed to make an effective transfer of human resources by sectors of activity.
- Emigration is significantly influenced by the level of labor incomes, which are among the lowest in Europe (except for the IT sector).
- The ageing population and migration in Romania endanger the future of the country itself.

The consequences of population aging and emigration are becoming increasingly important. Aging and emigration have reached an unprecedented scale and will continue to increase. These have important implications for economy, citizenship, health, and retirement policies. A special attention should be paid to the role of individual factors such more responsibilities and macro factors such as equity of retirement system and changing social norms and stereotypes (Edge, 2017, p.26). By understanding its specific population trends, Romanian government can assess present and anticipate future needs to its older or younger population. The government has the power but not the will to do something sustainable in this regard. The paper points out that ignoring these problems affect the very existence of the Romanian people. Migration and ageing data are complex, however the threats and benefits to the economy and society are often clouded by local concerns, including those based on perception rather than experience. The study is to be completed with other analyses, providing a theoretical and practical background to understand the
influence and importance of these phenomena in an interconnected and multicultural world. There are several aspects in which this study is limited. However, this suggest a direction for future research with people of other cultures in order to gain a broader perspective of ageing and migration.

"Communities are highly technologically, informationally advanced, but there are emotional slipping’s that do not tolerate differences. The certainty has died, the chaos has lived. This puzzle requires tolerant, multi-cultural people. More freedom for the individual requires more education and responsibility "(Ridderstråle, Nordström, 2003).

References


Mathematical Thinking as a Predicting Factor in Academic Success

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Abstract

The objective of this research paper is to examine how the development of formal and informal mathematical thinking skills predicts scholastic success. The variables included early mathematical knowledge, such as informal numeration, informal numerical comparison, informal numerical calculation, informal concepts, formal
number reading and writing, formal concepts and variables in formal addition and subtraction tables, and formal numerical calculation, as measured through Ginsburg & Baroody’s (2003) TEMA-3, Test on Early Mathematics Ability. In this study, a one-year, two-year longitudinal study involved 67 children aged four (4) to five (5) years of age, who were enrolled in the transition grade from three schools of low socioeconomic strata in Colombia. Scholastic success was evaluated using the scores teachers gave students in the cognitive aspect, which included the subject of pre-reading and mathematics. It was observed that only in the first take, did early mathematical knowledge predict scholastic success. The findings of this research have important educational implications, taking into account mathematical thinking, as the main, decisive component in academic performance and in everyday life.

**Keywords:** Mathematical thinking, Academic predictor, Academic achievement, Academic success, Early mathematical knowledge.

1. Introduction

Many years ago, the main objectives of educational systems were to achieve literacy for all citizens, since reading and writing skills were considered a minimum and indispensable requirement for society. Parallel to the concept of literacy, due to the great importance that is being given to mathematical knowledge, the terms "numerate", "numeracy" or "mathematics" arise, referring to "literacy in mathematics" or "Numeracy", which refers to the minimum requirements in mathematics that every individual must acquire in order to function in society (Skovsmose, 2005; Niss, 1994).

From the perspective of Cardoso & Cercedo (2008), it is important to learn mathematics in early childhood because it is a tool that enables students to pose new situations, and which in turn generate knowledge in the different areas of their future field of work / professional and personal. In the same line of thought, Goñi (2000) refers to the formation of intelligence, and how mathematics has a prominent place because it becomes a driving force in the development of habits, positive attitudes and capacities to formulate rational hypotheses and assume challenges, based on situations that allow contextualization and provide students with tools that can be used throughout their educational and personal life.

The learning of informal mathematics is of great impact to the formation of a logical thought and in the structuring of the reasoning abilities, aspects that later influence in the learning and intellectual progress in general (Fernández, Gutiérrez, Gómez, Jaramillo & Orozco, 2004). The development of skills such as: comparing, relating, classifying, reasoning, knowing numbers, numerical abstraction, notions of form and measure, problem solving, among others, are fundamental basis for the student to more easily correlate mathematical situations - formal and informal- that will be the reason for the reasoning, the construction and the logical resolution of different problems presented to them throughout their education. The development of these skills will contribute to a better academic performance and academic success in general (González & Weinstein, 2000).
In a descriptive study carried out in Colombia, in which questionnaires and semi-structured interviews were applied to 96 pre-school teachers from public and private institutions belonging to different socioeconomic strata, in order to determine how the development of children's mathematical thinking was supported (children ranging in ages between three (3) and six (6)), it was revealed that teachers consider the notion of numbers, counting, shapes, spatial relationships, arithmetic operations such as addition and subtraction, predictions and measures are fundamental concepts that children should learn for their future success in an academic system because it prepares them to acquire more complex mathematical concepts (Ginsburg, 1989; Fernández, Gutiérrez, Gómez, Jaramillo & Orozco, 2004). Likewise, the vast majority of teachers felt that numerical counting is of vital importance to success in preschool because they help to establish number sense and is a powerful intellectual tool that children use in the construction of informal mathematical thinking (Hughes, 1986). For example, counting forward and backward develops understanding of positional value and numeric sense and numerical reading and writing and also helps children to establish connections between symbols and labels quickly (Fernández, Gutiérrez, Gómez, Jaramillo & Orozco, 2004), elements that in turn facilitate the success in mathematics, and which at the same time, increase the academic performance in general.

Other studies on the prediction of academic performance (Miñano, Cantero & Castejón, 2008), on 168 students, who attended the first level of compulsory, secondary education in public and private schools in the province of Alicante, Spain, while using a correlational and hierarchical regression analysis with students in varying areas of Language and Mathematics through the Battery of General and Differential Abilities (DAS-II) Yuste, Martínez & Galve (2008), found that the numerical aptitude correlates positively with the academic performance (i.e, that the numerical reasoning, the mental calculus capacity in the management of Mathematics) and the mathematical reasoning of mathematics (r = .597; p <0.01) (Miñano, Cantero & Castejón, 2008) mathematical operations (addition, subtraction, multiplication and division), numeracy, the speed of mathematical calculation and how to apply numerical operations to problems, favors student performance in the area of Mathematics, which in turn correlates positively with the student's general academic performance (Monsalvo & Carbonero, 2009); Results that at the same time agree with what was found by Puerta (2015) citing Almeida et al. Finding statistically significant correlations between academic success and mathematics in their research, they affirm that the cognitive value associated with the development of mathematical skills are part of the factors that predict students' s educational success, principally at the beginning and at the end of adolescence.

Alvarez & Crespo (2005) also found how math is related to school success, as they found that the majority of children with academic handicaps, present particular difficulties in Mathematics, reflecting more global deficiencies (language, attention, memory, intelligence, etc.), which manifest themselves in this especially complex activity. Children who presented specific difficulties in the management and learning of numbers were found to be two standard deviations below their age group in arithmetic notions and mathematical calculations, although their intelligence level was normal. Similar research found that high school students begin their studies with a poor math preparation, which causes a strong school drop-out (Gázquez, 2001). On the other hand, Posso, Gomez & Usuriaga (2007) in their studies found that students
newly admitted to the universities have not reached the level of formal thought in the mathematical concepts which is an obstacle to their learning because they do not employ or have not developed metacognitive learning strategies appropriate to the mathematics. This explains why the university students encounter difficulty in math when they start the university (Posso, Obregón & Gutiérrez, 1998; Posso, 2005, Posso, Gomez & Usuriaga, 2007).

Similarly, empirical results from a study examining the correlation between math courses and academic success at a university with engineering and business students show that math skills scores are positively associated with the academic success of the students (Lee, B. & Lee, J., 2009); with similar results to those found by Brenes, Mora, & Sánchez (2006), where teachers who were part of the sample of their research, reported that the main factors that affected student performance are the poor mathematical foundations they possess and which prevents basic calculations without the help of the calculator.

In the absence of researches that allow us to know the predictive nature of the different developmental abilities in mathematics, as formal and informal abilities, in relation to academic success, this research was carried out in order to deepen our knowledge on how the development of mathematical thinking skills, including numeracy skills, ease of comparing numbers, mastery of numerical facts, computational skills, and understanding of concepts, contribute to academic success.

2. Methodology

2.1. Subjects

In this study 67 children from four (4) to five (5) years of age, belonging to three low socioeconomic strata schools in the Atlantic region of Colombia, participated; those who at the onset of the study, were in transitional schooling.

2.2. Design

A one-year longitudinal study at two intervals. A longitudinal study was used to evaluate growth trajectories and initial conditions that affect change (Morris, 1997; Papalia, Feldman & Olds, 2009).

2.3. Instruments

An instrument created by Ginsburg & Baroody (2003), TEMA-3, which measures informal and formal concepts in numbering skills, number-comparison facility, numeral literacy, mastery of number facts, calculation skills, and understanding of concepts. It can be used to screen for readiness, measure progress, or determine specific strengths and weaknesses. The test has two parallel forms. Results are reported as standard scores, percentile ranks, and age and grade equivalents.
Academic success was evaluated through the scores that the teachers gave their students on the cognitive aspect that included the subject of pre-reading and mathematics.

2.4. Procedure

For the implementation of TEMA 3, persons who collected the data were trained; it was applied two measures to see the development of the mathematical thinking skills in the participants. The second measure was made 7 months after. The test was applied individually by each of the trained people. The authorization of the participation of minors was collected through the informed consent signed by parents; this explained the general purpose of the study. After parents’ reading the informed consent, decided whether their children were involved in the study. In addition, parents were informed that their responses were anonymous and confidential, and that the results of the study, would be solely and exclusively used for research purposes.

The sample was collected by purposive sampling. Subsequently, the data were entered and analyzed using statistical factor analysis, Student's t-test for related samples and analysis of correlation and linear regression. It was used the software SPSS version 17.0 for analysis.

3. Results

When performing the factorial analysis for the different study variables at the first intake, a Varimax rotation was performed, where there was a single component that explains 72% of the variability of the data. Within this component, the variables that make up the Early Mathematical Knowledge were entered, such as Informal Numbering, Informal Numerical Comparison, Informal Numerical Calculation, Informal Concepts, Formal Number Reading and Writing, Formal Concepts, Addition Variables and Formal Subtraction and Formal Numeric Calculation Tables.

Table 1 shows the estimated coefficients of the regression line for the academic success variable in relation to Early Mathematical Knowledge \( F = 6.298, \text{ gl} = 1, p <0.050 \), which explains 29.5% of observed variation in the student's grades.

When performing the factorial analysis for the different variables of study in the second intake, a Varimax rotation was performed as well, where there was a single component that explains 72.2% of the variability of the data. Within this component, the variables that make up the Early Mathematical Knowledge entered, such as Informal Numbering, Informal Numerical Comparison, Informal Numerical Calculation, Informal Concepts, Formal Number Reading and Writing, Formal Concepts and Variables Formal Addition and Subtraction Tables and Formal Numeric Calculation.
Table 1. Multiple Linear Regression 1st intake

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients</th>
<th>Non-Standardized Coefficients</th>
<th>Typified coefficients</th>
<th>T</th>
<th>Sig.</th>
<th>Confidence Interval of 95.0% for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B Typ. error Beta</td>
<td></td>
<td></td>
<td></td>
<td>Inferior Limit Superior Limit</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td>4,03 ,088</td>
<td>46,1 0,00</td>
<td>3,862</td>
<td>4,212</td>
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<tr>
<td>1 Early Mathematical Knowledge</td>
<td></td>
<td>0,221 ,088 ,295</td>
<td>2,510,01</td>
<td>0,045</td>
<td>0,397</td>
<td></td>
</tr>
</tbody>
</table>

*a. Dependent Variable: score

Source: Research Results

Table 2 shows the estimated coefficients of the regression line for the variable Academic Success in relation to Early Mathematical Knowledge [F = 1.469, gl = 1, p> 0.050]. It is observed that there are no significant differences between these two variables.

Table 2. Multiple linear regression 2nd intake

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients</th>
<th>Non-Standardized Coefficients</th>
<th>Typified coefficients</th>
<th>T</th>
<th>Sig.</th>
<th>Confidence Interval of 95.0% for B</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B Typ. error Beta</td>
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<td></td>
<td></td>
<td>Inferior Limit Superior Limit</td>
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<tr>
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<td>52,4 0,00</td>
<td>4,095</td>
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<tr>
<td>1 Early Mathematical Knowledge</td>
<td></td>
<td>0,099 ,082 ,148</td>
<td>1,210,23</td>
<td>-0,64</td>
<td>0,262</td>
<td></td>
</tr>
</tbody>
</table>

*a. dependent variable: Intake 2 COGNITIVE FINAL

Source: Research Results
Table 3 shows the mean differences between the results of intake 1 and intake 2 of the selected children. Student's t-test for related samples found a significant difference in the following variables: Informal numbering (t = -3.161, gl = 67, p <0.010), informal numeric comparison (t = -4.153, (T = -2.822, gl = 67, p <0.010), Reading and Writing Numbers (t = -2.688, p = Formal Concepts (t = -2.110, gl = 67, p <0.050).

Table 3. Mean differences between sets 1 and 2 in the variables that make up Mathematical Knowledge.

<table>
<thead>
<tr>
<th>Evidence of related samples</th>
<th>Related Differences</th>
<th>Confidence Interval of t</th>
<th>gl</th>
<th>Sig. (bilateral)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Half</td>
<td>Typ. Dev</td>
<td>Typ. error of Half</td>
<td>Inferior</td>
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<tr>
<td>INFORMAL NUMERATION</td>
<td>1,764</td>
<td>4,604</td>
<td>33</td>
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<tr>
<td>INFORMAL NUMERIC COMPARISON</td>
<td>.6764</td>
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<td>.162</td>
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<tr>
<td>INFORMAL NUMERIC CALCULATION</td>
<td>.4411</td>
<td>1,353</td>
<td>.164</td>
<td>.7688</td>
</tr>
<tr>
<td>INFORMAL CONCEPTS</td>
<td>.4558</td>
<td>1,331</td>
<td>.161</td>
<td>.7782</td>
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<tr>
<td>FORMAL NUMBER READING &amp; WRITING</td>
<td>.6176</td>
<td>1,727</td>
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<td>FORMAL CONCEPTS</td>
<td>.1764</td>
<td>.6898</td>
<td>.083</td>
<td>.3434</td>
</tr>
</tbody>
</table>

Source: Research Results

4. Discussion And Conclusions

The goal of this research was to examine how the development of formal and informal mathematical thinking skills, predict academic success. The variables included early mathematical knowledge, such as informal numeration, informal
numerical comparison, informal numerical calculation, informal concepts, formal number reading and writing, formal concepts and the variables formal addition and subtraction tables and formal numerical calculation.

It is noted that only in the first phase did early mathematical knowledge predict school success. These findings are congruent with research carried out by Almeida et al. (cited by Puerta, 2015) in that their research found statistically significant correlations between academic success and mathematics and the findings of Miñano, Cantero & Castejón (2008) Spain, where through correlational analysis and hierarchical regression, they found that the numerical aptitude of the students correlates positively with the final academic performance in mathematics ($r = .597; p < 0.01$), that is to say, that the numerical reasoning, the ability of mental calculation in the management of mathematical operations (addition, subtraction, multiplication and division), mastery of numbers, speed of mathematical calculation and how to apply numerical operations to problems, favors student performance in the area of math and therefore also their academic success in general.

When comparing the sources between the two instances, we observed that there was an increase in the knowledge of early mathematics. Mathematical skills followed an appropriate course of development and reached a level that may be considered acceptable for the degree of transition. In this respect, it can be said that most of the mathematical skills showed progress throughout the school year, some more substantial than others. The skills that showed the greatest improvement were informal numeration and informal numeric comparison, skills that are basic for the development of formal thinking (Fernández, Gutiérrez, Gómez, Jaramillo & Orozco, 2004).

The progressive development of mathematical thinking is fundamental because it allows us to isolate, analyze, interpret and transmit information through algorithms, which are the methods used to solve a problem within the mathematical process. However, it is paradoxical - in that within the variety of applications, and its predictive character in relation to academic success, mathematics does not generate models of problem solving from mathematical language, which unlike verbal language, requires many grammatical elements to convey a message in a suitable way; mathematics transmit an enormous amount of information with few elements, hence the richness of its application.

The findings of this research have important educational implications, taking into account the centrality of mathematical thinking in academic performance and daily life. It could be said that from the pedagogical point of view, it is necessary for educators to project mathematics in their daily class activities as a fundamental subject, so as to enable positive habits and attitudes in the students’ development, as well as instill the ability to formulate rational conjectures and to assume challenges based on the discovery and in didactic situations, that allow the student to contextualize the contents as tools to be used in everyday life situations, thus the intervention of the educator will enable to students to move on to analyze and interpret mathematics.
References


Existential Anxiety and Free Time Activities in University Students

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Abstract

This correlational study intends to describe the symptoms of existential anxiety and its relation to freetime activities in a sampling of 100 university students in a city located on the Caribbean coast of Colombia. A method to measure existential anxiety was used and nine categories were related with the free time variable. The results of the study indicate that an average of 47% of the university students polled, presented
varied, high and severe levels of anxiety symptomatology, when confronting existential situations related to freedom, existential isolation, death and lack of vital sense. Significant, statistical and meaningful relationships were observed between the psychological symptomatology and great intellectual ability and need of sleeping; between low assertive symptomatology and reading; between severe assertiveness and exercise; and between the severely physical symptomatology and exercise.

**Key words:** Symptomology, Anxiety, Free time activities, Basic sense of existence.

1. **Introduction**

Existential anxiety is defined as an interlaced apprehension by a threat to some human value that is considered essential for human existence (May, 2000). Hence, anxiety is originated from the process of valuing personal endeavors, which may be considered vital and threatened, thus resulting in emerging anxiety as a response (De Castro & García, 2011). Anxiety can be manifested by five different types of symptoms: physiological (hyper-sweating, gastric pinches, palpitations, shortness of breath, dry mouth and tremors), intellectual (valuation and perception of a fact or situation based on the state of tension that is experienced, generalization of negative expectations, false interpretations of reality and false judgments, rumination of absolutist thoughts and non-perception of the positive or the concentration in unfavorable contingencies), the assertiveness individuals expressed in the patterns of interaction (not knowing how to start or end a conversation, how to present oneself and what to say in front of others), psychological-emotional (nervousness, restlessness, feelings of overwhelm, insecurity, fear, fear of loss of control, decreased attention, loss of vital energy and recurrent negative uncertainties that become evident in verbal language), and finally, behavioral symptoms which are observed directly in the actions (hyper-vigilance, difficulty performing simple tasks, motor restlessness, confusion, inability to concentrate and not knowing what to do, think or say) (Rojas, 2000). All these symptoms that shape the anxiety experience can be confronted in a constructive or destructive way, and this will depend on how each human being integrates each of these experiences into the totality of their experience (May, 2000).
Anxiety has high prevalence rates in the world population. The European study on the Epidemiology of Mental Disorders (ESEMED) indicated that 13.6% of the population aged 18 or over has experienced an anxiety disorder (Alonso et al., 2004). Research on mental disorders in Latin America and the Caribbean, found that anxiety disorders scored high rates of prevalence in the population (Kohn et al., 2005); These results are consistent with studies carried out in Colombia with university students (Conde, Orozco, Báez & Dallos, 2009) and also related to the high prevalence rates of anxiety found in the Latin American population in general (Kohn et al., 2005). On the other hand, studies carried out in the Colombian Atlantic coast revealed that 83% of university students seek university psychological services for reasons of anxiety (Contreras, Caraballo, Palacio & Pérez, 2008). A 19.3% anxiety prevalence rate was found in the general Colombian, according to the Ministry of Social Protection (2003).

Chauhan, Shah, Chauhan & Chaudhary (2014) in their cross-sectional study on stress and anxiety in a sample of university students from a city in India found that, to relieve stress and anxiety, 34% carried out recreational activities and invested time in their free time to lower their anxiety levels. While it is true that anxiety in college students has not received as much attention compared to anxiety and work stress (Agolla & Ongori, 2009), and that only a few studies have been done on perceptions of stress and anxiety and strategies or methods used by university students in coping with anxiety (Sami et al., 2011; Xian & Wang, 2000; Vaz, Mbajiorgu & Acuda, 1998), it is also true that, in recent years, the number of leading research interests studying students free time and their effects and impacts on their social, educational and emotional development has led researchers to clarify where students spend their time when they finish their academic days (Jordan & Nettles, 2000). Another research has found that free time outside of school hours can be both enriching as well as detrimental to the individual's life (Coley, Morris & Hernández, 2004).

Another research demonstrates that coping with anxiety plays a central role in the individual's adaptation and in the way he or she deals with events that involve stress, according to Sani et al. (2012), in their study on the prevalence of stress in university students in the Kingdom of Saudi Arabia, it was found that stress is directly associated with anxiety. Al-Naggar, Al-Naggar, Alshagga & Rampal (2011) indicate how the coping strategies in relation to the situations and/or anxious experiences, the specific psychological and behavioral efforts that individuals apply to dominate, tolerate and reduce the impact of events and/or anxious experiences, may favor the adaptation to coping with the experience of stress and anxiety. A study of the coping strategies that students exhibit in the face of anxious and/or stressful events, carried out by Shaikh et al. (2004) at a medical school in Pakistan, reveals how sports, music, sleep, and complete isolation, are coping strategies that students deploy or put into place to cope with stress and anxiety. Another study with university students at a university in Malaysia (Sami et al., 2011) and others such as Redhwan, Sami, Karim, Chan & Zaleha (2009), found that coping strategies most commonly adopted by university students were: jogging, watch cartoons or comedies, doing meditation including yoga, tai chi, and listening to soft music.

In relation to anxiety and its assertive symptoms, as manifested directly from the interaction patterns or modes of interpersonal relationships described by Rojas (2000), Arrieta, Díaz & González (2014); in their bivariate analysis and their nominal
logistic regression model between the anxiety symptomatology and its various associated factors, in was shown that those students who reduced their opportunities for satisfactory social interaction with their peers and relatives presented higher anxiety symptoms (77.7%). A similar finding was found in the study by Feldman et al. (2008), which conducted a hierarchical multiple regression analysis, to assess the relationship between academic performance, psychosocial and health variables in a sample of 321 students from Venezuela, finding that the highest intensity of stress and anxiety occurs in those students, and which also identifies less social support - understood as the opportunity to share common interests with people close to you. It was also found that those students who had a better academic performance reported greater intensity of stress and anxiety and less opportunities to share common interests among their peers and relatives (Feldman et al., 2008). The preceding demonstrate that there is a relationship between free time activities involving interpersonal relationships and anxiety (assertive symptoms); according to the aforementioned authors, a reduction of university students' participation in activities involving cooperative work, mutually beneficial activities, affection and social support can make the student vulnerable to anxiety and / or which require greater effort to overcome, while affecting their mood and social and academic performance (Arrieta, Díaz & González, 2014; Feldman et al., 2008). In other words the interpersonal exchanges facilitate resources for coping with stressful and anxious situations (Madariaga & Lozano, 2015).

Other findings have revealed that 42% of students who share with their friends and family, mainly with their parents and do recreational activities and invest time in their hobbies, such as listening to music, etc., do so as a front in coping with stress and anxiety, (Sani et al., 2012; Sreeramareddy et al., 2007; Al-Dubai, Al-Naggar, Alshagga & Rampal, 2011), as well as others in their free time who to turn to reading as a an alternative to not be bored, and that according to Caballero & García-Lagos (2010), research carried out on university students, it was considered that it helps them to improve their social skills; to work towards achieving their goals despite obstacles that may arise; to reflect and learn from the experiences of others; to be more empathetic; and to give advice at the opportune time. This study also indicates that students who read regularly show more attention to feelings and have a tendency to better regulate their emotions, especially those students who are avid readers of self-help books.

Other authors confirm the benefits that reading generates in people's psychological well-being (Martínez & Sierra, 2010), such as the student who reads improves his-her social skills, tends to be courteous, learns to listen, tones his-her own feelings and emotions and those stirred by the text, improves the self-concept, self-confidence and gradually decreases social isolation and shyness (Briz, 2002), which in Mendoza's words (2005), could be explained - assuming that all text is a semiotic encounter that seeks to change a behavior and that goes beyond communicating a content –as something that incites the reader to action, thus regulating their behavior, and which converts reading into a creative tool that helps students cope with stress in their lives (Pardeck, 1994). In other words, those students who spend their free time reading and derive from it all the benefits referred hereto, may present better constructive ways of coping with anxiety due to the psychological well-being benefits that reading generates in students (Martínez & Sierra, 2010). The results of the previous studies show that use of free time as healthy behavior, allows for
constructive neutralization and confrontation of stressful situations (Lemp-Paredes & Behn-Theune, 2008), since university students who manage their free time, present behavioral health styles, beliefs, knowledge, habits and actions to maintain, restore or improve their overall health (Arrivallaga, Salazar & Correa, 2003).

Surfing the Internet, reading, cooking, and using audiovisual media, are the preferred activities of Spanish university students (Fernández, 2005), while Chilean university students prefer to watch TV, listen to music, perform household activities, visit friends and sleep (Lemp-Paredes & Behn-Theune, 2008). With respect to sleep, Merino & Hidalgo (2010) found that anxiety and depression are one of the main causes of excessive sleep, an aspect confirmed by the American Anxiety and Depression Association (ADAA, n.d) when referring to stress and anxiety, which can cause or exacerbate prolonged sleep (hypersomnia) or deprivation (insomnia); this may refer to the anxiety experience which brings with it, frequent agitation, causing a state of loss in vital energy. Sleeping is one of the activities that students refer to within their preferences of things to do in their free time (Lemp-Paredes & Behn-Theune, 2008). This preference can be understood in relation to the experience of anxiety, as a way of relating and which university students find to impede, as De Castro & García (2011) would say, their experience of anxiety and to confront the uneasiness it generates. As for free time activities such as sports, it has been found that those who exercise in their free time have lower levels of anxiety (Márquez, Jerome, McAuley, Snook & Canaklisiva, 2002), and others have even stated that (Gutiérrez, Moreno & Sicilia, 1999) participating in sports as a compliment can prevent mental illness (Feingold, 2002), improve mood, serve as a stress management technique, increase self-esteem and reduce the physical and psychological symptoms of anxiety (Akandere & Tekin, 2004). Physical activities and sports such as basketball, tennis, weightlifting, swimming, personal defense and paddle ball cause positive effects on physical, mental and quality of life (Akandere & Tekin, 2004) aspects. On the other hand, other Research refers to the fact that people who spend their free time in sports are more sociable, less withdrawn and more extroverted in their relationships with others, (Arai & Hisamichi, 1998; Bakker, Whiting & Van Der Drug, In this paper, Rhodes, Courneya & Bobick, 2001, Rhodes, Courneya & Jones, 2005, Rhodes & Courtesy, Smith, 2006), an aspect which could be explained by the findings of Rhodes & Smith (2006) who argues that people who play sports in teams - such as football, rugby, basketball, among others, are more extroverted than those who practice individual sports such as athletics, swimming or golf, the research aims to shed knowledge on the prevalence of anxiety in university students from the existential humanist approach by taking into account that few studies on this variable have been conducted from this perspective, nor under the framework of quantitative research.

2. Methodology

Type of Research and Design

Cross-correlation non-experimental study with the purpose of measuring the degree of relationships which exist between two or more variables (Hernández,
Fernández & Baptista, 2010), measuring the degree of relationship between existential anxiety and free time activities.

**Sampling and Population**

Colombian University students between 18 and 28 years of age. A total of 100 university students selected during a random survey.

**Techniques and Instruments**

For the measurement of existential anxiety, the inventory of existential anxiety established by De la Ossa, De Castro & Noreña (2014), which has two dimensions: symptoms (Rojas, 2006) and ways of coping (May, 2000) were applied. To address the objectives of this study, we used only the anxiety symptoms variable.

In order to build on the categories of the variable ‘free time,’ an open question was given to the students, who had to identify in order of importance, which were the activities they performed as free time activities. The analysis included only those activities that they carried out in their free time and considered of great importance. Based on this information, nine (9) categories were constructed for the analysis: interpersonal contact activities (sharing time with family, friends and significant others), activities with electronic devices, watching TV, studying, reading, sleeping, listening to music, exercising and participation in artistic activities.

**3. Results**

To add validity to the results obtained in this study, we provide the results of the analyzed data to which the existential anxiety instrument was applied: content validity, reliability analysis and construct validity; and then, the results that give answer to each one of the objectives raised in this study are shown. In order to verify the validity of the existential anxiety instrument, the instrument was validated by judges (n = 11), obtaining a kappa coefficient of Fleiss equal to 0.851, which indicates according to the interpretation of the coefficient, an agreement between evaluators, almost perfect, since it is located between the values 0.81 - 0.99 (Viera & Garrett, 2005).

In order to verify the reliability of the instrument, a consistency reliability analysis was performed, obtaining adequate values of the Chronbach alpha coefficient for the symptom dimension in each of the existential situations (see table 1); First situation (S1): decision making, second situation (S2): existential isolation, third situation (S3): death and fourth situation (S4): lack of vital meaning (see table 1), taking into account that the minimum value acceptable for the Chronbach alpha coefficient is $\alpha > 0.70$ (Campo-Arias & Oviedo, 2005).

*Table 1. Chronbach alpha coefficients for group symptoms*
In order to demonstrate the construct validity of the applied instrument, an exploratory factor analysis was implemented using the principal components extraction method with a promax rotation, finding the following KMO results = 0.926 and testing Bartlett sphericity with a chi-square = 3945.2 and p = 0.00 which makes the interpretation of the resulting factor solution relevant. The factorial arrangement yielded a large factor composed of 28 items, using the Stevens criterion, taking the sample size as the reference, the critical value = 0.52 (see Table 2).

Table 2. Factor arrangement according to Steven’s criterion

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>FACTOR I</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2. I’m afraid of losing control.</td>
<td>.644</td>
</tr>
<tr>
<td>B2. I feel an emptiness in my stomach.</td>
<td>.564</td>
</tr>
<tr>
<td>C2. I feel everything I do, will go wrong.</td>
<td>.807</td>
</tr>
<tr>
<td>D2. I feel useless in any situation.</td>
<td>.756</td>
</tr>
<tr>
<td>E2. I feel pressure in my chest.</td>
<td>.631</td>
</tr>
<tr>
<td>F2. I feel pressure in my head.</td>
<td>.592</td>
</tr>
<tr>
<td>G2. I feel dizziness when I walk.</td>
<td>.633</td>
</tr>
<tr>
<td>H2. I freeze and don’t know what to do.</td>
<td>.678</td>
</tr>
<tr>
<td>J2. I have difficulties carrying out simple things (bathing, eating, opening the door).</td>
<td>.464</td>
</tr>
<tr>
<td>K2. I only think about negative aspects.</td>
<td>.729</td>
</tr>
<tr>
<td>L2. Experience a stiff back.</td>
<td>.684</td>
</tr>
<tr>
<td>M2. I have no desire to do anything.</td>
<td>.691</td>
</tr>
<tr>
<td>N2. I have difficulty concentrating.</td>
<td>.727</td>
</tr>
<tr>
<td>O2. I have difficulty addressing other people.</td>
<td>.588</td>
</tr>
<tr>
<td>P2. I avoid being with other people.</td>
<td>.712</td>
</tr>
<tr>
<td>Q2. With great frequency, I feel like running away (escape).</td>
<td>.780</td>
</tr>
<tr>
<td>R2. I feel restless, and can’t stop moving around.</td>
<td>.672</td>
</tr>
<tr>
<td>S2. I find it difficult to think positively.</td>
<td>.770</td>
</tr>
<tr>
<td>T2. I experience an unpleasant sensation in my throat.</td>
<td>.718</td>
</tr>
<tr>
<td>U2. I feel nauseous.</td>
<td>.626</td>
</tr>
<tr>
<td>V2. I experience a constant uneasiness.</td>
<td>.716</td>
</tr>
</tbody>
</table>
The following demographic data of the sample population studied are shown with the respective responsive objectives of the study. The sample is made up of 100 university students from a Colombian city in the Caribbean, with an average age of 22, a minimum age of 18 and a maximum of 28 with a standard deviation of 2.3 years. The majority of university students in the sample are women with 88%. 93% of the university students evaluated are single and 60% are in stratum two and three, with a proportion of 27% and 33% respectively.

To address the first objective of the study, we describe the symptomatology of the experience of anxiety before the basic assumptions of its existence in a university of a Colombian city in the Caribbean; identifying the percentages of students who present physiological, psychological (emotional), assertive, behavioral and intellectual symptoms to each of the existential situations. This symptomatology is presented in terms of absence, low symptomatology, moderate and severe symptomatology.

Concerning symptoms of anxiety before decision making, at least 45% of university students have been identified as presenting psychological, assertive, physiological, behavioral and intellectual symptomatology at a high and severe level. On average, 23% had moderate symptoms and 25% had lower symptoms of anxiety. However, in lower percentages between 1% and 12% of university students who were faced with a situation that requires from them to make decisions, anxiety symptoms were not present. The statistical data for this conclusion are presented below in figure 1.

![Figure 1. Anxiety Symptoms: Decision making situation](image)

Source: Research Results

With symptoms of anxiety in the situation of existential isolation, at least...
42% of university students have been identified with psychological, assertive, physical, behavioral and intellectual symptomatology at high and severe levels; on average, 27% had moderate symptoms, 13% presented low symptoms, and 17% of university students do not present anxious symptomatology when they realize that what they think, do, and feel only depends on them. The results of the analysis category is presented in figure 2.

**Figure 2. Anxiety symptoms: existential isolation situation**

Source: Research Results

Regarding the symptoms of anxiety before a death situation, at least 47% of university students showed psychological, assertive, physical, behavioral and intellectual symptomatology at high and severe levels. On average, 24% had moderate symptoms, 23% presented low symptoms; and 5% of university students do not present anxious symptoms when they realize that what they think, do, and feel depends only on them. It is worth noting that 12% of the university students in the sample do not present anxiety symptoms of an assertive type when they are in an existential isolation situation (see figure 3).

**Figure 3. Anxiety symptoms: death situation**

Source: Research Results

In the absence of vital meaning, 41% of university students have been identified as presenting psychological, assertive, physical, behavioral and intellectual symptomatology at a high and severe level; on average 19% have moderate symptoms, 11% have low symptoms when they do not find any plans to follow, something or someone that motivates them to continue. It has been noted that between 16% and 36% of university students do not present symptoms of anxiety in the case of the
situation lacking a vital meaning. Figure 4 presents the results of this category of analysis.

**Figure 4. Symptoms of anxiety: lack of a vital meaning**

![Figure 4](image)

Source: Research Results

In order to respond to the second objective of the study, contingency tables were constructed comparing the categories of free time activities with the symptoms of anxiety. In order to observe the relationship between anxiety symptoms and free time activities, the values of the typified residuals (V > 1.96 and 2.58) were taken into account for 95% and 99% confidence levels respectively. The markers indicate whether the relationship is direct or inverse. The relationship between severe psychological and intellectual symptoms and sleep V = 4.1 (see Tables 3 and 7). Between low assertive symptomatology and reading V = 2.9, and between severe assertive symptomatology and exercise V = 2.0 (see table 4). Between severe physical symptoms and exercise V = 2.0 (see table 5). And between high intellectual symptomatology and study V = 2.3 (see table 7).

**Table 3. Contingency Table Scoring on Psychological Symptoms * Activities - Free Time (9)**

<table>
<thead>
<tr>
<th>Interpersonal Activities/Contact</th>
<th>Activities w/ Electronic Devices</th>
<th>Watch Television</th>
<th>Study</th>
<th>Read</th>
<th>Sleep</th>
<th>Listen to Music</th>
<th>Exercise</th>
<th>Artistic Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Symptoms</td>
<td>Low Corrected Residuals</td>
<td>-0.1</td>
<td>0.5</td>
<td>0.7</td>
<td>-1.6</td>
<td>0.6</td>
<td>-1.1</td>
<td>-0.3</td>
</tr>
<tr>
<td></td>
<td>High Corrected Residuals</td>
<td>-0.2</td>
<td>0.6</td>
<td>-0.1</td>
<td>1.1</td>
<td>0</td>
<td>-0.9</td>
<td>-0.1</td>
</tr>
<tr>
<td></td>
<td>Severe Corrected Residuals</td>
<td>-0.8</td>
<td>-0.3</td>
<td>-0.8</td>
<td>0.8</td>
<td>-0.9</td>
<td>4.1</td>
<td>-0.5</td>
</tr>
</tbody>
</table>

Source: Research Results

**Table 4. Contingency Table Score on Assertive Symptoms * Activities - Free Time (9)**

<table>
<thead>
<tr>
<th>Interpersonal Activities/Contact</th>
<th>Activities w/ Electronic Devices</th>
<th>Watch Television</th>
<th>Study</th>
<th>Read</th>
<th>Sleep</th>
<th>Listen to Music</th>
<th>Exercise</th>
<th>Artistic Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Corrected Residuals</td>
<td>0.2</td>
<td>0.5</td>
<td>0.3</td>
<td>-0.7</td>
<td>2.9</td>
<td>-1.7</td>
<td>-1</td>
<td>-0.7</td>
</tr>
<tr>
<td>High Corrected Residuals</td>
<td>0.1</td>
<td>0.5</td>
<td>0.7</td>
<td>-0.3</td>
<td>0.3</td>
<td>1.9</td>
<td>-1.1</td>
<td>-1.7</td>
</tr>
<tr>
<td>Severe Corrected Residuals</td>
<td>-0.8</td>
<td>-0.3</td>
<td>-0.8</td>
<td>0.7</td>
<td>0.5</td>
<td>-0.5</td>
<td>0.5</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Research Results

**Table 5. Contingency Table Scores on Physical Symptoms * Activities – Free time (9)**

297
Source: Research Results

Table 6. Contingency Table Scores on Behavioral Symptoms * Activities – Free time (9)

<table>
<thead>
<tr>
<th>Physical Symptoms Scoring</th>
<th>Interpersonal Activities / Contact</th>
<th>Activities w/ Electronic Devices</th>
<th>Watch Television</th>
<th>Study</th>
<th>Read</th>
<th>Sleep</th>
<th>Listen to Music</th>
<th>Exercise</th>
<th>Artistic Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Corrected Residuals</td>
<td>-0.5</td>
<td>0.5</td>
<td>0.2</td>
<td>-0.3</td>
<td>-0.3</td>
<td>-0.3</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>High</td>
<td>Corrected Residuals</td>
<td>0.3</td>
<td>0.6</td>
<td>-0.6</td>
<td>1.1</td>
<td>0.5</td>
<td>-0.9</td>
<td>-0.1</td>
<td>-1.7</td>
</tr>
<tr>
<td>Severe</td>
<td>Corrected Residuals</td>
<td>-0.8</td>
<td>-0.3</td>
<td>-0.8</td>
<td>0.8</td>
<td>0.6</td>
<td>-0.5</td>
<td>-0.5</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Research Results

Table 7. Contingency Table Scores on Intellectuals Symptoms * Activities – Free time (9)

<table>
<thead>
<tr>
<th>Intellectual Symptoms Scoring</th>
<th>Interpersonal Activities / Contact</th>
<th>Activities w/ Electronic Devices</th>
<th>Watch Television</th>
<th>Study</th>
<th>Read</th>
<th>Sleep</th>
<th>Listen to Music</th>
<th>Exercise</th>
<th>Artistic Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Corrected Residuals</td>
<td>-1.2</td>
<td>0.5</td>
<td>1.8</td>
<td>-1</td>
<td>0.1</td>
<td>-1.1</td>
<td>-0.5</td>
<td>0</td>
</tr>
<tr>
<td>High</td>
<td>Corrected Residuals</td>
<td>0.3</td>
<td>0.6</td>
<td>-0.6</td>
<td>2.3</td>
<td>0.5</td>
<td>-0.9</td>
<td>-0.9</td>
<td>-0.7</td>
</tr>
<tr>
<td>Severe</td>
<td>Corrected Residuals</td>
<td>-0.8</td>
<td>-0.3</td>
<td>0.8</td>
<td>-0.8</td>
<td>-0.9</td>
<td>4.1</td>
<td>-0.5</td>
<td>-0.4</td>
</tr>
</tbody>
</table>

Source: Research Results

4. Discussion And Conclusions

On average, 47% of the university students in the sample present varying anxiety symptoms of high intensity (P50) and severe (P75) when faced with decision making, when they realize that what they think, do and feel depends only on them, when something important to their lives is in danger, and when they find no plan to follow, something or someone to motivate them to continue. That is, the symptomatology of anxiety in the university students of the sample, as Yalom (2010) indicates, before becoming aware of the basic assumptions of existence such as freedom, existential isolation, death and the lack of a vital meaning. This is closely related to the results of other studies carried out with similar samples, where it is also evident that the symptoms of university students in the face of existential situations are varied (De La Ossa, Navarro & De Castro, 2015), and although the intensity of symptoms are different in the two samples, the truth is that there is symptomatology
of all types in both instances with symptomatology at the physical, assertive, intellectual, behavioral and psychological level, which shows that the symptomatology of anxiety as stated by Rojas (2006) is varied and in each subject relatively different symptoms may appear.

The varied symptomatology of anxiety present in college students indicates that existential anxiety must be approached as an integrative experience rather than as a sum of diverse symptoms. Existential anxiety leads college students to experience intense fear of losing control, headache, difficulty concentrating, and a tendency to annoy when joking and to continuously moves from one place to another. This varied symptomatology can be due to the responsibility to the decision making (May, 2000); faced by the fact of living without a purpose, which justifies existence, thus, building on their perception of a possibility of failure along with the assumed responsibility of what they do, think and feel (Yalom, 2010).

The mixed symptomatology of anxiety in high, or that of a severe intensity, is related to the results of a study by Arrieta, Díaz & González (2014) and Contreras, Caballero, Palacio & Pérez (2008), which focuses on the high prevalence of anxiety in the majority of the students of several universities in the Colombian, Caribbean region. These findings are closely similar in proportion to the levels and frequency with which anxiety, according to Kohn et al. (2005), prevails in Latin America and the Caribbean region. As for the possible relationship between anxiety symptoms and free time activities, a direct correlation was observed between severe psychological and intellectual symptoms and sleep, that is to say, university students were more likely to present constant restlessness, fear of losing control and difficulties to concentrate and to think positively when faced with situations such as decision-making, the possibilities of failure, existential isolation and lack of vital meaning are the ones that sleep the most, or sleep in their free time. Results similar to those of Merino and Hidalgo (2010), where it was found that anxiety and depression are one of the main causes of excessive sleep, an aspect that confirms the ADAA (n.d.) when it refers that stress and anxiety can cause or exacerbate prolonged sleep (hypersomnia) or deprivation (insomnia), a conclusion that can be referred to as the experience of anxiety which leads to frequent agitation, and which in turn induces a state of loss of vital energy, which leads to passivity and apathy when its maximum expression of chronicity is reached.

The aforementioned (the act of sleep in their free time) can also be understood as the way students deal with the anxiety. It is the way the person responds to interaction in a relationship in the face of frequent agitation and is used, as De Castro & García (2011) stated, to avoid feeling, contact with uneasiness, fear of losing control, possibilities of failure, existential isolation and lack of vital meaning. The individual may try to avoid a conscious, realistic confrontation with the psychological and intellectual symptomatology that Rojas (2000) points out and will use his will power to try to block out and prevent contact with his-her anxious living experience. A self-induced, passive act of sleeping, which serves as a secondary gain in avoidance of the totality of the anxiogenic experience and with defensive attitude that subtly masks the way in which university students intentionally participate, to a lesser or greater degree, in order to avoid confronting their responsibility and having to deal with the whole anxiety experience. The same is true in relation to low assertive symptomatology and reading, where we find that those students who spend their free
time reading, are those who do not have anxiety when addressing or coming into contact with other people.

They do not hesitate to respond to what others are asking and they do not complain if someone plays a joke on them and manage to address others properly; aspects that go hand in hand with those found by Martinez & Sierra (2010), Briz (2000), Mendoza (2005) and Pardeck (1994), where it was shown that students who read the most, improve their social skills, are more courteous, learn to listen, qualify their feelings and emotions, because when they read. And in so doing they come in contact with the desires, intentions and emotions that the text offers them as they read: giving them increased self-knowledge, self-concept, self-confidence, and gradually decreases social isolation and shyness (Briz, 2002). This would explain the reasons why those university students who spend their free time reading, enjoy more of their daily activities and are therefore more likely to face their anxiety constructively, because in the act of reading, (choosing to read at will, as their free time activity) they are in contact with themselves, with their internal world, with their desires, emotions and feelings instead of avoiding them.

Another correlation was found between severe physical and assertive symptoms and exercise. We have found that university students who spend their free time practicing some sport are more likely to have difficulties in addressing other people, may avoid being with others, have difficulty responding to what other people ask, feel stomach pain, experience head and chest tightness, experience instability when walking, back stiffness, an unpleasant sensation in the throat, nausea, heartburn and headaches. Differing from what is found in the scientific research analyzing anxiety in athletes, and in contrast to the findings that are revealed in this research paper, those people who during their free time practice sports have lower levels of anxiety (Márquez, Jerome, McAuley, Snook & Canaklisiva, 2002); better self-concept (Gutierrez, Moreno & Sicilia, 1999), better mood, better self-esteem, and less physical and psychological anxiety symptoms (Akandere & Tekin, 2004); are more sociable, less withdrawn and more extroverted in their relationships with others (Arai & Hisamichi, 1998; Bakker, Whiting & Van Der Drug, 1993; Courneya, Bobick & Schinke, 1999; Eysenck, Nias & Cox, 1982; Marrero, 1989; Rhodes, Courneya & Bobick, 2001; Rhodes, Courneya & Jones, 2005; Rhodes & Smith, 2006). Faced with the findings in this research paper, it has been proposed to expand the sample of university students, who in their free time are engaged in sports or plan to practice some sport, this to re-analyze the possible correlation between anxiety and how students face and / or relate to the totality of the anxiogenic experience.

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Quantum HRD, Anyone? A Postmodern Approach to HRD in Today’s Uncertain World
Abstract

In order for Human Resource Development (HRD) to face challenges in the volatile, uncertain, complex and ambiguous (VUCA) world, acceptance and perception of multiple-realities, worldviews and paradigm shifts are necessary, especially in being a strategic partner and helping organizations drive to greatness. Quantum mechanics, a multi-paradigm approach and a postmodern epistemology are brought together to enable deep understanding of the problem and situation. This enables the HRD professional grasp the plurality of answers and multiplicity of theories, constructs, missions, beliefs, values and ideals that exist within HRD. This article, written in a narrative style, serves to inform as well as allow interpretation of context, highlighting how quantum entanglement and quantum skills can be applied to a variety of HRD interventions to create the quantum experience and desired outcomes of the expected interventions. Quantum HRD, anyone?

Keyword: Quantum mechanics, Human resource development, Quantum HRD, Quantum skills

1. Introduction

We begin by stating that what is being written comes from our worldview, as how the reader perceives the article depends on his/her worldview. As much as we want to inform with this article, we could also be transmitting our bias, even though
we constantly remind ourselves to be aware and mindful of the situation. Language and representations are also not neutral (Barad, 2003).

Let us review the thought experiment devised by Erwin Shrödinger. According to Trimmer (1980), Shrödinger proposed,

One can even set up quite ridiculous cases. A cat is penned up in a steel chamber, along with the following diabolical device (which must be secured against direct interference by the cat): in a Geiger counter there is a tiny bit of radioactive substance, so small that perhaps in the course of one hour one of the atoms decays, but also, with equal probability, perhaps none; if it happens, the counter tube discharges and through a relay releases a hammer which shatters a small flask of hydrocyanic acid. If one has left this entire system to itself for an hour, one would say that the cat still lives if meanwhile no atom has decayed. The first atomic decay would have poisoned it. The $\psi$-function of the entire system would express this by having in it the living and the dead cat (pardon the expression) mixed or smeared out in equal parts. (p. 328)

When we open the chamber (supposedly to observe) at the end of the hour, we will discover either a living or a dead cat. We can also say that we will discover a determinate state once we open the chamber. However, without opening the chamber, we cannot be sure if the cat is living or dead. To say the cat is either living or dead is inaccurate as there would be a determinate state. The alternative is to admit that the cat is living and dead at the same time, acknowledging indeterminacy and existence of multiple (more than one) realities. The alternative also embraces ambiguity.

The case of Shrödinger’s cat (Trimmer, 1980) argued that multiple realities could co-exist until an action (like deciding or measuring) is taken. How useful is the Shrödinger’s cat case in reality? We live in a world that is volatile, uncertain, complex and ambiguous (VUCA), as defined by May and May (2014). Mak, Kyaw, Yingchoho, Miushad, and Kaewpijit (in press) wrote in the conclusion of their work, that “Learning and development is not only a process activity, but a mindset paradigm that has to evolve and adapt” (p. 12). How can we get comfortable with volatility, uncertainty, complexity and ambiguity and turn it into vision, understanding, clarity and agility (May & May, 2014)? The case of Shrödinger’s cat could point a way.

2. Method
This article is a combination of literature review on quantum mechanics, epistemologies and HRD interventions, and a multi-paradigm approach to theory building. Our review included mainly articles published in peer-reviewed journals and books accessed through the university’s library, portal and online resources. Our review also included books and articles published in the mid-1800s CE and early 1900s CE. Keywords used in the article search included quantum theory, quantum mechanics, quantum organization, quantum skills, epistemology, double-slit experiment, quantum entanglement and storytelling. All reviewed material came mainly from philosophy, philosophy of science, quantum theory and organizational development where the knowledge is widely researched and published. Several sources are heavily cited in this article as discussions are relevant to our context.

### 3. What we care about in HRD

Human resource development (HRD) has come quite a distance, as shown in Figure 1.

![Figure 1. Timeline showing select development of perspectives in HRD. Adapted from Hurt (2010).](image)

Looking at Figure 1, it would seem appropriate to say researchers have moved towards *idealism* of the epistemological continuum described by Potipiron, Sritanyarat and McLean (2010, Figure 2, p. 14-15), embracing and encouraging phenomenology and idealism. At this end is where we believe we can make use of the quantum lens to lend a hand in making sense of reality. It seems appropriate (and perhaps timely) to review keys questions from the past to catch a glimpse of the future or to simply understand if anything has changed. Holton (2003) asked to consider the following possibilities,

(a) What approaches to HRD practice will enable organizations to prosper in the decades after 2010?
(b) What fundamental shifts will need to occur for HRD to be a strategic partner in the highly competitive global economy?
(c) What paradigms enable HRD to drive good organizations to greatness? (p. 4)
In today’s uncertain and complex world (quantum age), we wanted to explore:

(d) How is Quantum Mechanics related to HRD?
(e) How can Quantum Mechanics be applied to HRD?

The purpose of this article is not to provide an absolute answer to each of the above research questions. We take the stance of celebrating the plurality of answers, and like McLean (2000), affirm “the importance of ambiguity and recognizing the multiplicity of theories, constructs, missions, beliefs, values, and ideals that exist within HRD” (p. 39). The significance of this research is to propose a lens through which answers could be derived. This research also lends support to pluralism in HRD, as suggested by Storberg-Walker (2015),

The purpose of this brief editor’s note is to suggest a foundational principle of Human Resource Development Review (HRDR) as it continues to expand its impact across the globe. The principle is pluralism, and I believe this principle has the potential to guide editorial as well as researcher decisions as HRDR moves into the next phase of its development (p. 3).

4. Literature Review

4.1 Epistemology

Epistemology concerns the theory of knowledge; Ferrier (1854) wrote,

This division explores and explains the laws both of knowing and of the known . . . laying out the necessary laws, as the laws of all knowing, and all thinking, and the contingent laws as the laws of our knowing and of our thinking. This section of the science is properly termed the EPISTEMOLOGY – the doctrine or theory of knowing, just as ontology is the doctrine or theory of being (λόγος τῆς ἐπιστήμης the science of true knowing). It answers the general question, “What is knowing and the known?” – or more shortly, “What is knowledge?” (p. 45-46).

It is important for researchers to be aware of the assumptions about theories used as knowledge and ways to know continues to change (Grix, 2002); the worldview of the research not only influences how the research is carried out but could also influence the outcome of the research, or be subsumed into the research. In this section, we highlight some of the common epistemologies in research.

Positivism / Modernism. Positivism is a philosophy that claims that affirmative knowledge obtained through experiments and empirical studies of data and information gathered from naturally occurring events and their properties is the only knowledge (Halfpenny & McMylor, 1982).
Post-positivism. Post-positivism emerged to correct and harmonize faults and disapprovals of positivism and can be considered a rectification of positivism (Ryan, 2006). The world is still non-subjective and neutral, and answers can still be found and an acceptance that a plurality of answers exist (Guba and Lincoln, 2005). Such answers can also be approximated, moving away from absoluteness (Hurt, 2010).

Postmodernism. Postmodernism dismisses noble tales or general convention and favors modest chronicles, stories that explain minor activities and local occurrences that are conditionally dependent on environment, tentative and temporal (Klages, 2006).

4.2 Key Concepts of Quantum Mechanics

This section highlights major concepts of quantum physics central to this article. The intent is to introduce concepts in a simple manner; it is not the intent to provide in-depth explanation of the theories.

The Double Slit Experiment and Wave-Particle Duality. According to Jones (2016), physicist Thomas Young conducted the famous double-slit experiment, showing light to behave as a wave in the early 1800’s; Young delivered a lecture describing the interference phenomena in (Young, 1802) prior to this experiment. Figure 2 shows a graphic of Young’s experiment.

Young’s experiment indicated light behaved as waves. Einstein (1905/1965) postulated that light consisted of particles with quantized levels of energy in 1905, explaining the photoelectric effect. The wave-particle duality property of light became central to quantum mechanics. Bach, Pope, Liou, and Batelaan (2013) described and demonstrated Richard Feynman’s 1965 double-slit thought experiment. The Royal Institution (2013) provides a comprehensive description of Feynman’s thought experiment,

(a) A stream of atoms fired through the double-slits behaved as a wave, resulting in bands observed on the screen.

(b) Atoms fired singularly through the double-slits resulted in similar bands on the screen, indicating that single atoms seemed to behave in a wave-like manner.

(c) When a detector was placed at the upper slit to observe the atoms (fired singularly) going through, only two bands were formed on the screen.

(d) When the detector placed at the upper slit was turned off, the atoms (fired singularly) again behaved as a wave, resulting in bands observed on the screen.
Figure 2. Schematic diagram representing authors’ interpretation of Young’s experiment (Young, 1802).

The significance of the wave-particle duality is that light behaves as a wave until it is measured or observed; it is possible for two realities to co-exist until the measurement or observation, when the realities collapse to that of the measurement or observation. Piazza, Lummen, Quiñonez, Murook, Reed, Barwick, and Carbone (2015) has successfully photograph light’s wave-particle duality; EPFL (2015) shows how it was done.

Heisenberg Uncertainty Principle and the Observer Effect. In 1927, Heisenberg (1983) postulated that complementary pairs of physical properties of matter cannot be known (measured) at the same time; the knowledge of one property will diminish the knowledge of the other property. Simply put, we cannot determine the position of a glass marble flying across the room and its speed at the same time; we either know the position (where exactly is the glass marble in the room) or the speed (how fast the glass marble is flying).

An effect often confused with Heisenberg’s uncertainty principle is the observer effect. The observer effect, or sometimes referred to as the Hawthorne effect refers to the act of observing (or measuring) changing the behavior of phenomenon being observed (or measured). Consider the case of an observer of a group intervention. The presence of the observer could have changed the behavior of the group, causing the results to be biased. In other words, the observer is part of the system.

Quantum Entanglement. As Einstein, Podosky and Rosen (1935) concluded that “the wave function does not provide a complete description of the physical reality” (p. 780), Schrödinger (1935) wrote about two systems being entwined once they have interacted,

When two systems, of which we know the states by their respective
representatives, enter into temporary physical interaction due to known forces between them, and when after a time of mutual influence the systems separate again, then they can no longer be described in the same way as before, viz. by endowing each of them with a representative of its own. . . By the interaction the two representatives (or ψ-functions) have become entangled. . . Another way of expressing the peculiar situation is: the best possible knowledge of a whole does not necessarily include the best possible knowledge of all its parts; even though they may be entirely separated, each of them a representative of its own. The lack of knowledge is by no means due to the interaction being insufficiently known – at least not in the way that it could possibly be known more completely – it is due to the interaction itself (p. 555).

The last sentence provokes thinking, especially casted upon Gettier’s (1963) short essay (shown as 錯誤！找不到參照來源。) and the different epistemologies / world-views of others who have responded to Gettier (Epistemology, n.d.).

Figure 3. Euler diagram representing Gettier’s (1963) argument about knowledge.

5. The Quantum Age

5.1 Influence or Quantum Entanglement?

The relationship amongst a few individuals prominent in their respective fields is shown in Figure 4. “In the quantum world, relationship is the key determiner of everything” (Wheatley, 2006, p. 11). “There is a constant weaving of relationships, of energies that merge and change, of momentary ripples that become noticeable within a seamless fabric” (Wheatley, 2006, p. 22). We assume that not many pay attention to the relationship between Carl Gustav Jung and Albert Einstein or the works of those around them. We also assume that not many pay attention to Einstein’s early involvement with philosophy, reading Immanuel Kant at an early age of 16 (Howard, 2005).
An initial interpretation would be that it is coincidence that both fields came to contemplate the same topic. Another interpretation would conclude that indeed there was influence to investigate each other’s field; some would assume the individuals are all curious people. A third interpretation, more aligned to quantum theory, is one where the individuals were entangled in some way and the exchanges brought the sub-conscious to consciousness.

Figure 3. Map of prominent individuals and their contributions.

According to Howard (2004), “Einstein’s philosophy of science is an original synthesis drawing upon many philosophical resources, from neo-Kantianism to Machian empiricism and Duhemian conventionalism” (Section 1, para. 17).

5.2 Quantum Skills

Researchers and scholars have written about applications of quantum theory to organization theory. Fris and Lazaridou (2006) posited that a Newtonian approach leads to management while a Quantum approach is leads to leadership, and pointing out that in the quantum approach, practitioners need to,

(a) Accept the uncertain and unpredictable nature of situations.

(b) Accept multiple ways of completing the task.

(c) Value relationships, individuals and rely on informal networks.

(d) Accept members as co-creative partners.

(e) Realize change can start anywhere and might not yield results.

(f) Focus on wellness. (p. 15-16).
Shelton, McKenna, and Darling (2002) introduced the concepts of quantum thinking and quantum organization in their work. According to Shelton, et al (2002), quantum thinking is the ability to access the right brain’s paradoxical thinking capability to uncover different perspectives and solutions. Shelton, et al (2002) also posits that leaders who use quantum thinking realize that different realities exist for members of an organization and can use different ways to build a cohesive organization. Karakas (2009) described a shift to a new paradigm for organizational development, involving “new sciences (quantum, multiple truths), multiple orientations (triple bottom line focus), diverse (contextual, inclusive), flexible (egalitarian, trusting), uncertain (ambiguous, chaotic), and impartial (holistic, synergistic)” (p. 15).

Quantum skills have also been discussed by researchers (Shelton and Darling, 2003; Olmedo, 2012); a summary is provided in Table I. In particular, Shelton and Darling (2003) explained how quantum physics play in each of the skills listed. Researchers have been able to translate complex quantum theories into practical skills for advancing organizations. Such skills should enhance the practice of HRD as well.

Table I

Quantum skills for Complex Organizations

<table>
<thead>
<tr>
<th>Skill</th>
<th>Practice / Behavior</th>
<th>Skill</th>
<th>Practice / Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantum Seeing</td>
<td>Reality subjective; involve all stakeholders in visioning and planning</td>
<td>Complex Seeing</td>
<td>Reality subjective; multiple paradigms exist</td>
</tr>
<tr>
<td>Quantum Thinking</td>
<td>Think paradoxically; creative energy generated by differences</td>
<td>Complex Thinking</td>
<td>Dialogue; discussion, mastering conflict</td>
</tr>
<tr>
<td>Quantum Feeling</td>
<td>Feel alive; use of appreciative inquiry to focus on positive</td>
<td>Complex Feeling</td>
<td>Focus on positive aspects of situation</td>
</tr>
<tr>
<td>Quantum Knowing</td>
<td>Know intuitively; learning from inside out</td>
<td>Complex Knowing</td>
<td>Correlation through language, symbols and rules</td>
</tr>
<tr>
<td>Quantum Acting</td>
<td>Act responsibly; wholeness (ethics)</td>
<td>Complex Acting</td>
<td>Wholeness; utilitarian</td>
</tr>
<tr>
<td>Quantum Trusting</td>
<td>Trust life; chaos creates higher levels of coherency</td>
<td>Complex Trusting</td>
<td>Creative potential of chaos; flexibility</td>
</tr>
</tbody>
</table>
6. How Might HRD Embrace Quantum Mysticism (Quantum-ism?)

It would seem logical to embrace the quantum / complex skills listed in Table I as an initial step. This section highlights practices that researchers and practitioners may find useful in their work, especially with interpretive epistemologies. While researchers and practitioners need to be cautious of the observer’s effect, that is, the exertion of our worldview in the field affecting the field, Monahan and Fisher (2010) argues that there are benefits of being close to the community, such as understanding if a behavior is staged or not. The researcher and practitioner should constantly self-evaluate to avoid being subsumed into the research or intervention.

6.1 Quantum Interventions

Quantum skills can be applied to a variety of HRD interventions to create the quantum experience. According to Hurt and Callahan (2013), cultural artifacts, such as stories, fables, and fairy tales aid us in understanding and envisioning how complex ideas might influence us personally and organizational work in areas like conflict management, training, organizational development, change, leadership, and many others, could all benefit from this idea of taking something complex and presenting it in a simplified and more accessible manner. Stories help shape the organizational reality and the perceptions of that reality for organization members (Whitener, 2007) and are so effective for teaching in people understand, communicate, and make sense of concepts through the use of tropes, or metaphors (Hamilton, 2003). Metaphor is an important vehicle for making sense of HRD as a field of research, practice, and education (Short, 2001). Inquiring knowledge through conversation, dialogue and discussion allowed us to think, reflect, generate ideas, understand or see the situation as a whole in multi-paradigmatic view. Appreciative Inquiry (AI) is predicated on narrating and reflecting on one’s lived experience, one’s contribution to, and the conditions surrounding that experience that involves small-group dialogue to identify connection points and generatively build shared meaning out of experiences so that action can be taken collectively (Hart, Conklin, & Allen, 2008).

Desired Outcomes of Interventions. In this application, we take a quantum look into outcomes expected of interventions. Consider the following list of desired outcomes:
(a) Focus on building relationships and integration of functional parts of organizations.
(b) Desire certainty, predictability and control (do it right), with high trust.
(c) Functional groups have separate key performance indicators aligned to business goals but desired overall results in line with “whole is greater than sum of its parts” concept.
(d) “Best in class” practices, or one best way through synergy; conflicts to be managed.
(e) Same programs to be applied across the organization, even for different countries and locations; uniformity.
(f) Focus on results achieved through innovation / creativity.

7. Limitations of Study

The main purpose of this article was to connect the body of knowledge from quantum physics to HRD through an exploration and examination of available literature. The first limitation would be the extent of coverage of literature and area of interest being cursory. This article also covered select areas that are relatively easier to assimilate into current practice. Thirdly, this essay being written based on the worldview of the authors; there are other worldviews out there.

8. Moving Forward

We chose to approach this article using a narrative style; we wanted to inform as well as allow for interpretation of the quotes. We have explored literature that suggest a quantum approach to HRD practice for today’s uncertain world. We have also shown that a shift to quantum paradigm and a worldview of multiple-realities co-existing as being necessary to becoming a strategic partner and helping organizations drive to greatness. We have also connected the body of knowledge from quantum mechanics to HRD in this article, showing how interventions could look different.

One answer to each of the research questions from quantum physics is clearly ‘it depends’. Schwandt (2005) suggested that sense-making can reveal multiple socially constructed realities through a connection between cognition and actions. Wheatly (2006) strongly suggested self-awareness and self-knowledge development. Identity, new information and relationships are the three connected components in developing such skills. Knowing oneself, acquiring new information and developing relationships with people encourage us to learn multiple realities embedded in ourselves and others will be one of the outcomes of the quantum approach.

Quantum HRD, anyone?
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Shelton, C. D., McKenna, M. K., & Darling, J. R. (2002). Leading in the age of paradox: optimizing behavior style, job fit and cultural cohesion. Leadership and


Cultural representatives: staff identity at international university branch campuses

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Abstract

International branch campuses (IBCs) are a growing phenomenon in higher education. These overseas outposts of foreign universities transport aspects of the home-campus experience—and the chance to earn a home-campus degree—to satellite locations overseas. There are currently 249 IBCs operating worldwide, with a thriving trend toward parent universities in the U.S., U.K., and Australia opening branch campuses on other continents (Garrett, et al., 2016). These IBCs make a compelling promise to students: the chance to gain an international ‘study abroad’ experience, while still enjoying the comforts of home. Delivering on this promise is a complex undertaking, requiring leaders to transport not just educational offerings from the home campus, but identity features reflective of its image. The campus facilities, grounds and branded materials are examples of this, as are the IBC staff who interact with its students. Whether sourced from the home campus, host country, or internationally, student-facing staff at overseas campuses must perform the challenging role of representing the home institution—and to some extent, its country—to students. This paper highlights the complexities of performing this representation and suggests principles of identity theory that provide a useful lens for exploring this topic.

Keywords: International branch campuses, Cultural representation, Identity theory.
1. Introduction

The field of higher education is undergoing dramatic change. In many countries, public funding has been reduced, and universities are adopting entrepreneurial practices to ensure ongoing financial viability (Lim & Shah, 2017). Globalization has offered one solution in the form of transnational higher education, allowing universities to connect with the expanding market for international education in economically-booming countries such as China and the United Arab Emirates (Garrett, et al., 2016). Recruiting international students to temporarily live overseas is a prominent mechanism for this; however, an emerging trend switches the direction of travel, bringing the ‘foreign’ education to students in their home countries through satellite campuses of larger universities. These institutions are called “international branch campuses,” or “IBCs,” and their number is rapidly increasing.

A growing body of research on international branch campuses has explored this trend and what it means for the future of higher education. Much of this research has charted macro-level patterns in IBC development and transnational education at large—information we briefly summarize in Part 2 of this paper. However, an emerging focus is on the human actors involved in these enterprises. Part 3 of this paper presents some of the richer vein of this research: studies examining students’ motivations for choosing IBCs and the expectations they bring to this experience. In Part 4, we highlight findings from a less-explored area of study: the responsibilities of student-facing staff whose daily actions constitute the foreign university ethos for students. The ways that these staff members orient to their roles in this work is discussed in the final section, with suggested applications from identity theory providing potential insight into the complex personal challenges involved in this undertaking.

2. The rise of international branch campuses

2.1 Defining international branch campuses (IBCs)

International branch campuses are one of several means for universities to export their offerings overseas. Partnership agreements, where foreign and local universities collaborate in joint ventures, are also common. Yet several factors differentiate IBCs as unique. First, they are typically owned and operated by the foreign university, promoting the branch campus as a legitimate extension of its often prestigious international counterpart (Lane, 2011, p. 5). And unlike online education—another transnational education mechanism—IBCs involve study at a
“brick-and-mortar” branch campus in the host country (Shams & Huisman, 2012, p. 2). A third distinguishing feature is that students of IBCs receive degrees at completion that bear the name of the home university (Lane, 2011, p. 5). These characteristics combine to form the unique appeal of the IBC offering: the opportunity to earn a prestigious foreign degree and enjoy an ‘overseas’ experience without leaving one’s home country.

2.2 IBC growth in recent decades

The IBC business model has proven to be an attractive market opportunity for globally-minded universities. In recent decades, there has been a marked increase in the number of these branch campuses. One of the earliest calculations of this trend was in 2002, when the newly-formed Cross-Border Education Research Team identified 18 IBCs in existence and six additional ones in development (C-BERT, 2011). In 2009, just seven years later, this number had grown to 162 (Tierney & Lanford, 2014). The most recent estimate in 2015 identified 249 IBCs in worldwide operation (Garrett, et al., 2016), suggesting that the proliferation of IBCs continues.

International branch campuses are sometimes formed in neighboring or culturally-connected countries, such as the City University of Seattle in Canada and the University of London Institute in Paris (Cross-Border Education Research Team, 2017). However, the rapid rise of IBCs in recent decades has involved more culturally disparate home/host country combinations, with the U.S., U.K. and Australia opening more branch campuses in countries like China and the United Arab Emirates (Garrett, et al., 2016).

2.3 Benefits for home and host countries

In addition to the market opportunity inherent in the IBC enterprise, several additional potential affordances have inspired universities to open branch campuses abroad. Adding a foreign outpost to a university’s portfolio can be a demonstratively global, prestige-generating move (Tayar & Jack, 2013, p. 153). Parent universities can also use their IBC to build international collaborations and conduct cross-country research (Tierney & Lanford, 2015). For host countries, the appeal often lies in capacity-expanding opportunities: meeting a gap in current in-country offerings, internationalizing the academic community, and increasing education levels to build a knowledge-based economy (Wilkins & Huisman, 2012; Lim & Shah, 2017).

3. Attracting and satisfying IBC students

3.1 Drivers of student choice of IBCs
Students choose to study at IBCs for a variety of reasons. In addition to the practical appeal of completing their education close to home, IBCs offer social benefits that make them attractive choices for upwardly mobile students and their families. Chief among these is prestige: the impression that the university is highly regarded by others (Sung & Yang, 2008). In a study of prospective IBC students in the United Arab Emirates, Wilkins and Huisman (2013) found that even without direct experience with a university, high school students socially identified with institutions they viewed as prestigious, demonstrating a desire to associate themselves with the university brand. Ahmad and Buchanan’s (2016) survey of students enrolled in Malaysian IBCs confirmed that institutional reputation and quality are paramount in students’ university selection decisions (p. 663).

The prestige enjoyed by top IBCs is due in part to the image of their country of association. Lane (2011) notes that IBCs are often perceived to be “extensions of their home country” (p. 15), where practices and standards of the home country remain intact. For many students, this oasis of transplanted foreignness holds particular appeal. Howman Wood (2011), an administrator at Texas A&M University in Qatar, stresses the importance of an IBC campus environment “that reflects the fundamental ethos that exists on the main campus,” (Lane & Kinser, 2011, p. 30). Her description of Qatari students taking on the collegiate practices of the Texas “Aggies”—including hand gestures, school-spirit chants, and a copious display of team paraphernalia—demonstrates the positive orientation of IBC students to the home-campus institution: the desire to attach themselves symbolically to the parent university and its U.S. home (pp. 33-37).

3.2 Delivering on the IBC promise

To provide this attractive identity-expanding opportunity to current and potential students, international branch campuses must effectively transport not only the educational offerings and quality standards of the home institution, but the cultural signifiers that contribute to its brand identity. IBC leaders must “perform the complex task of managing multiple interrelated images simultaneously,” ensuring that campus facilities and academic offerings fulfill students’ expectations of a parent-campus extension (Wilkins & Huisman, 2013, p. 618). The university’s grounds and facilities influence this perception, as do students’ interactions with university staff. As Hughes (2011) notes, “an IBC is the home of a collection of staff who represent the ‘brand’ of the home institution,” (p. 23). Whether sourced locally from the host country or hired internationally, employees of the IBC are representatives of the host institution, responsible for representing the home campus and its associated country’s culture as part of the branch campus experience.

4. IBC staff and their experiences
4.1 Need for this focus

Student-facing staff at IBCs perform a complex role as representatives of the home campus and its country. But as Cai and Hall (2016) note, “there is, as yet, relatively little fine-grained exploration of the experiences and motivations of the staff involved” in these ventures (p. 206). Tierney and Lanford (2015) emphasize the need for research on this topic, stressing that “if we are to understand the changes that are taking place throughout the world, we need a nuanced understanding of the lives of the actors who work in [international] tertiary institutions” (p. 290). This section summarizes key literature to date that has explored this important area.

4.2 Employment models and challenges

IBC staff are broadly sourced through three employment arrangements: home-campus faculty who “fly in” temporarily from the parent campus, international employees recruited specifically for work at the branch campus, and staff recruited from the local region (Healey, 2016, p. 66). The proportional balance of these groups at a given IBC may be tied to institutional maturity, with initial reliance on home-campus faculty followed by movement toward a more international employee base (Cai & Hall, 2016). This connects to an overall trend in IBC staff recruitment toward basing hiring responsibilities at the local IBC level rather than university headquarters (Salt and Wood, 2014, p. 86). As institutions and the overall field of international education develops, IBC staff may therefore be increasingly unfamiliar with their home-campus institutions and related countries.

Yet regardless of their familiarity with the home institution, student-facing staff at international branch campuses have the unique responsibility to reflect the home-campus ethos. As Hughes (2011) notes, these staff “are often the sole representative of the institution’s behaviors and aspirations to the local society and the students being taught,” (p. 23). Performing this role is not always an easy undertaking. Geographic and cultural barriers can interfere—so much so that Shams and Huisman (2014) consider the recruitment of suitable representative staff “one of the biggest challenges faced by IBCs,” (p. 958). Student-facing IBC staff are therefore a critical resource for international universities to support and cultivate.

4.3 Staff adjustment to IBC life

Research to date on the employment models overviewed above has largely focused on the experiences of international staff who temporarily ‘fly in’ from the home institution or are recruited internationally for larger periods of time—sometimes referred as “academic migrants” (Liu & Lin, 2017). Less is known about local staff recruited to work in the IBC, though these are also migrants of a sort: adjusting to very different workplace cultures within their home-country environment.
A recurrent focus in literature on international staff adjustment is the initial exposure to the foreign country and “honeymoon period” of enchantment with it. Garson (2005) describes her experience of this in her first-person account of working at an early IBC, highlighting the thrills and challenges of navigating new environments and successfully settling in to temporary life in the new country. Smith’s (2014) study of “flying faculty” echoed this: cultural interest inspired staff to sign up for the opportunity, and they enjoyed initial exposure to their new environs (p. 130). Yet Smith also noted challenge in the depth of cultural exchange possible for these busy sojourners: despite their interest in the country, their busy workloads prevented them from sufficiently exploring it (p. 131). Cai and Hall (2016) described a similar phenomenon in their study of international staff working at a British university in China: despite a positive appreciation for the country’s beauty and an initial interest in learning Chinese, many staff settled into the expatriate English-speaking “bubble” of their workplace circle and did not integrate into the local culture much beyond this level (p. 215).

A notable trend in literature on international staff working at IBCs is that adjusting to their new workplace proved an unexpected challenge as compared to their adjustment to the new country, for which they were typically better prepared. This was clear in the experiences of the academic migrants that Cai and Hall (2016) studied: their pre-departure training and preparations equipped them well for life in China, but they were surprised by challenges they faced at work.

Studies of IBC employees broadly note several major areas of challenge for acclimating international staff. Perhaps the most profound is the differences in students’ expectations and approaches as compared to students in their home countries. International lecturers have needed to persuade students reliant on rote learning to engage more critical faculties (Garson, 2005); they have found themselves uncomfortably in the role of disciplinarian, dealing with behavioral issues they had not faced previously (Cai & Hall, 2016); and they have needed to adjust to still-emerging levels of English-language competence (Debowski, 2006).

A perhaps less predictable challenge for international staff working at IBCs is the sense of isolation they sometimes feel from the home university. This is less of an issue for flying faculty than it is for dedicated IBC staff, for whom geographical and temporal boundaries often inhibit the collaboration they seek with their home-campus colleagues. The “sheer physical distance” separating the IBC from the parent institution can impede mutual understanding (Edwards et al., 2014, p. 188). Staff can feel sidelined by the parent university in decision making, and frustrated when it is necessary to implement curricula and initiatives from the home campus without tailoring these to local needs (Dobos, 2005; Healy, 2016; Liu & Lin, 2017). This is perhaps part of the reason that desire for greater IBC autonomy features throughout the literature on IBC staff perspectives (Edwards et al., 2014).

5. IBC staff representation and identity
5.1 Representing the home campus and culture

The topic of culture is widely discussed in IBC literature, highlighting Tierney and Lanford’s (2014) point that “[w]hen actors contravene boundaries, and, subsequently, it becomes apparent that their cultural sensibilities are dissimilar from the accepted norms, the concept of culture comes into focus,” (p. 290). Interestingly, however, discussions of culture in IBC contexts are almost exclusively focused on the experiences of international staff members adapting to the differences they experience in their new environment. The subject of how they themselves are perceived in this setting as representatives of the host culture—and how they perceive themselves being perceived by their new interlocutors—is less examined.

IBC staff’s role as cultural exporters is however critical to the IBC enterprise. “[T]ransmitting their home-based ‘institutional DNA’ abroad,” is, as Salt and Wood (2014) have said, “universally regarded as the key to [IBC] success,” (p. 94). The teachers and staff members who interact with students are therefore cast in the role of cultural representatives, with the power to reinforce or undermine this perception. This is a serious responsibility. As Hughes (2011) warns, “[i]f the distance between what students expect from the “brand” of an institution and the teaching and learning experience they receive is too great, they will find a different institution to attend,” (p. 27).

Reinforcing the cultural ethos of the home-campus institution may be achieved in different ways by different types of IBC employees. Local staff, for example, may need to speak English to their compatriot students throughout lessons to maintain the experience of immersive quasi-overseas study (Dobos, 2011, p. 32). International staff—regardless of home country—may through their habitual mannerisms, actions and expectations, project an air of ‘foreignness’ that students may perceive as representative of the larger institution. For foreign staff in ethnically homogeneous Eastern settings, their physical features may be emblematic of students’ perceptions of the home country (Rivers & Ross, 2013). A tall naturally blond lecturer in rural China, for example, will likely read as ‘other’ to her students without saying a word.

The extent to which IBC employees consciously perform cultural ‘otherness’ is unclear, and may not even be known to the actors themselves. Identity research—an area of sociology devoted to the study of humans’ conscious and unconscious self-conceptions—offers a helpful lens for parsing this complex focal area.

5.2 Applying identity theory to this context

The positioning of staff inherent to the IBC enterprise is fundamentally tied to the concept of identity: a phenomenon that in its popular conception could be summarized as ‘how one feels about oneself’. Yet while identity is often mentioned as central to the IBC staff experience, use of the term typically relies on this lay definition, failing to exploit the rich theoretical resources of sociological research in
this area. This section provides a brief overview of key concepts in identity study that can be applied to the IBC context.

A core and widely-accepted principle of identity theory is that this is a malleable construct, having multiple variations within an individual and changing “over time and space” as individuals accumulate different experiences (Norton & Toohey, 2011). The identity-shifting process is largely seen as social. Many identity scholars stress that individuals do not determine their identity autonomously—it is a joint project, socially constructed through interactions that a person has in their various environments (Benwell & Stokoe, 2010). A person may choose or be assigned a “subject position” in a social situation, and through interaction may reinforce or reject it (Davies & Harre, 1990). For example, a teenager treated as popular by her peers may take on the self-image and characteristics of a likeable, confident person, and a teenager treated as unpopular may try to resist this positioning. Benwell and Stokoe (2006) describe this phenomenon as identity being “constituted” by the discursive interactions a person has, rather than these interactions “reflecting” a fixed reality (p. 4).

When applied to the situation of student-facing IBC staff, these theories about the social nature of identity formation are incredibly resonant, hinting at the impact on the individuals involved. Students enter the IBC context with the expectation of engaging with representatives of the home campus, placing student-facing staff in the “subject position” of home-campus avatar. Regardless of their ties to the parent campus, these staff will likely be treated as representatives not only of the university, but also its home-campus country. In the social space of interactions with students and other IBC stakeholders, staff must respond to this positioning, accepting or contesting it.

A key question is therefore how IBC staff respond when they are positioned as cultural representatives in interactional settings. Do they accept the candidate identity projected onto them by their interlocutors? Do they reinforce it? Do they reject it—as in the case of local staff using their shared language to address students, prioritizing their local identity over their global one? IBC literature has yet to answer these questions.

Although systematic research needs to be conducted to chart identity experiences of IBC staff, based on existing findings about the adjustment experiences of these individuals, some key sources of identity influence can be posited. We know, for example, that a key influence on IBC staff members’ professional identities is their personal narratives about who they are as individuals: the “durable” thread of identity formed in childhood that is reinforced throughout one’s lifetime (Bourdieu, 1990, p. 53). Liu and Lin’s (2017) study of foreign staff at a British IBC in China includes a salient example of this personal narrative: when describing the cramped office space that others complained about, a lecturer they interviewed expressed pride in his ability to cope with the conditions, due to his personal characteristics as “rational” and “productive”—a seasoned expatriate employee (p. 13).
Another identity influence for IBC staff is the role that they are expected to play—in this case, professionally and culturally. The sociologist Erving Goffman (1956) highlighted the impact of role “performance” on identity development: the idea that through talk and action, “dramatic realization” of role expectations is brought to life—often with varying degrees of authenticity (p. 30). This performance may feel forced and unusual at first, but over time, it may become comfortable, adopted by the individual as habitual. Garson (2005) shares a good example of this in her first-person account of teaching at an IBC in Egypt. In her first week, she realized that her students expected her to “feed them the information that they would memorize”—that they did not recognize her American learner-centredness as good teaching (p. 323). She introduced more fill-in-the-blank drills to her teaching style, embodying good teaching by that culture’s definitions, and used this influence to introduce more exploratory activities into the class. In other words, she performed the role that was expected of her, and then negotiated a desirable identity for herself as a good teacher by both cultures’ definitions.

These more macro-level influences are buttressed and contested by moment-to-moment social encounters that position IBC staff in certain ways. Staff’s interactions with interlocutor students and other stakeholders create negotiation opportunities where their identities are established, challenged and continuously reformed.

6. Conclusion

Delivering a satellite international branch-campus experience reflective of the home campus requires careful coordination. Student-facing IBC staff play an important role in reinforcing the international ethos that distinguishes the foreign campus from local alternatives. The responsibility of student-facing IBC staff to represent the university’s home country—or the English-speaking world at large—creates a complex identity situation that is underexplored in current research. The current paper makes an initial contribution to this research area through an identity-focused review of literature on IBC student-facing staff. Here we have briefly overviewed multiple influences on IBC staff’s professional identities: information that will be developed and refined as our research team conducts empirical study of IBC staff identity in the coming years.
References


Student Attrition: A Study of Risk Factors in an International University

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Abstract

Increasing pressure on Thai private universities to retain their students in the wake of decreasing student enrollment, demographic changes, and direct competition from public universities calls for them to address more systematically plans and action for student retention. The purpose of this study was to determine risk factors that affect student retention at an international university in Thailand. First year undergraduate students (N=2,193) were surveyed for factors related to student attrition. The survey was conducted both online and distributed on campus to a cohort of first year students. A 5-point scale survey instrument was constructed around five categories of factors related to student attrition according to the theoretical literature: Academic Factors, Social Factors, Motivational Factors, Faculty Factors, and University Factors. A multiple regression model was employed to assess the predictive ability of the five factors plus students’ reported high school GPA and their concern with ability to pay tuition. The multiple regression analysis yielded significant results for the following factors: Social, Motivational, and University factors, entering GPA, and concern with ability to pay tuition. Results suggest that a combination of attention to traditional components of student attrition factors and a systematic review of institutional specific factors may be the optimal approach to inform institutional retention practice.

Keyword: Student retention, Attrition, International university
Introduction

Student retention remains an important concern for the higher education sector in Thailand. Changing demographics, reduced public spending, and decreased enrollment continue to have effects on the bottom line for many institutions. The Thai higher education system has undergone significant changes in the past two decades that have affected both public and private universities in the country. Modernization and internationalization in Thai higher education, influenced by the global movement towards a more autonomous and commercialized education system has been encouraged at the national level. The 1999 National Education Act called for Thai public universities to become autonomous universities and more accountable for their operations and budgets than in the past (Kirtikara, 2001). These changes to the public university sector have had implications for private universities.

Traditionally, in Thailand, private universities have been seen as less prestigious by the public. Top students have tended to vie for limited seats at a handful of prestigious public universities. Private universities were seen as second choices and thus the recipients of the overflow of students unable to gain admission to public universities. However, the introduction of the autonomous university policy in 1999 which in effect put public universities in direct competition with private universities, has had ramifications on private university enrollments (Savatsomboon, 2006). Decreased government funding, increasing calls for accountability for the bottom line, and pressure for financial reform has forced public universities to find more ways to increase their financial viability. Public universities have responded by setting up new programs with direct admissions and offering international (English) programs and joint degree programs with other universities that directly compete for students with private universities (Pimpa, 2011).

In addition, demographic trends in Thailand show a low population growth rate in comparison to neighboring countries. Thailand’s ageing society has ramifications for the number of college-aged population, which is predicted to shrink by around 20 percent between 2012 and 2025 (ICEF Monitor, 2016). According to Worasinchai, Ribiere & Aurelie (2008), the increase in competition among Thai universities themselves, from foreign university partnerships operating in Thailand, and the decreasing number of students applying for higher education has made the education sector more competitive and administration more difficult in the face of
rising or fixed costs and a decline in students and conversely, tuition revenues. Drops in enrollment have consequences for all universities and its affects are felt not only at the administrative level, but at all levels and positions in the university. Therefore the necessity for attention to administrative policy to increase student retention is a must for private universities if they are to maintain viability and fiscal well being. The following exploratory research was conducted with the objective of obtaining data that would assist a private international university in evaluating and monitoring its enrollment for maximum efficiency by collecting data from its freshman year students as to their opinions on various issues that would affect their intent to stay at the university.

Overview of Student Retention Theories

Student attrition or conversely student retention, if viewed from the institutional standpoint, has been studied extensively for almost five decades since the early 1970’s. Several theoretical frameworks have been postulated and researched concerning why college students leave before completing a degree, nonetheless, no single theory or approach is comprehensive enough to account for all of the factors that influence student departure. The most often cited theories define student success as persistence or educational attainment and emphasize the importance of academic preparation and the quality of students’ experiences during college (Kuh, Kinzie, Cruce, Shoup & Gonyea, 2006).

Sociological theories such as Tinto’s Theory of Student Departure and Astin’s Theory of Student Involvement explain student departure through the process of student interactions with the environments of the institution. Tinto’s theory has arguably been the most researched and considered to be paradigmatic in stature (Braxton, Hirschy, & McClendon, 2004). According to Tinto, the main sources of student departure occur in three specific areas; academic problems, failure to become socially integrated and intellectually integrated, and low levels of commitment to the institution. Academic problems may include grades, studying habits, and identification with the academic norms and values of the university. Social aspects such as the daily life of students at university, social interactions with peers, and participation in activities can also affect the level of integration. Students’ ability to become integrated into these environments of the institution influence their commitment and thus, influence decisions to persist (Tinto, 1993).

Alexander Astin’s Theory of Student Involvement was developed from an initial longitudinal study of college dropouts. According to his theory, involvement is the students’ investment of physical and psychological energy that the student devotes to the academic experience. Students who spend time studying, participating in campus activities and student organizations and interacting frequently with other students and faculty members are considered to be involved to a certain degree. There are five basic postulates to Astin’s theory: a) involvement is the investment of physical and psychosocial energy in different “objects” that range in degree of specificity; b) involvement occurs along a continuum, with students investing different amounts of energy in various objects at various times; c) involvement
includes both quantitative and qualitative features and are measurable; d) the amount of student learning and personal development is directly proportional to the quality and quantity of involvement; and e) the effectiveness of any educational practice is directly related to the capacity of that policy or practice to increase involvement (Astin, 1999).

Psychological models and psychosocial influences on student persistence have also been proposed to explain student departure. Bean and Eaton proposed a model of student retention that incorporates the psychological processes that lead to academic and social integration. The premise of their theory is that students enter an institution with different psychological attributes that have been shaped by the students’ own experiences, abilities, and self-assessments. These include self-efficacy assessments, normative beliefs, motivation, and past behavior. During the students’ interaction with the institution, other students, faculty and various institutional processes, the students engage in self-assessments that influence how they feel about the institution. Individuals who become self-confident and levels of self-efficacy increase and develop higher levels of persistence. As the individual’s academic and social self-efficacy are increased, their overall academic and social integration also increases (Bean and Eaton, 2001).

**Student Retention Research**

Research based on the various models and theories have attempted to attribute student attrition to various causes, but limitations in methodology and research assumptions; difficulty in operationalizing concepts such as academic and social involvement or engagement; external influences that are not under the institutions ability to affect, and differences in the definitions of what constitutes student retention and persistence are some of the reasons why there has yet to be a comprehensive theoretical model that is able to translate into definite action to increase retention in institutions (Tinto, 2010). Nonetheless, finding the causes and cures for student attrition still remains an important focus for institutions as the importance of keeping students is more cost effective and beneficial for both students and universities. Notwithstanding, even though there is no consensus on what theoretical viewpoint is most appropriate for understanding why students drop out, the research literature has demonstrated several common factors related to retention. These factors can be generally designated as: academic preparedness, campus climate, student commitment to educational goals and the institution, social and academic integration, and financial aid or financial concerns (Swail, 2004). Similarly, Bean identifies nine themes that have an affect on retention: the students’ background, money and finance, academic performance, social factors, bureaucratic factors, the external environment, psychological and attitudinal factors, institutional fit and commitment, and intentions (2005).

Demographic factors and students’ background have been widely studied in relation to retention. Research has shown that factors including students’ age, gender,
socioeconomic status, first-generation status, ethnicity, high school academic performance, and parents' educational background have an affect on persistence. In general age and gender are generally considered to have some affect on student persistence and studies on older, non-traditional students have shown that increased age is associated with decreased persistence. Alternately, some research studies have found that older students may begin with a greater commitment towards the goal of earning a degree and possibly greater financial resources. Gender also has a small effect on persistence, with some research showing that females have a slightly higher rate of persistence than males. (Burrus et al. 2013; Haemmerlie and Montgomery, 2012). Race and ethnicity have also been demonstrated to be related to persistence. Research has shown that racial and ethnic differences have different persistence rates and some groups showing differences in gender. Generally, studies originating from the west show that ethnic minority groups such as African Americans, Hispanics, and Native Americans show a greater risk of withdrawing. Socio-economic and first generation status also have influence on persistence as studies have found that moving a quintile up in socioeconomic status increased students’ likelihood of receiving a degree by more than six percent. Students whose parents went to college and attained a degree are also more likely to persist. (Peltier, Laden, & Matranga, 1999; Wohlgemuth et al. 2006; Fike and Fike, 2008; Reason, 2009).

Academic and social integration has also been well studied in the research. According to Morrison and Silverman (2012) the basic tenet of Tinto’s theory is that student departure from college is based on their ability to become integrated into the environment of the college. The more the student was able to integrate into the academic and social communities of the college, the more likely that they would persist towards their academic goals. As this theory has been one of the most widely researched, academic and social integration and the institutional practices that facilitate them have been some of the most studied variables. Academic systems of college include those factors that relate to the formal education of the student, studying, grades, faculty contact and other factors that involve academics. The social systems of college includes the students’ daily life, interactions with other students, and social activities. Institutional practices that have an affect on persistence include those institutional processes that facilitate the students’ adaptation to their new learning environments (Gerdes and Mallinckrodt, 1994; Lau 2003; Zepke and Leach, 2005). A study of community college students showed that students who reported being more integrated or had a sense of belonging on campus and an effect on their rates of persistence. Students who learned about the campus through social relationships and participated in courses offered to acclimatize them to the college environment had high higher rates of persistence (Karp, O’Gara, & Hughes, 2008).

Studies that specifically focus on motivation as an important component of student adjustment and integration have shown that the absence of motivation had negative effects on psychosocial adjustment to university life and contributed to stress and negative well-being (Baker, 2004). A Meta-analysis of research on student retention has shown the psychosocial factors do play an important role in influencing student retention (Habely, Bloom & Robbins, 2012). A research synthesis on community college students that examined relationships between psychosocial factors
and student persistence concluded that psychosocial factors, especially motivation and self-perception, where influential predictors of achievement and persistence for college students (Fong, Davis, Kim, Marriot & Kim 2016).

Financial issues have also been demonstrated to have an affect on retention. Financial issues have an impact on retention both at entry and during the college experience, especially for students who have limited financial resources to start with and are more likely to affect decisions to persist in the early stages of starting college when the potential benefits of a college degree are still remote and subject to uncertainty (Tinto, 1993). Generally, studies have shown that students who receive financial aid or assistance have higher graduation rates and that higher tuition is associated with lower persistence (Burrus et. al. 2013). A UK study of retention in higher education identified financial issues as one of the reasons students were likely to withdraw or drop out of university (Thomas, 2002).

Student and faculty interaction, teaching techniques that facilitate active and collaborative learning, positive faculty behaviors, and enriching activities have an impact of student engagement and thus, on student persistence (Umbach and Wawrzynski, 2005). As faculty members have more contact with students, are in a position to evaluate students and observe those that may have potential for attrition, they should be considered to have quite a strong impact when it comes to student retention given the strong evidence supporting effective college teaching and student retention (Cuseo, 2001). Tinto stated that faculty action in the classroom should be considered critical to institutional efforts to increase student retention and linkages to faculty pedagogy and student retention should be more fully explored (Tinto, 2006).

Method

Sample

This retention study was conducted at large, international university with a total enrollment of over 19,000 students located in Thailand. The sample for this study was taken from a cohort of first year students entering university for the first semester of 2016. Student ID and emails were obtained from the university database. The survey instrument was distributed both by email and distributed directly to students through their enrollment in general education courses. A check of student ID numbers ensured that there were no duplicate responses. The total number of responses received were 2,193 responses.

Questionnaire

The instrument was developed from review of the literature on student retention theories and reviews of related research that have been carried out in the past.
The survey instrument contained 24 questions, with five questions containing subsets of questions making the overall responses to be answered a total of 60 questions. Responses were categorized into a 5-point rating scale. The instrument was comprised of fifteen descriptive items; ten items concerning academic factors; five items concerning social factors; seven items concerning motivation factors; twelve items concerning institutional factors; nine items concerning faculty factors; one item related to financial concern; and one item (the dependent variable) concerning students’ intent to stay at the university. Questions on the survey were made available in both English and Thai to ensure respondent understanding. The Thai translations of the English questions were checked and verified by two experts to ensure correct translation.

Five sets of independent variables were used for this study. They were: Academic Factors, Social Factors, Motivational Factors, Faculty Factors, and University Factors. Multiple items for each scale or factor were included on the survey to increase reliability of the data and the Cronbach’s Alpha Coefficient for Internal Consistency was applied to each of the scales and items to reduce the possibility of measurement error (Gliem & Gliem, 2003). A sample test was conducted on 60 students to assess for internal reliability. The Academic Factors scale consisted of 10 items ($\alpha = .72$), the Social Factors scale consisted of 5 items ($\alpha = .78$), the Motivational Factors scale consisted of 7 items ($\alpha = .84$), the University Factors scale consisted of 12 items ($\alpha = .88$), and the Faculty Factors scale consisted of 9 items ($\alpha = .92$). A two step data analysis procedure was conducted for this study. First, the descriptive items were statistically analyzed to yield frequencies and percentages. Next, a regression model was employed to assess the predictive ability of the seven dimensions. The five factors plus students’ high school GPA and students’ Concern with Ability to pay tuition were the independent variables while the dependent variable was the students’ Intent to Stay.

Results

According to the data obtained from this sample, the majority of students who took the survey were female (63 percent) and 90 percent of the respondents considered themselves to be non-native speakers of English. Over 40 percent of the respondents graduated from public high schools and highest self-reported grade point average was 3.00 to 3.49 (37 percent). When asked if they had any worries about their tuition fees, approximately 54 percent said they had some worries. Over 76 percent of the respondents intended to obtain at least a Bachelor’s Degree from the university. When asked about their parents’ educational levels, the majority of responses were Bachelor’s Degree for both their father and mother, at 38.2 and 42.1 percent respectively. The majority of students (36 percent) reported studying for approximately 5-10 hours per week. Students rated themselves as to their skills in English and mathematics capabilities in the medium range with 47 percent in English and 40 percent in mathematics. The major reason for selecting this specific university
to attend (53 percent) was that it was an international university that uses English as the medium of instruction. When asked what they felt was the most important quality of a good university, 40 percent answered that it was the quality of education and knowledge that they received. Thirty-seven percent of students answered that they would consider leaving the university if their grades were lower than expected.

**Regression Analysis**

A multiple regression analysis was performed on the data using statistical application software. The independent variables were: Academic Factors, Social Factors, Motivational Factors, University Factors, Faculty Factors, High School GPA, and Concern of Ability to Pay. The dependent variable was the students’ Intent to Stay. A multiple regression analysis was used to test if the five factors, high school GPA, and Concern with Ability to Pay significantly predicted students’ Intent to Stay.

When Intent To Stay was predicted it was found that Social Factors ($\beta = .026$, $p < .05$), Motivational Factors ($\beta = -.013$, $p < .05$), University Factors ($\beta = .008$, $p < .05$), High School GPA ($\beta = .038$, $p < .05$), and Concern of Ability to Pay ($\beta = .077$, $p < .05$) were significant predictors. Academic Factors ($\beta = -.001$, n.s.) and Faculty Factors ($\beta = .008$, n.s.) were not significant predictors. The overall model fit was $R^2 = .031$. See Table 1 for the beta coefficients for the independent variables used in the analysis.

Table 1. Results of the multiple regression analysis.

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<th>Standardized Coefficients</th>
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Discussion

This current research has as its objective to determine what factors affect student retention at the university. The results show that five variables had a significant effect on students’ intent to stay: Social, Motivational, University, high school GPA, and financial concern. Academic and Faculty variables were not significant. Upon evaluation of the results, Academic Factors (i.e. study habits, contact with faculty) had a negative beta coefficient, which is interpreted that an increase in strength of academically related factors actually resulted in a decrease in the students’ intent to stay at the university. In a study by Bean and Metzner, differences in types of institutions and students were established. Institutions were defined as residential and commuter. Students were defined as traditional and non-traditional. Non-traditional students are defined as being older and usually not living on campus and typically have less contact with faculty and peers (1985). Bean and Metzner suggested that for these types of students environmental variables would be more important and if they have low values for academic variables but high values for environmental variables, the student would stay in college (Davidson and Wilson, 2013). Therefore, as the majority of research applying Tinto’s theory was based on residential institutions and traditional students, assumptions of academic integration may not be applicable given the type of students at this university. Differences in institutional categorization and norms of cultural behavior may place students in this university in the non-traditional student category in terms of behavior. Thus, this may explain the reason why academic factors were found not to be significant. The non significance of Faculty Factors could also be mitigated by cultural norms typical of the country where criticism of one’s teacher may not be typical.

The highest beta coefficient was found for Social Factors and the significance level at the p < .01 level is indicated. In this study, Social Factors, such as involvement with peers, the joining of activities and clubs on campus, appear to have a significant influence on the students’ intent to stay at the university. University factors, such as the reputation and image, the ease and convenience of the various processes involved (i.e. admissions and registration) also appear to have influence on students’ decisions to stay according to this study. The psychosocial or Motivational Factors (the students’ level of motivation, attitudes, and stress) were also shown to have an affect on their intent to stay. The significance of the students’ reported high school GPA and their intent to stay which is also supported by the major reason that they would leave the university was if their grades were lower than they expected, is supported by the research that students who are more prepared academically will tend

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to do better in college and thus, persist more (Cabrera, Burkum, La Nasa & Bibo, 2012). Nonetheless, although there are many studies on psychosocial attributes, there is still a need for a comprehensive instrument to measure their effects (Habley et. al., 2012). Financial concerns as stated previously, have been shown to influence student persistence in many studies. This is a concern that has consequences on persistence to possibly an even more extent in current times as we see the costs of tuition on the rise and lowered financial support by external or government sources. As tuition in private universities tend to be higher than at government universities, attention to addressing this issue will be of utmost importance.

Conclusions and Implications

The overall results of this study show that factors that have been reported to influence student retention are also seen to influence retention at this particular university. As an initial study, there are limitations. The results indicate that the regression model, although significant, has demonstrated that there may be a need for subsequent research to explain more of the variance, and thus reasons for student leaving. The addition of more variables or a breakdown of the factors into several subsets of variables could enhance the predictive ability of the model. Regression analysis is a largely predictive rather than explanatory procedure in social science research and thus may only provide limited information and connection among variables. Subsequent studies may need to focus on causal modeling in order to ascertain causal effects (Pascarella and Terenzini, 2005).

The results of this study have implications for university administrators in that it identifies several areas that can be targeted to improve student retention. Firstly, identification of the factors that influence retention is critical in being able to address those areas that will have the most affect as resources both financial and human are limited. Second, identifying areas that the university has control over or the resources to influence such as social and university factors, will allow administrators to implement plans or processes that will have more timely results and impact. As for those factors that university administrators may have less influence on such as motivational aspects, support services and processes, even if already available, should be enhanced and promoted so that students can make use of them more fully in order to help them through their first year before they drop out. External limitations and influences, such as financial concerns, may also require creative problem solving by university administrators not only in the form of financial aid and scholarships, but by assisting students in locating external sources of funding. A final implication of this research is that it by focusing attention not only on student characteristics and their integration to the university, but to the university itself, its image, reputation, processes and activities that can attract and assist students, that is, looking internally at what the university can do ‘better’ for its students, will efforts to increase retention have the most impact and desired results.
References


Dichotomy of the ‘Clip Thinking’ Phenomenon

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Abstract

The paper describes the phenomenon of ‘clip thinking’ from interdisciplinary perspective. Clip thinking is regarded as a process of reflecting a multitude of various properties of objects, without taking into account the relationships between them, characterized by fragmented information flow, illogicality, heterogeneity of incoming information, high speed of switching between fragments of information as well as the lack of a holistic perception of the surrounding world.

The phenomenon of clip thinking is essentially synonymous with the concept of ‘cognitive style’. The ‘differential / integral’ cognitive styles are associated with individual features of students’ digestion of the teaching material. Students with integral type of cognitive style tend to rely on educational technologies built on the principle of transition from abstract to concrete, whereas students with differential type of cognitive style are inclined to learn from a specific focus to a general one.

Within the context of clip thinking, we need to:
The application of common teaching methods together with e-learning technologies will increase the efficiency of the learning process as well as significantly enhance students’ professional training.

**Key words:** Clip, Clip thinking, Zapping, Blip culture, Cognitive style.

### 1. Introduction

The increased role of knowledge, information and information technologies has led to a new stage of development of the modern society. Information technologies are widely used in everyday life, production, institutions, and the education system as a whole. The global information space provides effective interaction of people, satisfaction of their needs in information products and services, as well as access to the world resources.

Global informatization is changing man’s mental activity. Thus, under the influence of television, computer games, the Internet and even modern literature, most representatives of the younger generation are forming a special type of thinking – ‘clip thinking’.

The analysis of interdisciplinary works in philosophy, cultural studies and psychology devoted to the phenomenon of clip thinking, has revealed the contradiction associated with the essence of orthodox educational paradigm, which responds quite slowly to the rapid changes in modern society, where information is the main resource. As a result, there is a clear discrepancy between updated internal expectations of individuals with clip consciousness and a measured rhythm and stable character of the educational foundations.

### 2. Theoretical Fundamentals

The aim of the paper is to conduct an interdisciplinary analysis of clip thinking. The word *clip* often refers to the principles of constructing music videos, or music clips, where the video consists of loosely linked images. This is an underlying principle of a cliché worldview, when a person perceives the world as a series of almost unconnected parts, facts or events. Clip thinking hinders analytical abilities, since the images that remain in thoughts only for a short period of time, almost
immediately disappear being replaced by the new ones (Semenovskikh, 2002).

The media are excessively manipulating the word ‘clip’ in the context of thinking, although the term ‘clip thinking’ initially emerged in philosophical and psychological literature in the late 1990s to denote the peculiarity of a person to perceive the world through a bright short message embodied in the form of either a video clip (hence the name) or television news (Azarenok, 2009).

Originally, it was the media rather than the World Wide Web that developed a universal format for presenting information through the so-called sequence of current clips. In this case, a clip is a short set of abstracts submitted without defining the context, since the objective reality itself serves as the context of the clip due to its relevance. Thus, a person is free to perceive and interpret the clip because it is immersed in this very reality. In fact, not everything is as beautiful as it looks at first glance, since in view of the fragmented nature of the information flow and the spacing of related events over time, the brain simply cannot comprehend the connection between them. Consequently, the clip turns into information noise. However, the message of the clip is retained in the person’s perception, thereby reading news fosters an illusion of being aware of the processes taking place in the world, while, in effect, it results in a set of discrete facts that are almost impossible to link or associate with the general chain of events. The format of the media forces the brain to make a fundamental comprehension mistake, i.e. the events are considered to be connected if they have a temporary affinity, rather than a factual one. It is therefore no wonder that the clip thinking emerged as a response to the increased amount of information.

According to McLuhan’s theory of civilization (McLuhan, 1988), at the present stage of its development the society is being transformed into an e-society or a global village, whereby the Internet and social media are creating a multidimensional perception of the world. The development of electronic means of communication is taking back human thinking to the pre-text era, where the linear sequence of signs ceases to serve as a cultural base.

The phenomenon of clip culture was first noted by A. Toffler, an American futurist (Toffler, 1984), who viewed this concept as a component of the general information culture, that forms such a unique form of perception as ‘zapping’, when non-stop switching of TV channels creates a new image, consisting of scraps of information or debris of impressions. This image requires no imagination or reflection; the information is constantly updated, since everything seen in the news report without a temporary gap tends to lose its meaning or become obsolete. Furthermore, Toffler introduced the term ‘blip’, i.e. mosaic perceptions of the world that arise from audiovisual electronic information in terms of its demassification. Hence, those who prefer logical harmony and integrity of the mass media broadcast struggle to comprehend the chaos of blip-cultural information.

Girenok (Girenok, 2002) was the first to use the term clip thinking in Russian literature, believing that conceptual thinking ceased to play an important role in the modern world, whereby linear, binary thinking is being replaced with a nonlinear one. The European culture is built on a system of evidence, whereas the Russian culture with its Byzantine roots is grounded on the system of visualization. Therefore, Russians have evolved, perhaps following John of Damascus, towards the perception
of images, which is intrinsically related to clip thinking.

According to Feldman (Feldman), clip thinking is a conditioned thinking, which allows a person to process fixed-length content rather than semiotic structures of arbitrary complexity. This is particularly visible in a person who is incapable of concentrating on any information for long periods to subsequently provide its critical analysis.

Clip thinking, as defined by Frumkin (Frumkin, 2010), is a vector of the development of a new level of person’s relation with information, characterized by the ability to quickly switch between disjointed semantic fragments, as well as our inability to perceive a long linear sequence of homogeneous information.

Frumkin identified five factors that contributed to the phenomenon of ‘clip thinking’:

- accelerated pace of life and the subsequent increase in the volume of the information flow unduly burdensome to select, filter out and differentiate between the essential and the non-essential;
- systematically updated information;
- increased diversity of incoming information;
- extended multi-tasking;
- enhanced democracy and an on-going dialogue at different levels of the social system.

The main problem with clip thinking is the lack of context, which elucidates the significance of separate fragments in a meaningful verbal or written speech (Frumkin, 2010). When you perceive any meaningful text, a certain context is formed as a set of statements and assumptions that have already been considered within the scope of the topic in question both in the existing context and in the context of your own knowledge and expertise. The longer the text is, the more complex its context is, and therefore the easier it is for us to understand the semantic relations between phenomena, which, in fact, exist before our eyes, namely in a context.

Clip thinking impedes a clear understanding of the context, and therefore, a clip leaves no traces in semantically related phenomena. Although a clip is a form of information representation, its interpretation could be particularly problematic, for instance, for a person who is indifferent to politics and therefore unable to understand the causes and consequences of the political events, since he fails to see any connection between the isolated facts. In contrast, a politically conscious person relies on the context that correlates the clips to provide a unified view of the political situation (Bryksin, 2012).

The relation between experience and behavior was central to Carl Roger’s Phenomenological Theory of Personality. Rogers believed that people’s behavior is influenced by their current perceptions and interpretation. In other words, their subjective experience determines the behavior that cannot be understood without subjective interpretation of the events.

Furthermore, Carl Rogers was the proponent of a holistic approach to personality that suggests that the person is regarded as a whole, and this unity cannot
be reduced to the constituent elements of his personality.

The transition from a holistic approach to clip thinking is the transition from holism to elementalism. This indicates a fragmentation and contradiction in thinking. In his article ‘Is Google making us stupid?’ Nicholas Carr (Carr, 2001) wrote: “Over the past few years I’ve had an uncomfortable sense that someone, or something, has been tinkering with my brain, remapping the neural circuitry, reprogramming the memory. My mind isn’t going—so far as I can tell—but it’s changing. I’m not thinking the way I used to think. I can feel it most strongly when I’m reading. Immersing myself in a book or a lengthy article used to be easy. My mind would get caught up in the narrative or the turns of the argument, and I’d spend hours strolling through long stretches of prose. That’s rarely the case anymore. Now my concentration often starts to drift after two or three pages. I get fidgety, lose the thread, and begin looking for something else to do. I feel as if I’m always dragging my wayward brain back to the text. The deep reading that used to come naturally has become a struggle”.

One of the peculiarities of clip thinking is the development of some cognitive skills at the expense of others. In his book ‘Me, MySpace, and I: Parenting the Net Generation’ Larry D. Rosen, an American psychologist, notes that the strength of the Internet Generation, brought up in the era of internet-based communication technologies, demonstrate a higher propensity for multitasking, for instance, present-day children can do homework while simultaneously listening to music, chatting, editing pictures or surfing the Internet. However multitasking leads to a lack of concentration and attention deficit hyperactivity disorder (ADHD). Moreover, Net Geners prefer visual symbols to logic.

Since the consciousness of a modern man is experiencing unprecedented influx of chaotic and heterogeneous information that clogs the channels of perception with excessive, unwanted data, clip thinking acts as a protective shield against information overload (Golovin, 1998). Thus, clip thinking proves to serve as a kind of protection against information overload in modern society, particularly when a person needs to digest diverse information. Clip thinking is creating a new information management tool; therefore, network communications are as important for a modern man as the ordinary ones.

Clip thinking can be defined as the process that allows humans to make sense of the world they experience and of various properties of multiple objects, characterized by a lack of a holistic perception of illogical flow of heterogeneous information and rapid switching between its fragments, without analyzing their connections. In our opinion, the main characteristics of clip thinking are as follows: concrete thinking, fragmentation (lack of a holistic perception), focus on less general concepts, illogicality and lability.

3. Students’ Clip Thinking: Psycho-Didactic Aspects

Recently, among educators and psychologists a stable opinion has emerged that nowadays young people perceive the world around them too superficially. Thus,
Vronsky (Vronsky, 2012) believes that the entire system of young men’s values and ideals is too monotonous and is based solely on the information flow that literally ‘pours’ in on them from television screens and the Internet. The ability to formulate an idea in a clear and comprehensible way to convey its meaning has become a rarity. Equally, the inability of modern students to listen carefully and write down the conclusions of the lecture in a coherent way has come under increasing criticism from professors.

This is due to the fact that today the information space as the total result of human semantic activities involves extensive written and audiovisual communication. On the one hand, excessive information environment entails the need for the person to rapidly assimilate as much information as possible; on the other hand, it evokes qualitative changes in the format of the information itself. There is a steady tendency to represent information in a fragmented manner with a focus on its quantity, rather than quality. These changes determined the emergence of such a phenomenon as ‘clip thinking’ and the subsequent need to redesign the approach to teaching young people.

Can clip thinking contribute to the effective assimilation of information in the learning process? There is no unambiguous answer to the above question. The application of clip thinking in education allows a person to memorize huge amounts of information without perceiving its content, in other words, to quickly memorize a set of words, phrases or numbers in a certain sequence on the basis of some images that correspond to the information to be memorized (Semenovskikh, 2002).

Such methods are suitable, for instance, for studying foreign languages, where a foreign word can correspond to some image of a word from the native language. However, in physics, it will result in memorization of some terms, rules, definitions or formulas, therefore the understanding of physical processes will be lost.

The language of images and gestures is much older than the language of symbols; therefore, it is easier for a man to perceive information in the form of images rather than letters, numbers, formulas, etc. A lecture is still regarded as a classical (traditional) form of organization of higher education. The above-mentioned system of images proves to be the most efficient way of memorizing the learning material from a more focused approach to the lecture’s content and duration with an emphasis on modern multimedia technologies.

Current articles examine the rules for developing electronic textbooks that, unlike paper versions, should contain separate sections on specific topics, including animation, especially in the study of physical foundations of various processes. The formation of images in educational process using modern computer technologies is unlikely to pose a serious challenge. These images can be represented in the form of slides or short animated pictures, i.e. clips. It is important to keep in mind, though, that students should associate the small-scale sequence of clips with quite definite images, rather than abstract content. The proposed method of presenting information in the form of a clip allows us to merely memorize it, without consciously absorbing it (Pudalov, 2011).

Furthermore, a measure of overlap exists between clip thinking per se and the cognitive style; therefore, it is necessary to take into account the recommendations for
the learning process with regard to students’ cognitive style. A complex approach to learning with an emphasis on clip and cognitive thinking is described in the work of Berulava (Berulava, 2001), that presents a set of methodological recommendations for helping students not only master the material, but also realize their full potential.

In her study, Berulava proves that clip thinking and the differential / integral cognitive style both relate to specific perception and assimilation of learning material. Thus, students with integral type of cognitive style tend to rely on educational technologies built on the principle of transition from abstract to concrete through discussions, whereas students with differential type of cognitive style are inclined to learn from a specific focus to a general one through logical and formalized perception of the material, either on the basis of their integral knowledge, or consistent cognition.

In general, we have every reason to believe that modern educators and psychologists should integrate essential features of clip thinking in learning environment, including students’ educational and extra-curricular activities. It is highly advisable to revise the content of the learning material with an emphasis on students’ individual psychological characteristics. The format of information should be modified and translated into the form of clips, i.e. bright, clear and visual presentations with understandable, imaginative and memorable formulations. The challenge is to create ad hoc films or video clips with illustrative examples, experiments, etc.

Advanced pedagogical tools combined with e-learning technologies will increase the efficiency of the learning process and significantly improve the students’ professional training.

4. Conclusions

The main findings of the interdisciplinary analysis of the research on clip thinking are as follows:

- clip thinking can be defined as the process that allows humans to make sense of the world they experience and of various properties of multiple objects, characterized by a lack of a holistic perception of illogical flow of heterogeneous information and rapid switching between its fragments, without analyzing their connections;
- a measure of overlap exists between clip thinking per se and the cognitive style;
- the students’ differential / integral cognitive style is associated with individual features of their perception of the learning material, which should be presented in short semantic fragments with regard to their psychological characteristics.
References


What are “effective” pedagogical practices? From the perspectives of 21st century student learning

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Abstract

Over the years, a question has been risen as to “What are effective pedagogical practices?”. This question has been controversial in the field of education. In this paper, we present a theoretical synthesis of the specialized literature in the field of learning and teaching. In doing so, we seek to examine what effective pedagogical practices are, particularly from the perspectives of 21st century student learning. A discussion of the question of whether student-centred methods is more or less effective than traditional approaches is also presented. Our paper brought important messages for policy makers, curriculum designers, educational researchers and teachers when they review, evaluate and rethink pedagogical practices at school.
1. Introduction

One of the goals of schooling is to educate children to become numerate in order to be able to function in a modern technological society and contribute to the growth of its economy. There is little doubt that, we are living in a world, few could have imagined 50 years ago. What will the workforce and workplace look like half a century from now? It is highly unlikely to actually predict what the workforce and workplace will look like 50 years later. However, one thing can be sure is that in the information-based, skills-intensive economy of the 21st century, there is now much more emphasis on learning as a skill and on increasing students’ ability to learn on their own or in groups.

Admittedly, an ability to work in groups is a life skill (Johnson, Johnson, & Holubec, 1990), involving constructively seeking and offering information and feedback with others and achieving goals and results by managing conflicts well. However, the skills that help students to communicate effectively in groups are not instinctive (Biott & Easen, 1994; Crook, 1998; Mercer, Dawes, Wegerif, & Sams, 2004). As Mercer et al. (2004, p. 361) argued, simply saying, “Talk together to decide” or “Discuss this in your group” may not deliver any understanding for children to know how to work in a group, or what goals they are expected to achieve. Research shows that effective group collaboration can motivate students’ learning and encourage them to organise tasks, manage conflicts, negotiate agreements and facilitate interpersonal communications (Attle & Baker, 2007; Culver, 2000; Dörnyei, 1997; Gardner & Korth, 1998; Goby & Lewis, 2000; Kain, 2003). However, to this end, students need to be given opportunities to develop their ability to communicate and explain their reasoning with others. Also, it is important to note that one goal of
schooling should be to equip students with the necessary skills before they begin their careers in this information age.

At school, teachers impart knowledge of many skills and strategies to students. However, unless their students have been actively, and personally, involved in planning, monitoring and reviewing their own learning, the skills and strategies imparted to the students may not be effective. As Sfard et al. (2001, p. 5) stated, “human thinking [to be] essentially social in its origins and […] inextricably dependent on historical, cultural, and situational factors”. It was in this sense that many researchers considered students’ thinking ought to be appreciated by considering their contributions in the context of questions and communication that preceded and followed them. For example, Hedges (2012, p. 145) stated that “concepts could not be assimilated by a child, but needed to undergo a process of dynamic, creative and complex development during social and cultural interactions”. Nevertheless, it has also been argued that many students nowadays wait for their teachers to present material, provide instruction and demonstrate each step (Goeke, 2009), and they have little experience of giving verbal explanations of their ideas at school (Mercer et al., 2004).

It is widely accepted that in practice, the teacher and the students are very much “two sides of the same coin” in that their narratives have both created, and been created, by their interactions. Nevertheless, it is also important to note that as Maley (1994, p. 67) argued, “what learners do in classrooms is largely contingent on what teachers make, or allow them, to do”. Therefore, the extent of sharing teacher authority is an important feature of the dichotomy between student-centred and teacher-centred pedagogies (Jolly & Jacob, 2012; Lee, Chang, & Tsai, 2009). Research provides evidence to demonstrate that the possibility of creating a student-centred classroom is in the hands of the teacher, suggesting that teachers need to change and improve their practice in order to achieve higher engagement on the part of their students (Li & Stylianides, in press; Reeve, Jang, Carrell, Jeon, & Barch, 2004; Watkins, Carnell, & Lodge, 2007).

2. Constructivist perspectives on learning and teaching

Constructivist perspectives on learning and teaching have been a popular topic among mathematics educators, psychologists and researchers (Cobb et al., 1991; Francisco, 2013; Levenson, 2013; Li, 2012; Tall, 2011; Webb, 1991; Wood & Sellers, 1997) and as a result, have contributed to shaping mathematics reform efforts in many countries around the world (e.g. Ministry of Education in Taiwan, 1993; National Council of Teachers of Mathematics, 1989). Over the past two decades, the aspect that emphasises a focus on classroom talk to encourage students to construct concepts, rather than being taught by their teachers, is not new (Alexander, 2008; Gillies, 2014; Hennessy, 2014; Li, 2011; Sonmez & Lee, 2003). Furthermore, the idea of children as social learners, has resulted in different terms and concepts being used to express the importance of the social dimension of children learning; for example, “discovery-learning” (DL), “inquiry-based learning” (IBL) and “problem-based learning” (PBL). These terms have resulted in pedagogically equivalent teaching methods, which have no “clear-cut distinguishing features” (Hmelo-Silver, Duncan, & Chinn, 2007, p. 100).
They are “sometimes even said to be synonymous” (Maaß & Artigue, 2013, p. 781).

It is worth repeating here that DL, IBL and PBL shared similarities by emphasising on “student-centered work with cognitive activation and autonomous thinking” (Maaß & Artigue, 2013, p. 781). Goodchild, Fuglestad, & Jaworski (2013, p. 395) stated that they all highlight “a dialectical process between the engagement of individuals”. A number of researchers have also pointed out that an engagement in the learning process to enhance students’ understanding is essential in these approaches (Bruder & Prescott, 2013; Reeve et al., 2004; Turan, Elicina, Odabasia, Warda, & Sayekb, 2009). Nevertheless, differences in the nature of each approach were also noted by several researchers. For example, Hmelo-Silver et al. (2007) argued that IBL and PBL with DL should not have been conflated, since DL largely involved instances of minimally guided instruction, whereas IBL and PBL employ extensive “scaffolding” to emphasise the teacher’s role as a facilitator rather than as an observer. Hmelo-Silver et al. (2007) also contended that IBL and PBL were different because they had different origins.

In a word, central to these approaches is the emphasis on student-centred learning environment. That is, in addition to “knowing that”, “knowing how” is particularly emphasised since “knowing how” requires learners to take responsibility for their own learning (Barrows & Tamblyn, 1980). In this way they conjecture, explain and justify their methods through dialogue and communication with others. Student-centred methods, though, by no means suggest shifting all responsibility onto the students and abandoning the teacher; rather it changes their roles in the classroom. This means the teacher’s role as “instructor” changes to “facilitator”, while the student’s role as “recipient” changes to “constructor” (Greening, 1998). In essence, then, teachers take less responsibility for transmitting material, but more for planning and organising learning situations that give sufficient opportunities for exploration, articulation and reflection, while they support the students’ learning activities (Stein, Engle, Smith, & Hughes, 2008).

3. A controversial issue on student-centred methods – effective or ineffective?

One key feature of student-centred methods is its completely different approach to traditional pedagogies. Its great strength, as explained earlier, is to provide students with more opportunities to construct knowledge meaningfully (Pape, Bell, & Yetkin, 2003). Maaß and Artigue (2013, p.781) also noted that one aim of a more student-centred approach to learning mathematics is to promote “a learning culture in which students are invited to work in ways similar to how mathematicians and scientists work”.

Nevertheless, it is argued that, when adopting student-centred methods, it is difficult for teachers to be sure that all students develop necessary, or useful, skills, hence it is considered by some researchers to be ineffective when compared to direct instruction (Kirschner, Sweller, & Clark, 2006; Muijs & Reynolds, 2001; Noddings, 1990). Some stated that a constructivist approach overemphasises the acquisition of conceptual knowledge and problem solving at the expense of skills mastery (Aulls,
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2002; Geary, 1994; Kirschner et al., 2006). For example, Aulls (2002) observed that many teachers implementing constructivist activities ended up by providing considerable guidance, because the students had learned so little from the constructivist approach.

Traditionally, teachers are expected to “pass facts, rules, or action sequences on to students in the most direct way possible” (Moore, 2005, p. 227) and an active, engaged learner is one “who sits up, makes eye contact, and nods his/her head to indicate understanding” (Goeke, 2009, p. 37). Goeke (2009) stated further that observable changes in performance are considered to be indicators of learning. While teacher-directed instruction has strengths and presents certain advantages (Varghese, 2009), students taught in this way are likely to be “memorizing and recalling facts” which can easily lead to “rote-learning” without developing deep and conceptual understanding (Zakaria & Iksan, 2007, p. 35).

Student-centred methods also, can be both effective and ineffective, depending on what feature is emphasised and results from several reviews of research in medical education have been varied (Albanese & Mitchell, 1993; Colliver, 2000; Hung, 2011; Koh, Khoo, Wong, & Koh, 2008; Neville, 2009; Savery, 2006; Vernon & Blake, 1993). Neville (2009, p.1), for instance, concluded that “graduates of PBL curricula demonstrate equivalent or superior professional competencies compared with graduates of more traditional curricula”, while Colliver (2000, p. 259) reported that there was “no convincing evidence that PBL improves knowledge base and clinical performance”. Albanese and Mitchell (1993) considered that traditional curriculum medical students performed better in the acquisition of basic science knowledge, while PBL students performed better in the acquisition and reasoning of clinical knowledge.

Some researchers in mathematics education found that the groups who received PBL-aligned practices performed better in mathematical reasoning, communication, long-term retention and ability to apply new material, than groups who received teacher-centred practices (Chianson, Kurumeh & Obida; 2011; Li & Tsai, in press; Wirkala & Kuhn, 2011). However, Ewing (2011) and Pearson (2009) asserted that the practices largely comprised of teachers’ direct instruction were the most effective approach to high achievement in mathematics. These findings suggest that it is necessary to differentiate between “achievement goal orientation” and “performance goal orientation”. In the literature, the former is identified as being “task involved” (Eccles & Wigfield, 2002), “learning oriented” (Dweck, 1999) and “mastery focused” (Skaalvik & Skaalvik, 2002), while the latter is characterised as being “ego involved” (Ames, 1992), “performance oriented” (Harackiewicz et al., 2002) and “ability focused” (Pintrich, 2000).

Linnenbrink (2005) described that “achievement goal orientation” focuses on developing competence, while “performance goal orientation” aims to demonstrate it. Whereas early work (e.g. Dweck, 1986) conceptualised that achievement and performance goal orientations were bipolar continuums, Button, Mathieu and Zajac (1996, p. 28) suggested that they are separate dimensions that are “neither mutually exclusive, nor contradictory and [that it] depends on the strength of situational conditions”. Indeed, in line with Button et al. (1996), we believe that teacher-centred and traditional teacher-centred approaches pursue different goal orientations – the
former focusing on “achievement goal orientation”, the latter on “performance goal orientation”.

The answer to the question of whether student-centred methods is more or less effective than traditional approaches, therefore, seems to be, as Albanese and Mitchell (1993, p. 56) put it, if one method is “simply another route to achieving the same product, why bother”. Some researchers have also argued (e.g. Bruder & Prescott, 2013) that instead of identifying which is more effective, it would be more productive to research the implementation of student-centred methods in terms of what actually happens in classrooms, and whether it has a positive effect on students’ understanding concepts in order to assess whether student-centred methods can be effectively applied in education.

4. Conclusion

As Schoenfeld and Kilpatrick (2013) argued, the likelihood of implementing student-centred pedagogical approaches in the US was small due to the considerations of preparing students for particular tests in the different states. Similarly, also, McGee, Wang and Polly (2013) stated that teachers in the US often consider student-centred approaches contradicted the culture of standardised tests in mathematics education, which makes it difficult to introduce reform. Although teacher-centred mathematical instruction may produce good test achievements, it often fails to develop students’ ability to function in the real world (Engeln, Euler & Maass, 2013). Huang (2004) strongly criticised such mathematics teaching in Taiwan, which, he believes, leads to “rote-learning”. Li and Tsai (in press) provide evidence to show that PBL has positive effects on longer-term knowledge retention. They further argued that mathematics teaching should incorporate an inquiry-based and student-centred pedagogy in order to lead students towards greater proficiency. We will conclude this paper, therefore, by referring to a quote from Tsai and Li (in press): “the successful transition to the information age from the industrial age requires us to address specific challenges in the area of education and learning. In particular, schools need to help students develop 21st century learning skills”, and, by so doing, as Murray and Savin-Baden (2000) put it, contributing to their country’s economic growth.

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Everybody values education, but I am disgusting with teaching: An exploration of teachers’ perception of job satisfaction

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Abstract
Albeit the concept of job satisfaction is well entrenched in business and management research studies, there is a vacuum and piecemeal approach into educational settings. The factors determining job satisfaction of teachers are inclined to country-culture specific nature thereby this study was designed to unearth teachers’ perception of job satisfaction from a neglected social and cultural milieu. Anchored in philosophical assumptions, this research adopted interpretivist-inductive approach. Using a purposive sampling technique, a total of twenty three informants was chosen from the teaching profession and the required data were garnered from semi-structure interviews. This study found the factors determining teachers’ job satisfaction, viz., economic conditions, relationship with principals and colleagues, students’ behaviour, loosen policy towards students’ discipline, responsibility of parents, salary, teaching facilities, working environment, teachers training, teacher transferring policy, school holidays, familiarity with teaching, promotion policy, educational policies and status in society and those subsumed into tripartite form: cultural factors, economic factors, and national factors. This study unequivocally contributed to the frontiers of teachers’ job satisfaction literature and flagged up the avenue for the future research.

Keywords: Teachers’ job satisfaction, Educational settings, Country-cultural factors

1. Introduction

Education is crucially important for the economic development and sustainability of a country (Little & Green, 2009) and the extant literature on teaching and teacher education flagged up an intriguing interest in the motivational aspect in teachers (Korthagen & Evelein, 2016). In Sri Lanka, the prevailing national education system called “a scheme for free education” was promulgated by Dr C.W.W. Kannangara, the first Minister of Education in the State Council of Ceylon, with a view to facilitate an equal educational opportunity for all children from all levels of society regardless of any discrimination. The administration of the educational sectors in Sri Lanka is governed by the national and provincial policies, regulations and the laws. Apropos of assessment of students performance, but for the continuous terms based assessment at school levels, students’ performance at national level have been assessed in a tripartite phase: the Grade 5 Scholarship Examination; the General Certificate of Education / Ordinary Level (GCE/OL) examination at Grade 11; and the
General Certificate of Education /Advanced Level (GCE/AL) examination at Grade 13 and their performance generally allude to teachers’ satisfaction and rigorous pedagogy (e.g., Ma & MacMillan, 1999).

Teacher job satisfaction is of great importance for the welfare of teachers, students and the schools (You, Kim, & Lim, 2017; Tygret, 2017) thereby received magnificent attention. Teachers’ job satisfaction is about how they feel coming to work each day (Taylor & Tashakkori, 1995). Renowned scholars pointed out that teachers in most schools were not satisfied with their job (Anari, 2012) and of late, many graduates are not willing to joining in teaching profession owing to the continuous transformation in the educational system. It is also ideated that the majority of teachers would not satisfy with their job and ipso facto thinking of leaving the job if any other opportunities come along (Buchanan et al., 2013; Litt & Turk, 1985).

Teachers in developed economies are well qualified and trained (Towse, Kent, Osaki, & Kirua, 2002), nonetheless, teachers in developing countries are not necessarily trained (Lockheed & Verspoor, 1991) instead they are mostly, directly appointed after being graduated. Throwing them in at the deep end, no matter how skilled, they may become highly dissatisfied and consequently, they turn into an apathetic mood in backing and enhancing the educational attainment of students. In addition, penetration of globalisation and cutting-edge information technology into educational system would be dissatisfying factor for those who are reluctant in adopting those new changes.

What was the thrust of the argument is that variations in culture and economic conditions of the country might influence the satisfaction of employees of that particular country. For instance, in terms of Hofstede’s cultural framework, Sri Lanka is a large power distance country. The power distance is “the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally” (Hofstede, Hofstede, & Minkov, 2010, p.61). Moreover, Hofstede et al. (2010) suggest that unequal relationships between superiors and subordinates and hierarchical systems are more prevalent in a large power distance country. The hierarchical system engenders large numbers of supervisory personnel and the boss is a benevolent autocrat or “good father”.

Moreover, in a large power distance country, subordinates are more dependent on superiors and thus they are often afraid of disagreeing with them. The relationships between superior and subordinate are emotional. Thus, the employer-employee relationship is said to be basically moral like a family link, and thus relationships prevail over tasks. Therefore, organisational factors such as work support; superior subordinate relationships and higher dependency would be typical in Sri Lanka and potentially influence satisfaction of teachers. Evidencing that Klassen, Al-Dhafrri, Hannok, and Betts (2011) suggest the relationship between teachers and students are anchored in socially recognised power distance attitudes. For instance, in well developed nations, students call the name of the teachers, nonetheless, in the high power distance country, students do not call the name of the teachers instead calling salutation “madam/sir”. Therefore, teachers and students were embedded in a hierarchical interaction and students respect teachers. In addition, in developing nations, due to the economic development and soaring up unemployment level, graduates satisfy if they get any job at the beginning. Nonetheless, in developed

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nations, graduates have plenty of employment opportunities and even if they are unemployed, they will get unemployment benefits/dole. Therefore, teachers working in developing countries would easily get satisfied with the job at the beginning of their career but they may start dissatisfying their job while on the job.

Many research studies flagged up that job dissatisfaction of teachers afflicts not only the well-being of teachers (e.g., Akhtar, Hashmi, & Naqvi, 2010) and but also deleterious factor devastating students’ performance (Tygret, 2017), quality of education, a sustainable educational system of the country, most notably social nexus and its values. Furthermore, no studies have been carried out for looking at perceptions of teachers’ job satisfaction in Sri Lanka and the bereft of studies in Asia (e.g., Zembylas & Papanastasiou, 2004). Anchoring in all aforementioned facts, this study aims to explore teachers’ perception of job satisfaction and the factors affecting their satisfaction in Sri Lanka.

2. Theoretical framework

Regardless of the age of the definition, the most commonly accepted view was put forwarded by Locke (1969) that the job satisfaction is “the pleasurable emotional state resulting from the appraisal of one’s job as achieving or facilitating one’s job values” (p. 316) and the definition has been cited in many recent research studies (e.g., Limpanitgul, Jirotmontree, Robson, & Boonchoo, 2013; Ma & MacMillan, 1999; Sang, Ison, & Dainty, 2009; Weiss & Cropanzano, 1996). Albeit there is no universal definition of the concept of job satisfaction (Oplatka & Mimon, 2008), job satisfaction is generally a feeling of happiness (Akhtar et al., 2010) and those who satisfied stay on the job for longer. Distinguished research scholars looked at the job satisfaction through distinct lenses: subjective feelings towards the likes of their job (Griffin, Hogan, Lambert, Tucker-Gail, & Baker, 2010; Muchinsky, 2000); attitude towards the job (Brayfield & Rothe, 1951); the degree of satisfaction of the needs that job offer (Lambert, Hogan, & Barton, 2002; Tewksbury & Higgins, 2006). In the light of those research scholars, teachers’ job satisfaction is about the positive feelings and attitudes of teachers towards their job.

Job satisfaction is a crucial factor cultivating positive outcomes: increased performance (e.g., Abdullah, Uli, & Parasuraman, 2009; Judge, Thoresen, Bono, & Patton, 2001; Lambert et al., 2002); increased commitment (e.g., Nguni, Sleeers, & Denessen, 2006; Noordin & Jusoff, 2009); lower the absenteeism (e.g., Okaro, Eze, & Ohagwu, 2010); boosting creativity (e.g., Judge et al., 2001; Sharma & Jyoti, 2009); lower turnover (e.g., De Nobile & McCormick, 2008; Griffin et al., 2010; Oshagbemi, 2003); mental wellbeing (e.g., Eyupoglu & Saner, 2009; Klassen, Usher, & Bong, 2010; Rutebuka, 2000). Although the crux of the argument is that teachers’ job satisfaction dispense benefits to teachers, students (Bishay, 1996; Hurren, 2006) and organisations (Gupta & Gehlawat, 2013) and society en masse (Eyupoglu & Saner, 2009), the upshot of the antithesis of job satisfaction can bode ill for all those positive outcomes.

Studies on teachers’ job satisfaction have been carried out mostly in developed countries (Koustelios, 2001), nonetheless, a few studies were conducted in developing
countries (e.g., Abdullah et al., 2009; Keung-Fai, 1996). Many of the studies on teachers’ job satisfaction have applied the model developed in Western culture and those adopted quantitative technique using facets of job satisfaction: work itself, pay, and opportunities for promotion, supervision, working conditions and colleagues (e.g., Abdullah et al., 2009; Keung-Fai, 1996; Monyatsi, 2012). For instance, Abdullah et al. (2009) found that teachers in Malaysian secondary schools were satisfied with the work itself, relationships, promotion and supervision, however, on the contrary, dissatisfied with their salaries and working conditions. In a similar vein, Keung-Fai (1996) applied a Job Descriptive Index questionnaire and found that teachers’ in Hong Kong highly satisfied with their salaries and promotional opportunities mostly in government schools. Notwithstanding, it can be ideated that the components of job satisfaction of teachers may be distinctive alluding to country-culture specific factors. Consequently, this study was designed to address the lacuna in the extant theoretical framework that what factors contributing to the teachers’ job satisfaction in a neglected cultural milieu, Sri Lanka.

3. Methods

3.1 Subjects and Sampling

This study was designed to explore the nature and factors of job satisfaction from the teachers’ vantage point. A sample of 23 teachers was drawn from Government funded schools located in the Northern part of Sri Lanka. The informants consisted of 13 female teachers and remaining 10 were male teachers. The purposive sampling technique was employed for selecting the informants.

3.2 Instruments

Albeit job satisfaction of teachers was well established in developed world, a few studies are in support of developing world. Nonetheless, those studies conducted in developing countries have applied the models and theories which were originally developed from the studies in developed countries. Consequently, this study has employed semi structured interviews as that concur with intended purposes. Moreover, semi structured interview is most popular and an intermediate method preferred by educational researchers (Hitchcock & Hughes, 1995). Semi structured interviews provide not only opportunities for open discussion on the main features where researcher would be able to clarify any unclear concepts but also support to stay the focus on the phenomenon enquiring. Semi-structured questions blended with open ended and closed ended questions. Open ended questions offered a better place to discuss interviewee’s job satisfaction and the factors affecting their satisfaction. Sample items include: Do you satisfy with being a teacher? What factors you think that causes dissatisfaction at work? If you got an opportunity to move to another job, would you be willing to take up? In adherence to the notion of Merriam (2009), all interviews were conducted in Tamil and then transcribed and finally translated into English by the researcher himself, who is native speaker (Tamil) with significant knowledge of the context and then the results were confirmed using backward translation technique.
3.3 Mode of Analysis

A thematic content analysis was employed for analysing the transcripts. “A theme refers to a specific pattern found in the data in which one is interested” (Joffe & Yardley, 2004, p.57). Based on the strong theoretical ideas, themes are brought to the data in coding and thus, the coding is to be said “Deductive coding”. Nonetheless, the nature of the coding can be conjoined with “manifest” and “latent” content of data using NVivo 10. Dependability and validity of the data (leading questions and cumulative validation) were also confirmed.

4. Findings and discussion

Twenty three key informants made of this study where thirteen of them were females and the remaining ten were males. They were unique informants per se emanated from varying age groups, years of experience, educational qualifications and gender. The highest number of informants fell between 30-40 age group (N=10), followed by eight informants (N=8) between 40-50 and the remaining five informants (N=5) were over 50 age group. Average years of experience were 18 years.

4.1 Factors determining teachers’ job satisfaction

At the outset, the informants at large were asked to articulate their general satisfaction towards their teaching profession. It was the opinion of the majority of teachers interviewed that they were generally satisfied with their job owing to having a job, inter alia the doom-laden economic status of the country and the resultant mounting unemployment. One of the key informants’ extracted verbatim quote:

“It is very difficult to get any job, reminded me the recent long-lasting graduates protest against the government. I would say I am satisfied cos finding any job is like a wild goose chase” (Interviewee 4)

Informants were asked to explain the factors contributing to their (dis)satisfaction with their job. Anchoring in all information garnered from the informants interviewed, factors, viz., factors, viz., Economic conditions, relationship with principals and colleagues, students’ behaviour, loosen policy towards students’ discipline, responsibility of parents, salary, teaching facilities, working environment, teachers training, teacher transferring policy, school holidays, familiarity with teaching, promotion policy, educational policies and status in society were en bloc identified contributing to their (dis)satisfaction.

More than two-thirds of teachers interviewed expressed satisfaction over their relationship with principals and colleagues. They expressed that principals are supportive, flexible, motivation, understanding, and friendly, nonetheless, they are stringent towards school rules and regulations. For instance, an informant’s expression is noted underneath:
“...Hand on heart I am satisfied with my job. My principal is very generous and really helpful. He absolutely understands our problems. He arranges regular meetings and listens to our views and thoughts, He is an exemplar for others... My colleagues are very supportive. I am enthusiastic and willing to put all my efforts for the development of the school.” (Interviewee 8)

Sri Lanka is a large power distance country thereby respecting their supervisors is the hallmarks of that particular culture as well. Employees would be reluctant in disagreeing with their superior, notably their relationship goes beyond the school gates.

“I get along famously with my principal and colleagues. They are really helpful as and when needed. I would say we are extending our relationship beyond the school. They attend our family celebrations/functions, let say birthday party, wedding, puberty, house-warming or take part in any grief” (Interviewee 21)

In Sri Lanka, principals have been mostly appointed through general competitive examination and the most succeeded applicants were the young representing a vast pool of principals than experienced teachers. This nature of reality incubates conflicting cultural values embedded in the society (respecting elders) and the culture at the workplace (power distance):

“I am 52 years old having almost 30 years experience. I am still a head teacher. My principal was born the year I joined teaching services. Nowadays, government neglects the experience of teachers and their qualifications in appointing principals. I personally feel merely an exam do not pick the talent. They need experience. I would say my principal is immature in all aspects.” (Interviewee 17)

Besides, they castigated having a competitive examination for determining higher level of promotion and casting aside the experience and qualification of them.

A close rapport between teachers and students were found to be an overriding factor determining teachers’ job satisfaction. Three-quarters interviewed dissatisfied with their relationships with students and put forward cogent reasons: insubordination of students, parents’ ignorance towards their children, existing wobbly disciplinary practices/actions, disgusting attitudes and poor performance. One of the teachers expressed:

“I have been teaching for 20 years and pupils were well disciplined who were in 15 years back. We used to get the cane to control and change the behaviour of the pupils. Now punishing pupils with a cane is a criminal offence. So, I don’t care about the pupils, just I am teaching and I get paid. The behaviour of pupils is now absolutely repugnant. Due to lack of mechanism in Sri Lanka, pupils’ behaviour and the culture would be in serious
trouble in foreseeable future. Policy makers should attach magnificent consideration on this” (Interviewee 19)

Another informant’s verbatim quote:

“There are students who are quite talent...... but I am very dissatisfied with the majority of the students’ performance and their behaviours are going from bad to very worse. While I am teaching, some students were chatting, refuse to listen and show a lack of respect.....” (Interviewee 5)

Moreover, around half interviewed were not satisfied the onus of parents towards their children. They said that parents do not continuously monitor their children’s academic progress, their performance and the behaviour of them. In addition, the majority of parents were not attending the parents’ meeting as well. One of the informants clearly expressed his view:

“Parent attendance for regular meetings is very weak even we officially inform the meeting in advance. They don’t care about their children. It is ridiculous blaming on us for their children’s poor performance. I am really not satisfied with teaching, nothing encouraging me to firing on all cylinders” (Interviewee 13)

Majority of informants interviewed expressed that the salary they earn is not sufficed to run their family. They feel the income they earn is not commensurate with the work they put in. They compared their friends’ earnings and evidenced the yawning gulf at some point. For instance, a male teacher:

“Salary I earn is not sufficed, just make both ends meet. I cannot save anything from my salary. My wife is a housewife looking after household chores and children....I am dissatisfied as being a teacher owing to salary. My friends working in other government organisations earn more than I earn. Salary is not commensurate with the work they put in.... You know as a teacher I spent time even at nights for preparing notes!!” (Interviewee 1)

Teachers were also asked, “to what extent they are satisfied or dissatisfied with teaching facilities?” The majority stated that they have a lack of teaching facilities: unavailability of IT facilities, library with grandma books, poor sanitation, no facilities with staff room, lack of maintenance etc. They said that they still use chalk and board limiting their teaching excellence. They opined that they do not have any access to surf the net. Nowadays, internet and email are the part and parcel of any job required for keeping abreast of recent changes and sources of information and chalk and board is no longer valid.

“.we see technological development everywhere. Most advanced countries teachers teach in aid of computer and other technological devices. You know nowadays, we can get whatever
The teachers interviewed showed their dissatisfaction on the working environment. Clearly, they emphasised that they are not happy about the classroom, loos, staff room, scarcity of resources, time taken for commute, and clean water and sanitation, etc. One said that at a conservative estimate, 40 students packed into a small classroom. They articulated their difficulties at delivering excellent teaching and looking after each student individually.

In a similar vein, more than half of interviewed stated that they are compulsorily required to attend workshop/seminars but those training programme is not worth at all. They further added most of the resource persons are not good at delivering and contents are not new. There is no point reinventing the wheel. In addition, their grave concern is over the inappropriate time of the training programme. More precisely, all training programmes usually arrange after the school in that they are exhausted and they really feel they need to unwind.

Many a teacher shows anxiety over transfer from school to school. They said that they can only work for seven years in a particular school and then they would be placed in another school. They further expatriated upon that transferring to a new school is a new environment, new colleagues, new pupils, to wit everything new.

“I hate teaching cos every seven years I get transferred. Before I get used to a particular environment I will be transferred to another school. It hardly has friends longer. Sometime I will be placed far away. Travelling would cause problems. Importantly, of late, they have advanced the school beginning time at 7.30 from 8.00. It is really disgusting....”(Interviewee 11)

The teachers interviewed emphasised their satisfaction on the number of school holidays. They opined that teaching has a notably high number of holidays (three terms during a year) vis-à-vis other professions. Extracted verbatim quote:

“We have a lot of holidays helping us to unwind from hectic academic activities. I feel it is our privilege” (Interviewee 7)

Moreover, a few informants expressed their satisfaction owing to the experience on the job and they said that they got used to teaching. One of the informants expressed:

“I am working for more than twenty years. I really love teaching...I feel as I am teaching to my children. It is my experience.” (Interviewee 2)

Besides teaching responsibilities, they take up curricular and extracurricular responsibilities, social responsibilities and school administrative tasks. In addition, they said owing to the transformation in the education system in the recent past, teachers have been struggling to cope with those changes. For instance, writing lessons using Five Es model (Engagement, Exploration, Explanation, Elaboration and
Evaluation) and note book writing seems to be pressurising their work. They surmised that they dissatisfied with the recent soaring up responsibilities. A female teacher said:

“...At nights I am writing lessons rather than preparing notes for teaching tomorrow. In the mornings before leave to school, I am looking after household chores. In school, I deliver three classes [36 lessons per week] consecutively. I am really exhausted during school days”. (Interviewee 20)

Twenty teachers’ interviewed felt very proud of being teachers. They hold their head high owing to the status in society.

“Neighbours respect me because I am a teacher. Everywhere I go they confer respect. I feel teaching has its own dignity in society distinguishing from other government jobs” (Interviewee 13)

5. Conclusion

This study found that economic conditions, relationship with principals and colleagues, students’ behaviour, loosen policy towards students’ discipline, responsibility of parents, salary, teaching facilities, working environment, teacher training, teacher transferring policy, school holidays, familiarity with teaching, promotion policy, educational policies and status in society are determinants of job satisfaction of teachers in Sri Lanka. Albeit the majority of the factors were found to be determinants of job satisfaction were also reported in the previous seminal research studies: relationship with Principals and colleagues (e.g., Akhtar et al., 2010; Bernal, Castel, Navarro, & Torres, 2005; Platsidou & Agaliotis, 2008; Zembylas & Papanastasiou, 2006; You et al., 2017); Students (e.g., Perrachione, Rosser, & Petersen, 2008); relationship with parents (e.g., Perrachione et al., 2008); salary (e.g., Abdullah et al., 2009; Koustelios, 2001; Shah et al., 2012); promotion opportunities (e.g., Achoka, Poipoi, & Sirima, 2011; Mhozya, 2007; Zembylas & Papanastasiou, 2006); Work environment (e.g., Ari & Sipal, 2009); School holidays (e.g., Mhozya, 2007); Status in society (e.g., Shah et al., 2012), this study unequivocally made geographical and parametric contributions to the frontiers of teachers’ job satisfaction literature. In a nutshell, this study revealed that cultural factors (such as power distance, respecting the elders, and filial piety) economic factors (such unemployment rate) and national factors (such as educational policy and infrastructure) determine teachers’ job satisfaction. Therefore, this study underscores the importance of country-culture specific factors for understanding a holistic nature of job satisfaction among teachers and becomes a springboard for future research studies.

References


Examining the effect of High-Performance work Practices on Employee attitudes: Evidence from Hotel industry in the post war context in Sri Lanka

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Abstract

This study examined the effect of High-Performance work practices on Employee attitudes in hotel industry of Sri Lankan context. Questionnaire was used to collect the data. Purpose of the research was discussed with participants. Initially discussion was conducted with 200 employees who voluntarily participated in this study from Hotel sector, finally 175 participants agreed to fill out the questionnaire. Of the selected sample 150 questionnaires was complete and usable for this study. Correlation and regression analysis was performed to test the hypothesized relationship. Findings of the study indicated that Employees’ perception of high-Performance work practices positively related with intention to remain with organization, further study found positive relationship between employees’ perceptions of high-performance work practices and affective commitment; furthermore, study found that affective commitment mediated the relationship between high performance work practices and intention to remain with organization.

On the basis of these findings, managerial implications of the study and future research direction were highlighted.

Keywords: High-Performance work practices, Employee attitudes, Affective commitment, Intention to remain with organization, Hotel industry.
1. Introduction

Organizations face high competition with their competitors in the contemporary business world. Within unstable and competitive environment, organizations implement effective strategic plans to achieve competitive advantages in a highly competitive environment. Human resource is vital in achieving organizational goals and the contemporary world is aware of this importance. High competition and talents for employee has led to focus on Potential benefits of using high-performance work systems (HPWS) as a means to maximize firms’ competitive advantage in the competitive environment (e.g., Sun, Aryee, & Law, 2007, Guthrie, 2001; Huselid, 1995). Huselid,(1995) pointed out that human resource practices that strategic human resource management (SHRM) theorists consider performance enhancing are known as high-performance work practices (HPWPs).

Bohlander and Snell, (2004), define HPWS that a specific combination of HR practices, work structures, and processes that maximize employee knowledge, skill, commitment, and flexibility. According to Huselid, (1995) and Pfeffer, (1998) high-performance work systems (HPWS) referred to interconnected human resource management practices, including comprehensive recruitment and selection procedures, incentive compensation and performance management systems, flexible work arrangements and extensive employee involvement and training, which are designed to enhance employee and firm performance outcomes through improving workforce competence, attitudes, and motivation.

Most of the strategic human resource management (SHRM) theory emphasized that these practices increase employees’ knowledge, skills, and abilities (KSAs), empower employees to leverage their KSAs for organizational benefit, and increase their motivation (Becker & Huselid, 1998; Delery & Shaw, 2001). Thus the result is greater job satisfaction, lower employee turnover, higher productivity, and better decision making. Many previous HR researches (Lawler, 1992, 1996; Levine, 1995; Pfeffer, 1998) has studied on high-performance work systems, a term used to denote a system of HR practices designed to enhance employees’ skills, commitment, and productivity in such a way that employees become a source of sustainable competitive advantage.

The hotel industry that selected in this research was chosen precisely because Sri Lanka is known as the pearl of the Indian Ocean and also very popular destination for tourists. The country is blessed with the placement, the natural beauty and the culture which would be the key features for a destination to have successful and a thriving tourism industry (Sri Lanka tourism development authority, 2011).Tourism is the fourth biggest foreign income earning sector in the country behind the labor remittances, apparel exports and tea export (Annual report central bank of Sri Lanka, 2011).Thus HR practices designed to enhance employees’ skills, commitment, and productivity, intention to remain with organization in such a way that employees become a source of sustainable competitive advantage in the tourism industry is vital for the success.

Many previous authors (e.g., Huselid, 1995; Wright, McCormick, Sherman, & McMahan, 1999; Wright, McMahan, &McWilliams, 1994; Bowen and Ostroff, 2004; Nishii, Lepak, and Schneider, 2008; Kehoe, and Wright, 2013) have studied the
association between HR practices and outcomes and they have congregated in their belief that HR practices are associated with organizational outcomes throughout their influence on employee attitudes and behaviors. However, the assumption that HRM systems impact employees’ attitudes and behaviors, as well as firm performance, through various social processes has remained largely untested (Takeuchi, Chen, and Lepak, 2009).

The previous empirical investigations on high performance HR practices to employee outcomes are consistent with previous SHRM research and they contributed valuably to our understanding of the initial steps of the HR-performance causal relationship. However, additional work is still needed to assess the role of employees’ perceptions of HR practices in determining their attitudinal and behavioral outcomes (Nishii & Wright, 2008); and outcomes of employees’ attributions of HR practices, (see Nishii, Lepak, & Schneider, 2008).

In light of these extant research needs, this study extends to what extent existing conceptualization of high performance HR practices or system to employee attitudes are adequate in Sri Lankan context in the post war context, where Tourism industry make considerable contribution to the economy and adopting High performance work system are emerging in the post war context. Thus, the objectives of this study are examining the relationship between employees’ perceptions of high-performance HR practice and how it will impact on their attitudinal (such as affective commitment). From here, researcher present theoretical model, and discuss the employed methodology in testing the predictions, and report the empirical results. Finally, researcher concludes by discussing the implications of the research findings and by proposing possible directions for future research in this vein.

**Theory and Hypotheses**

Human resource is the most important asset in a service organization than manufacturing organization (Boselie & Wiele, 2002) and strategic human resource management “the pattern of planned human resource deployments and activities that are intended to enable an organization to achieve its goals” (Wright & McMahan, 1992, p. 298).

Most of the previous strategic HRM literature (Huselid, 1995; Lepak et al., 2006; Lepak & Snell, 2002) confirms in such way that the concept of HPWS has emerged as a core construct encompassing the extent to which firms invest in the attraction, selection, management, and retention of the best possible human capital. Takeuchi, Chen, and Lepak, (2009) conclude that HPWS are indicative of the value firms place on their human capital as a source for competitive advantage, with higher HPWS levels indicative of greater value firms place in their human capital.

According to behavioral perspective, the firms rely on HR practices, such as HPWS, to elicit and control certain employee role behaviors and attitudes (Jackson et al., 1989). However, the relationships between HPWS and employee-level outcomes may not be direct (Takeuchi, Chen, and Lepak, 2009)
Delery and Shaw (2001) in their study state that there is growing acceptance of the resource-based view as the main rationale for the link between human resource management practices and firm performance. There is general agreement that: (1) human capital can be a source of competitive advantage, (2) that HRM practices are the most direct influence on the human capital of a firm, and (3) that the complex nature of a coherent HRM system of practices can enhance. Further they state at least two major features distinguish SHRM research from the more traditional HR management (HRM) practice research. First, SHRM studies have focused on explicating the strategic role that HR can play in enhancing organizational effectiveness. A second distinguishing feature is the level of analysis. HRM practice research has traditionally had an individual-level focus; in contrast, SHRM research is typically conducted at the business-unit or organizational level of analysis. Reflecting this direction, recent HR research has focused on high-performance work systems, a term used to denote a system of HR practices designed to enhance employees’ skills, commitment, and productivity (Lawler, 1992, 1996; Levine, 1995; Pfeffer, 1998).

Although recent studies have considered various employee attitudinal and behavioral outcomes of high-performance HR systems, research remains scarce explicitly examining, in the same study, the impact of HR practices on both these outcomes. Thus, the causal sequence by which high-performance HR practices are likely to affect key employee attitudes and then employee behaviors requires further theoretical and empirical attention. Specifically, this study consider the attitudinal outcome of affective organizational commitment and the behavioral (or behavior-oriented) outcomes of intent to remain with the organization, for a number of reasons—namely, their relevance, importance, and generalizability (Kehoe, and Wright, 2013).

This study falls based on the following arguments. First, high-performance HR systems rely on the creation of a mutual investment based employment relationship, wherein an organization invests in workforce skills and opportunities and, in turn, expects employees to be qualified and motivated to make valuable work-related investments in the organization (Huselid, 1995). Second, affective commitment reflects a likely attitudinal consequence of this type of positive mutual social exchange from the perspective of an employee. Third, organizational citizenship behaviors, intent to remain with the organization, and attendance at work (the opposite of absenteeism) likely represent behavioral manifestations of employees’ affective commitment to the organization, thereby suggesting relevance of these outcomes to a high-performance HR approach (Kehoe, and Wright, 2013). As suggested by (Johnson et al. 2002), affective organizational commitment or emotional attachment to an organization and continue organizational commitment, or tendency to maintain organizational membership because of the perceived high cost of discontinuing membership were included in the present study.

**High-Performance HR Practices and Affective Commitment**

Three-component model of organizational commitment (Allen and Meyer, 1990) conceptualizes commitment in three dimensions: such as affective, normative, and continuance commitment. Three-component model has been supported by factor
analyses (cf. Meyer, et al. 2002) and study confirmed that the three components relate differently to various antecedents and consequences. According to the model of organizational commitment, which was developed by Meyer and Allen, (1990; 1991) refers affective commitment, in such way that the affective component refers to employees” emotional attachment to, identification with, and involvement in the organization.

For the purpose of this study, researcher focuses on affective commitment—or positive affection toward the organization, as reflected in a desire to see the organization succeed in its goals and a feeling of pride at being part of the organization (Cohen, 2003)—and consistent with previous research (Kehoe, and Wright, 2010; Meyer et al., 2002) researcher focuses affective commitment for several reasons. First, affective commitment has been shown to be affected by employees’ work and organizational experiences. Second, As pointed out by Meyer et al., (2002), affective commitment has been demonstrated to relate strongly and consistently to desired work outcomes, (such as low absenteeism and organizational citizenship behaviors) and its role as a key linking mechanism between high-performance HR practices and higher level performance outcomes has been supported by previous research, (e.g., Gong et al., 2009).

As suggested by social exchange theory, individuals are drawn to participate and invest in rewarding relationships, after which they become bound to return benefits or favors to their partners in exchange (Blau, 1983). Thus if High-performance HR practices, are implemented effectively, that are likely to cause employees to perceive that their exchange relationship with the organization is characterized by a supportive environment based on investments in employee skills, regular unbiased performance feedback, availability of fair and attractive rewards for performance—including compensation and advancement opportunities—and mutual efforts toward meaningful goals (Kehoe, and Wright, 2010) This in return, as pointed out by Cohen, (2003) employees are likely to feel an obligation to the organization’s goals and so develop an affective bond with the organization itself— which may be expressed as affective commitment. Thus for this study researcher postulate that

*Hypothesis 1:* Employees’ perceptions of high-performance HR practice will be positively related to affective commitment.

**High-Performance HR Practices and Intent to remain with the organization**

Many previous studies (Batt, 2002; Guthrie, 2001; Huselid, 1995), have been empirically linked high performance HR practices to retention and turnover. However, (e.g., Sun et al. (2007) pointed out that the underlying mechanisms of this relationship remain uncertain. Sun et al., relying on social exchange theory, examined service-oriented organizational citizenship behavior as a mediator of the high-performance HR–turnover relationship. However, the authors’ explanation relied less on the organizational citizenship behaviors and more on employees’ affective attachments that led to these behaviors. Thus, relying again on the social exchange perspective, we argue that affective commitment better explains (indirectly) the relationship between
high-performance HR practices and employees’ intent to remain with the organization (Kehoe, and Wright, 2013).

Boyle et al (1999) in their study they reported that job satisfaction had the strongest influence on intent to remain employed but also that nurse-manager leadership style directly influenced nurse intent to stay. Job stress, autonomy and group cohesion indirectly influenced nurse intent to remain employed through job satisfaction. Sourdif (2004) hypothesized that nurse intent to stay was influenced by satisfaction at work, satisfaction with administration, organizational commitment, and work group cohesion. Further, Sourdif found that work satisfaction and satisfaction with administration were the most significant predictors of intent to remain and explained 25.5% of variance in intent to remain. Thus HR Practices which implemented in the organization effectively may lead for satisfaction with work and administration and induce the commitment of the employees. Previous researchers Blau, (1983); Cohen, (2003) also confirm this such a way that effectively committed employees under a high-performance HR system are likely to hold deep bonds with the organization and feel both eager and obliged to contribute to organizational goals. Kehoe, and Wright, (2013) in their study indicate and argue that they are likely to express an intent to remain that is greater than that of less committed employees, for a few reasons. that are, employees can contribute to organizational effectiveness only as they continue their employment relationship; so, a desire to help achieve organizational goals aligns with intent to remain with the organization and employees are likely to choose to leave an organization when they think that incentives to stay no longer match the contributions they make (March & Simon, 1958). The desire to leave from the organization thus represents a form of withdrawal (Sheridan, 1985) and likely reflects a lack of emotional attachment to the organization and its goals (Kehoe, and Wright, 2013). Labatmediene, Endriulaitiene, and Gustainiene, (2007) in their study concluded that more committed employees are less intended to leave the organization than less committed employees. Further, Stallworth (2003) in his study states that affective commitment is the most important predictor of intention to leave. Thus researcher made the conclusion that more committed employees are less intended to leave the organization.

Thus, from the above literature and empirical support for a significant relationship between affective commitment and both intent to remain and turnover (e.g., Angle & Perry, 1981; Mayer & Schoorman, 1992; Ostroff, 1992; for a related meta analysis, see Harter, Schmidt, & Hayes, 2002): researcher postulate based on the perceived obligations and affective attachments of committed employees in the high-performance HR context,

**Hypothesis 2a:** Employees’ perceptions of high-performance HR practice will be positively related to intention to remain with the organization.

**Hypothesis 2b:** Affective commitment will mediate the positive relationship between high-performance HR practice perceptions and intent to remain with the organization.
Measures

Employee-level measure of HPWS

The main focus of this research is designed to assess the effects of HPWS on employee-level outcomes. Recent studies, Jensen, Patel, and Messersmith (2013) and Huselid and Becker, (2011) assessed the effects of HPWS on individual employees. This research work focused to examine the individual-level perceptions of employees in the context of HPWS. To measure employee perceptions of HPWS, a 15-item scale was utilized. The scale consisted of (a) 7 HR practice items drawn from Gould-Williams and Davies (2005) and (b) 8 items from Truss (1999), consistent with content reflecting employee skills, motivation, and empowerment. Recently, Jensen, Patel, and Messersmith, (2013) has used these scale for their study. Employees were asked to indicate on a 7-point scale (1 = strongly disagree to 7 = strongly agree) the extent to which they agreed or disagreed that each practice was being utilized. The sample items included in this study were “I am provided with sufficient opportunities for training and development”; a rigorous selection process is used to select new recruits”; the rewards I receive are directly related to my performance at work.” And the appraisal system provides me with an accurate assessment of my strengths and weaknesses”. Scale reliability \( \alpha \) for these items was .82.

Affective commitment Scale

Affective commitment was measured through a scale developed using five items that were consistent with items used in previous research (e.g., Meyer & Allen, 1997 Allen and Meyer 1990). The sample item included in this study for affective commitment was “I feel a strong sense of belonging to this organization” and “I am willing to work harder to help this company succeed and “I am proud to work for this organization”. Respondents were asked to report, on a five point likert scale ranging from 1(strongly disagree) to 5 (strongly agree) with each commitment statement; we then computed a mean commitment scale for each individual by averaging the individual’s responses to the five commitment items as computed by Kehoe, and Wright, 2013. Internal consistency reliability of these items was \( \alpha = .83 \).

Intent to remain with the organization Scale

Intent to remain with the organization was measured by using four items scale developed by Kehoe, and Wright, (2013) respondents were asked to indicate, on scale ranging from 1(strongly disagree) to 5 (strongly agree) with each statement. Sample representative items included “I plan to spend my career at this organization” and “I intend to stay at this organization for at least the next 12 months.” and “I do not plan to look for a job outside of this company in the next 6 months” Item scores were again averaged at the individual level to calculate a single “intent to remain” scale as computed by Kehoe, and Wright, (2013). Cronbach’s \( \alpha \) for these items at the individual level was .86.
Control Variables

The selection of control variables was guided by previous studies (e.g., Kehoe, and Wright, 2013; Bolton & Turnley, 2005; Lundberg & Frankenhaeuser, 1999; Nishii et al. 2008; Takeuchi et al., 2007). At the employee level, researcher controlled for job position, employment status, and gender, Level of education; age; marital status and years of Experience. By including these factors, Researcher control for the potential effects of individual demographic differences, such as gender and tenure, which might affect the way an individual, perceives commitment, intention to remain with organization. For instance, Nishii et al. (2008) note that long-tenured employees are less likely to have favorable views of the HR system; therefore, this is an important factor to control for in our model. Furthermore, Kehoe, and Wright, (2013) they controlled for job category, because

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Performance work system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective Commitment</td>
<td></td>
<td>.66**</td>
<td></td>
</tr>
</tbody>
</table>

Results

Table 1: Descriptive Statistics of studied variables (at Individual level)

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Performance work system</td>
<td>150</td>
<td>1.00</td>
<td>5.00</td>
<td>3.76</td>
<td>.61</td>
</tr>
<tr>
<td>Affective Commitment</td>
<td>150</td>
<td>1.00</td>
<td>5.00</td>
<td>4.31</td>
<td>.67</td>
</tr>
<tr>
<td>Intention to remain with organization</td>
<td>150</td>
<td>1.00</td>
<td>5.00</td>
<td>3.83</td>
<td>.84</td>
</tr>
</tbody>
</table>

different types of jobs vary in their relative desirability and likelihood of attracting committed, motivated, and diligent employees.

Source: Survey data
Correlation analyses of hypotheses are reported in Table 2. Our first two hypotheses predicted that employees’ perceptions of high-performance HR practice would positively relate to affective commitment (Hypothesis 1) and intention to remain with organization (Hypothesis 2a). Supporting Hypotheses 1 and 2a, employees’ perceptions of high-performance HR practice would positively related to affective commitment ($\beta = .66$, $p < .000$), and intention to remain with organization ($\beta = .68$, $p < .000$). Thus the hypotheses $H_1$ and $H_{2a}$ are supported.

### Testing the Mediating Role of Affective Commitment on Intention to remain with organization

To conclude that one variable (affective commitment) mediates the relationship between an independent variable (High Performance work practices) and a dependent variable (Intention to remain with organization), it is necessary to show that: high performance work practices significantly affects intention to remain with organization; high performance work practices significantly affects affective commitment and when intention to remain with organization is regressed on both high performance work practices and affective commitment, affective commitment must be significant and high performance work practices must not be significant (e.g. see Shafer and Simmons, 2008). In this study, to test the hypothesis $H_{2b}$; Affective commitment mediates the relationship between high performance work practices and Intention to remain with organization; high performance work system significantly affects intention to remain with organization ($\beta = .68$, $\Delta R^2$ value of 0.13, $p < .000$, see above model 1 in table 3), high performance work practices significantly affects affective commitment ($\beta = .66$, $\Delta R^2$ value of 0.27, $p < .000$, see above model 2 in table 3), and when Intention to remain with organization is regressed on both High Performance work system and affective commitment, affective commitment is significant ($\beta = .22$, $\Delta R^2$ value of 0.03, $p < .05$, see above model 3 in table 3), and high performance work practices is not significant ($\beta = .11$, $\Delta R^2$ value of 0.03, $p > .05$, see above model 3 in table 3). This result confirms that affective commitment mediate the relationship between high performance work practices and intention to remain with organization thereby supporting hypothesis $H_{2b}$.

### Discussion and Conclusion

The findings of previous studies show that there is a relationship between high performance (HR) work practices and intention to remain with organization; however, the studies under literature review are from different environments, different sectors
and different countries. Considering the Sri Lankan context, finding of this study will give more generalizable insights about importance of high performance work practices to remain employees with organization. Also this study will give insights to what extent the way leaders practicing the high performance work practices will have impact on employees’ intention to remain within organization and which type of HR Practices should be managed effectively to have commitment and retain people in organizations. No specific studies have done in the past on this issue in Sri Lankan context.

The findings of the main effect and the mediating effects of this study have contributed to new knowledge to the body of SHRM (High performance HR practices and intention to remain with organization) literature. The present study demonstrated the relationship between High performance practices and intention to remain with organization in the context of non-western organizations. Since most of the previous studies on high performance work practices and intention to remain with organization were conducted in the western context, the results of the present study confirm that employees’ perceptions of HRM practices influence their affective attitudes and behavioral intention in the non-western context, especially in Asian context, where people are said to be collectivistic in nature (Sri Lankan).

This study is consistent with the study of Kehoe, and Wright, (2013). They developed and tested a model based on social exchange theory in which affective commitment completely mediates the relationship between HR practice perceptions and intent to remain with the organization. Employees’ collective perceptions of high-performance HR practice use are positively related to affective commitment, organizational citizenship behavior, and intent to remain with the organization. Further, this study also consistent with the previous study (see.Nishii, Lepak, and Schneider, 2008) that HPWS was positively related to individual affective commitment

This research finding also supports our predictions: High-performance HR practice perception is positively related to affective commitment, and intent to remain with the organization. Furthermore, affective commitment completely mediates the relationship between high-performance HR practice perceptions and intent to remain with the organization. In particular, affective commitment mediates the impact of HR practice perceptions on individual-level intent to remain with the organization.

Previous researchers called for little work theoretically and empirically to address the role of attitudes in creating the context necessary for desirable behaviors to consistently emerge from the implementation of a high-performance HR practices in the organizations. Thus, based on the social exchange theory, our findings consistent and suggest that employees’ perceptions of high-performance HR practices likely affect employees’ behaviors to at least some extent through their effect on an important attitudinal outcome—that is, affective commitment (see Kehoe, and Wright, 2013).

Thus, Organizational HR Practices and its antecedents or consequences become an important research issue in Sri Lankan Hotel industry as it is emerging sector in the economy of the country. Especially, useful might be to know the relationship between high performance HR practices and intention to remain with
organization. As turnover intentions (opposite to intention to remain with organization) often lead to the leave from the organization, it is possible to suggest to employers to increase the High performance HR practices in order to keep employee retention stable in the organization. The research results may be useful for Sri Lankan Context where organizations face various difficulties when there is a high labor Turnover Island wide, retention of operational level employees has been of serious concern to managers in the face of ever increasing high rate of employee turnover in Sri Lanka (Rathnasooriya, Lakmini, 2016). So the results of this study could make the contribution to solving this problem.

This is the practical issue of concern to Sri Lankan organizations. The turnover is always costly to the organizations given the large investment made in selection, training and development of personnel and even in organizational culture.

**Future research direction and limitations**

The present study examined the relationship between High performance HR practices and intention to remain with organization of Hotel industry. Future research should include other possible industries in the high performance HR practices and intention to remain with organization research. Second, the present study is a cross-sectional in nature, thus data were collected at one point in time. Therefore, longitudinal or experimental designs are required to confirm the causality of the hypothesized relationships in this context. Third, another limitation of the present study is that individual perceived values (relied on self-reported questionnaire data) were taken into the consideration, so the unit level and team level data not collected. Therefore, it is difficult to generalize the results of the study, and findings cannot be applied to other situations. Fourth, the study was conducted with a small sample in a hotel industry that may be not representative, so one should be careful to make generalizations to other populations. Future study should employ a larger sample size that would help in the strength of the findings, especially in all industries in Sri Lanka.

Lok and Crawford (2001) argued that various cultural dimensions can affect the commitment outcome of individuals in organizations. Thus cross cross-cultural comparisons should include in the future research, especially where people are said to be individualist and collectivistic in nature. Finally as suggested by Kehoe, and Wright, (2013) this study did not empirically examine the antecedents of variability in employees’ perceptions of HR practices. Thus empirical work is needed examining the relative significance of potential antecedents in the Strategic human Resource management context.
References


Agro Farm Environmental Sustainability and the Myth of Uses and Misuses of Agrichemicals’ in Agriculture Food Productions

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Abstract

This paper is attempted to look into the uses and misuses of rural farmers’ agrichemicals in agriculture food production and agro farm environmental sustainability. Application of agrichemicals also has vast effects on ground water, conservation of ecosystem especially in a developing country like Malaysia. Agrichemical such as artificial fertilizers, fungicides, herbicides; pesticide and insecticides in a holistic manageable of rural farmers’ agriculture food production could benefited mankind and adversely could also cost human hardship upon consumptions and detrimental to natural habitat; soil and eco-system conservation as well as climatic change. Eco-sustainable minimal or chemical free tropical agriculture
food crops production not only will reap in profits in upgrading income and livelihood for rural farmers and create a good eco friendly and sustainable environment in developing countries. There are significant differences on the use and misuses of rural farmers’ agrichemical applications towards the agriculture food production and conservation of ecosystems in developing countries around the tropical regions.

**Keywords:** Agriculture chemicals, Agriculture, Conservation, Food production, Sustainability

1. Introduction

Beyond the twentieth first century, with high income and education, many people have opted for organic foods, even though there are many taboos on agriculture food crops for consumption. Like it or not agriculture chemicals is here to stayed and is a must in all agrarians countries throughout the world especially the developing and under-develop countries such as Malaysia and its neighbours, without it, the rural farmers will face a lot of hardship in the return of their investment. There is no value chain at all if agriculture produces can’t be sell or export to overseas markets. Therefore farmers try to move the value chain up by application of agriculture chemicals to produce quantity and quality agro food produces. World agrochemical market though is predicted to reach $223 billion in 2015 (2010, industry research by report linker), Throughout the years, rural farmers has been using a lot of agriculture chemicals in their food production of agriculture produces, especially fertilizer both granular or liquid on both vegetable (Legumes, leafy, tuber); fruits; monoculture commercial and cash crops either for own consumptions or for sales, subsistence, commercial or monoculture in nature. Therefore Carvalho (2006) quoted that the uses of agrochemicals in tropical country particularly fertilizers and pesticides is a common practice. But one need to know better that nutrient enrich fertilizers will polluted ground water and cause harm to human consumption as well as ecosystem as quoted by Overmann Agrochemical normally comprises of five categories namely herbicides, insecticides, fungicides pesticides and fertilizers. The market for agrochemicals is vast and huge in Malaysia and other developing countries, as the weather is as such that there is a need of application of agro chemicals to maintain and sustain the farmers and smallholders’ livelihood. Furthermore, rural farmers from developing countries are not be able to produce organic agriculture food due to the high cost of production, what more of the farmers from the under developed countries in the tropics and southern hemisphere.
The common basic agro chemicals that the farmers and smallholders apply in Malaysia and other developing countries in the tropical region are herbicides, insecticides, pesticides; fungicides and fertilizers. The nature of the environment in the tropical countries with evergreen lustre and warm and humid temperature encourage the faster growth of undergrowth and the faster cycles of hatching of farm insects, especially the insects that burrow and lay their eggs inside farm tree trunk or under the moisten tropical soil. Farmers can’t afford to practice netting and organic farming as many of them are subsistence and small scales in nature whereas smallholders practice semi and mixed commercial mono-culture which are impossible to goes organic. Therefore application of agro chemicals is the only means towards their ends or otherwise they will not getting good agriculture food production to a satisfactorily level. It means quantity to feed the demanding market.

What is more important and crucial in this research is the myth of uses and misuses of agrochemicals in farmers and smallholders agro food production in developing countries such as Malaysia, as farmers and smallholder of the rural areas maybe illiterate or ignorance, but they knew very well those outlets to get those agrochemical to protect their crops, because that agro food yielding is their return of investment and livelihood. Their family depend on the output of their effort in toiling and harvesting the agro food produces for themselves as well as the consumers’ market throughout the country and regions. The other crucial aspect is the agrochemical suppliers and middleman who sells agrochemicals to the farmers and smallholders. They may know the process of selling and marketing of the agrochemicals for profits, with just a registration with the Ministry of Trade and Consumers for the licence and that is the process to enable them to sell agrochemical in their premises. But do we have any governmental rules, regulations or laws and its legal implications on uses and misuses, sales and purchase, and its impact towards human and environment of the country? What are the short term and long term outcome of agrochemical that detrimental towards mankind and environment? What are the combine efforts by the tripartite of government-agro suppliers-farmers to eradicate or educate the stakeholders in the agriculture industry? As well as consumer awareness towards the buying and consumption of agro produces? The answer may not important to the developing countries as most of the developing countries were actually became the dumping ground for the developed countries to earn billions of dollars from the sale and export of agriculture chemicals.

2. Review of Literatures

Rural farmers’ utilization of agriculture chemicals only depend on the instructions stated as label or sticker on the agriculture chemicals containers. But many are not following strictly or adhere to the ruling stated. Many rural farmers are using their hands on in mixing many types of agriculture chemicals especially herbicides. There aren’t much of the law enforcement has been known or any professionals advice or supervision after the agriculture chemicals has transport and
dispatched to the local agro retail shops from agro suppliers or from the factories whichever agriculture chemical suppliers import from outside of the country. What is more crucial is when the agriculture chemicals were sold to the rural farmers. Agro retailers would seldom advice the farmers the process of application, safe usage and safe keeping as well as steps that farmers and smallholders should take after application of agriculture chemicals on their holding. Akinpelu et.al(2011) has revealed that the health impacts of agriculture chemicals both pre and post emergence herbicides, insecticides, pesticides etc. used in cassava production are a function of their degree of accumulation in environment sink – soil, air, water, plant and the degree to and form in which humans are expose to them. Therefore the harmful agriculture chemicals applied on the plants and soils will definitely hazardous to mankind and eco-system if uncheck.

There is limited or no record ever done by the agro retailers on the sales of agriculture chemicals to the rural farmers. Maybe there are inventories of stocks for agriculture chemicals by the agro retailers but most of it will be under the table or shelve to gather dust. Furthermore there also aren’t any records on the usage and inventories of agriculture chemicals by rural farmers either. Rural farmers just buy over the counter any forms of agriculture chemicals when the need arises. But it is in fact the whole year round usage of agriculture chemicals.

Even though there are laws and regulation enforced by the local governmental agriculture department on supervision, checking, penalties and advisory panels comprising of the qualified government agriculture department staffs both to the agro retailers and rural farmers but seldom have they practiced what are suppose to do. Many rural farmers are not register with certain governmental agriculture boards. There are also lack of local institutional and private studies and research on the impacts of agriculture chemicals application on human and environment. Once the ecosystem destroyed there would not be able to revert back again. Agriculture chemicals even will affect the farm pest and small animals. Rohr et.al (2008) from their field survey has shown clearly that usage of herbicide, atrazine and phosphate has cause the decline in farm amphibian like frog.

Even though application of agriculture chemicals on crops in agriculture sector will enhance the need of sufficient demand by consumers but Fianko et.al (2011) has shown that wide spread in using of agriculture chemical in Ghana has contributed immensely to increased food supply and improved public health, but it has caused tremendous harm to environment, water bodies, fish, vegetables, food, soil and sediment have been found to be contaminated. Evidence also shows farmers have overused agrochemicals especially pesticides, biological monitoring studies that farmer are at higher risk for acute and chronic health effects associated with pesticides due to occupational exposure. Therefore, after sales and after application of agriculture chemicals should be monitor closely by government authority and experts to minimize the health hazard towards human being and environment.
Tekwa et.al (2010) has surveyed in locations like Digil, Gella, Lokuwa and Shuware in Mibi environment, they have shown that three principle farm hazards management types namely weed, insects and soil fertility surveyed, insecticides application was accounted as the highest (70%) source of form hazard in Gella, farmers’ health hazard, crop damage and animal health hazard recorded of tremendous losses.

Maduka (2006) has quoted that agriculture chemicals such as herbicides, pesticides, halogenated polycyclic hydrocarbons has exposing man and animal health wise. Whereas Glenn and Toole (1997) also quoted that agriculture chemical form the biggest percentage of pollutants that contaminate the environment, the hazardous particles from agriculture chemicals has polluted the environment once apply, into water, air, sea, lake, atmosphere, land and soil. Care must take when application of agriculture chemicals on agriculture sector. Ignorance of rural farmers may cost sickness and life. It may take years to show signs of certain sickness, ty then it will be too late for remedy.

Okoye (1992) survey that crop planted on soils polluted by agriculture chemicals in varying concentrations. In the course of absorbing water and nutrients from the soil, plants take up the chemical. The agriculture chemicals cannot be degraded because it lacks the enzyme machinery to degrade and excrete them. They are deposited in tissues and cellular structures including those of edible parts that are not active in metabolism. Therefore human consumption of agro greens that laden with high agro toxic level will definitely slowly destroy human immune system and human bodies are like time bomb ready to explode.

Magauzi et.al(2011) have shown the result from their study that the prevalence of organophosphate poisoning, indicated by cholinesterase activity of 75% or less is 24.1%. The medium period of exposures to agriculture chemicals was 3 years.

Egyir et.al(2011) have prove from their study in Ghana that proper adoption of agriculture chemicals is positively associated with being literate, older than 40 years of age, having higher income from sales, living in village distant to urban area, having access to hi-tech machinery and being link to extension services and financial institutions.

3. Discussion

As far as tropical and sub-tropical agriculture are concern, most of the underlying concerns are the countries that lies in these regions are comprises of the developing and under-develop countries where the tropical and sub-tropical climate changes limitedly, the evaporation and precipitation rate is high, warm and humidity that causes a lot of insects eggs to hatch into larvae within the 14 days cycle. Its reproduction is so fast and even faster than the cycle of agriculture food crops yield. Therefore the evergreen and lush vegetation attracted a lot of insects and the
infestations of insects on the grown agriculture greens are not be able to harvest on
time within that 14 days hatching cycle of these insects and the crops will be destroy
by its larvae and worms before the insects will goes for another hatching cycle under
the soil, and or on the leaves, as well as on the barks. The only easy way out that rural
farmers are able to get back on par of whatever they have invested in their plot of
vegetable land is using agriculture insecticides. Further, if the undergrowth were not
control, then there would not be any harvest left for the rural farmers especially land
under the tropical and sub-tropic climate where the weather encourage the growth of
under-growth. Therefore a lot of herbicides are used to control the weeds and this will
affect the top-soil and its eco-system when there always has heavy down pour of rain
that will carry the herbicides residues into the soil and ecosystem. Example Amine
were used to control wild weed, and this type of agriculture chemical could arid the
soil system. To make matter worst is the ignorance rural farmers using of artificial
fertilisers that cause further deterioration of soil and ecosystem. Fleming (1987) has
quoted that actually, the rural farmers could reduce agriculture chemicals by adopting
low-input agriculture production methodology but farmer tends to try to reduce cost,
fast harvesting, lack of information on farming technique and government support has
failed rural farmers in safe guard the ecosystem.

3.1 Illiterate and ignorance of rural farmers from developing and under-develop
countries

The countries of tropics and sub-tropical regions, farmers are the lots of, many
are illiterate and ignorance in the usage of agriculture chemical. Even though each
bottle and packages of agriculture chemical comes with instructions but 90% of
farmers do not read and follow strictly to the instruction, for example the amount and
ratio of agriculture chemicals that mix with water before spraying, when and the time
frame to spray, types of spraying utensils also are important in the spraying process.
Instants that rural farmers contract and die from cancer of skin and cancer of lung
after inhaling or contact directly with the type of banned agriculture chemicals.
Therefore ignorance could kill and the consequences are farmers who ignore the
instruction in the application of agriculture chemicals will suffer themselves. As for
this matter, the usage of paraquate, a kind of banned agriculture chemical (herbicide )
in weed control, it must use spraying machine of nozzle and not fogging machine as
direct contact to skin and inhaling through the human nose will prove fatal. Still a lot
of rural farmers are practicing it until to-date. Furadan, to control buck borers,
normally used in palm sapling to prevent attack from buck borer, were used in sweet
potatoes cultivation. It just can’t imagine the outcome and consequences from these
two types of banned agriculture chemicals.

3.2 Rural Farmers Not familiar of Agriculture Chemical

Certain types of newly formulated agriculture chemicals that imported from
Thailand and other neighbouring countries only show their language that not every
rural farmer could understand or read. Therefore their unfamiliarity of this kind of
agriculture chemicals with its application also could court danger, not only to themselves but also to those consumers who buy and consume the produces. Example of pesticide used in the control of squirrel that attack durian before it ripe. Once a squirrel bow a whole in the fruit and eaten the durian flash, would die immediately from the poison and thirst. Instances that rural farmers use this method of pesticide application of tropical fruits and could easily cause fatal accident to those poor village people who consume the fruits that laden with this kind of agriculture chemical.

3.3 Misuse and simply mix

Farmers from Malaysia normally simply mixing the agriculture chemical before application, example herbicide, instead of a singular type of herbicide they spray, rural farmers tends to mix more than two types of herbicide for their weeding of their farm. This kind of misuse could cause a lot of hardship to them and others. Example just for the control of undergrowth, the mix more than two kinds of banned herbicides for normal weed control which is detrimental to human. Normally after spraying the herbicide, nobody are allow to visit the farm for the next seven days at least, but the next day, the rural farmer start working in the same plot of land where they just spray with herbicide a day before.

3.4 Desperation

At certain junctures, rural farmers are more desperate in using the agriculture chemical to protect their interest. Otherwise there will be less or no harvest at all. Undergrowth need to be clear, herbicide will have to be use, fertilizer need to be apply. When the plants start to grow, insecticides need to be use to rid off those insects and worms that destroy the plant. Sometime fungus attack the root part of plants, therefore fungicides need to be use to cure the plants. All these agriculture chemicals apply on the plants need careful scrutinize by experts from agriculture department. Otherwise the misuses will cause hardship to the rural farmer themselves as well as the consumers.

3.5 Hearsay

Rural farmers from the rural areas who tends to their small plot of holding for subsistence agriculture crops will normally never seek any advice from qualify agriculture department staffs on the application of agriculture chemicals on their holding and crops. Certain warning from government agencies were treated as hearsay. They are prone to practice what has been passing down from their elders. The rural farmers have even consumed themselves of whatever agro produces they have, therefore the first casualty are this group of people, only then to the consumers in the market place who buy the agriculture food products.

3.6 Middleman, credits and financing
Due to the pressures from agriculture middleman’s demand for good quality agro produces for export in regions of high demand. The rural farmers have to use excessive agriculture chemicals on their food crops. Some time rural farmers tends to borrow money to finance their planting and replanting of crops, they need to refurbish their loan and credits from loan sharks, therefore they will have to produce good quality agro produces in the fast pace, therefore, excessive agriculture chemicals also apply and harvest immediately after spraying. The chemical residue if uncheck, consumers who consume the produces will suffer, maybe in the long run.

3.7 Storage Problem

Rural farmers normally do not have proper separate storage double lock-up cabin for keeping all the agriculture tools and agriculture chemicals. Whatever remain or new stock they simply stored in any open space of the house back yard. Or even just put inside the garden or just left it under the tree in their plantation. This could be detrimental to mistaken or carelessness of other people or member of the family. It could be fatal to life. A good example was incidents happen to a number of Malaysian rural farm family that mistaken weed killer of trade name paraquate as soy source and end up the whole family hospitalized but luckily is only mild poisoning.

3.8 Various Types of Agriculture Chemicals in the Market

Agrochemicals uses by farmers and smallholders comprises of four big categories, namely insecticide, herbicide, fungicide and fertilizer. All the agrochemicals sold in the market are either in solution form or granular form, the toxicity of each type and brand of agrochemicals are label with colour like green, pink, red and black followed the severity of the toxicity with the sign of skull as warning sign to the buyers. Agrochemicals especially insecticides are colourless and odourless. All types of agrochemicals posted danger and severity towards human and ecosystem if not handle and apply with care.

Insecticides sold in the open shelves in agro retailing shop are Malathion57%; Dimethoate 38%; Cypermethrin 5.5%; Deltamethrion 1.4%. These are the common types of insecticides uses by farmers and smallholders. It is effective on Helicoverpa Armigera (Chilli borer); Cnaphalocrocis Medinalis (leaf roller); Helopeltis Theobromae (insect sting young cocoa fruits); Cocopimorpha Cramevella; Planococcus, Apogonia (cocoa pod borer); Coptotermes (termites); Spodoptera Litura, Curvignathus; Helicoverpa Armigera (Warms); Myzus persicae, Thrips; Plutella Xylostella; Hellilia Undalis; Brevicoryre Brassicace (Leaf bugs); Valarga (grasshopper), Apogonia (Bug borer). All types of insecticides post danger to human and ecosystem. Normally if spray on the vegetable crops, the harvesting period will be after fourteen days but due to ignorance and demand, farmers normally will harvest in the next day after spraying. Therefore it is utmost danger to consume those agro greens. Those
consumers who know will never want to buy and consume but normally consumers in the town area will never know.

Fungicides sold openly in agro retailing shops are Macozeb 80 80%; Thiophanate-Methyl 70%; Benomyl 50%; Copper-Oxycloreide 85%. It is effective on various type of plant root fungi and bicaptra. Fungicides may not post danger to farmers and consumers because it only will rid of those fungi that attack the root of plants especially fruit trees. But it definitely will harm the ecosystem because the residue will affect the soil and dilute with rain water to flow into the rivers.

Herbicides or weed killers that sold in the agro retailing shops or outlets post the most dangers to human and environment, it come with many trade names but generally it comprised of herbicides for weeds like Paraquat Di-Chloride 13%; MSMA 55%; Glufosinate-Ammonium 13.5% (Basta 15); Glyphosate Isopropylamine 41% (Round-up). Herbicides mean to rid of bushes and small trees comprised of 2,4.D-Amine 48%; Diuron 80 80%; Metgsulfuron-Methyl 20% (Ally). Normally farmers and smallholders suffer bodily injuries from ignorance of spraying herbicide. Appliances that they used for spraying must be right, protective clothing and mask must be wear and the time of the day that most suitable for spraying herbicide is early morning and evening because during these hours, there will be less windy and calm. Otherwise if inhaled, in the long run, farmers will contract skin and lung cancer, especially if they are using fogging machine.

Sometime farmers and smallholders also apply herbicides to poison bushes and small trees, these agrochemical consisted of Triclopyr Butoxy Ethyl Ester 32.1% w/w (garlon 250); Fluroxypyr Neptyl Ester 29.6% w/w (Starine 200). Either spray directly or mix with other types of general herbicides to spray together. Herbicides are effective on Calopogonium; centrosema puereria; leguminous Creeping cover; eupotoriumodorathuim; asystasia gangetica; mikauia micrantha; paspalum conjugtum; borreria latifolia; melastoma affine.

Farmers and smallholders occasionally even buy and used banned agrochemicals for Insecticides classify as Class 1A (Black line) like Monocropthos (Azodrin); Metamidplos (Tamaron). and Class 1B (Red line) like Linduned and banned herbicide like 2-4-5 T and Sodium Arsenic when they are desperate to get rid of the insects and herbs immediately. What is more about pesticides which could kill not only the pest but also human if not careful.

The latest agrochemicals for organic farming that suppose are safe for application for insecticides like Diflubenzuron 25%. Its effect is to retarded the egg and growth of insects; Organophosphate (Tricel 21.2 EC) is to retard the growth of insect and its eggs from hatching, also for organic farming and Bacirluy, cagrochemical for Leaf Foliar for growing, flowering and fruiting. All these latest agrochemical which wouldn’t cause bad effects to human and environment are too expensive and beyond the reach of farmers and smallholders from developing and under-develop countries in the tropic regions. Most of these agrochemicals are used
by farmers from develop countries, because their government formulated law and
regulation to guarded the health of their citizen and environment.

3.9 Limited Law, Act or provision in the manufacture, imports, wholesales, retail
use and misuse

There are not much of legal provision in Malaysia on the import, manufacture
wholesale, retail, application and misuse, sales and purchase of agriculture chemical.
Likewise, Malaysia emphasizes on the issue of misuse and improper sale of
agriculture chemicals among suppliers and rural farmers. These criminal activities
must be observed in order to preserve the safety of consumer, human body, animal,
growing crops and the conservation of eco-system. Among the preventive action
 supplied by the government are by preparing the legal provision and enforcement of
the law such as Pesticides Act 1974, Poison Act 1952, Food Act 1983, Environmental
Act 1953 and many regulations and guidelines.

Therefore, there are no provisions and laws stated on other agriculture
chemicals such as herbicides, insecticides, fungicides and fertilizer which are more
deadly than pesticide if left uncheck. Developing and under develop countries have a
lot of agro suppliers and agro retailer using these legal loopholes to prey on the
uneducated poor and ignorant rural farmers for their gain. That is why government
has to play its part in determining there are provisions in laws to deter this or stringent
and harsh law and protect the well being of rural farmers as well as sustain ecosystem.

3.10 On the counter and under-counter sale and purchase of agriculture
chemicals

All in all, the various types of herbicides, insecticides, pesticides, fungicides
under various trade names from various agriculture chemical companies could be
purchase on the counter in all the retail agro retailer and suppliers without having any
difficulties and without any registration. Even all forms of government banned
agriculture chemicals could be purchase under-counter from any agro retail shops.
Therefore controls systems are very relax in the developing and under-develop
countries. Government should find solution to solve these problem.

3.11 Genetic engineered agro food crops

Certain quarters from developing countries has introduced genetic engineered
agro food plant to counter the diseases and pest control and at the same time increase
yielding to many folds but then do we actually trust the consumption of genetic
engineered agro food produces. The outcome to our health could not be known
immediately, it will take years to see the consequences on human being.
4. Conclusion

In conclusion, agriculture chemicals manufacturer and producers, agriculture chemical importers, agro retailers should be register with government agro and drug agencies annually. All sales of agriculture chemical and applications should be supervised and closely check. Education is the most important factors in reducing casualties and injuries in agriculture chemicals application and usage. The tripartite of government-agro retailer-farmers should be collaborate in the sales, purchase and application of agro chemicals at the farm level.

The myth of using sea salt as neutralizer for all forms of agriculture chemicals do hold some water after all. This traditional practice has been pass down for years and it really is the only remedy for the poor rural farmers after application of agriculture chemicals, to take some sea salt and mix with fresh water to drink and wash away chemical residues on the body and or all agro greens should submerse under saline water for at least 20 minutes before cooking will also rid of agriculture chemical residues. But still, the main issue here will be the reduction in application of agriculture chemicals as only measure for good health and ecosystem sustainability.

5. Recommendations

5.1. Rural farmers in the sales and purchase, uses and application of agriculture chemicals in the farm should be scrutinized by appointed qualified agronomist station in government agriculture department at every level.

5.2. All imports of agriculture chemicals should be registered and recorded at the national, state and district levels.

5.3. Agriculture chemicals importers, agriculture chemicals wholesalers and retailers need to follow stringent criteria to apply for the license to operate their premises with at least a degree in agriculture or agriculture economic from the local universities.

5.4. Setting of government task forced to supervise the outlets of agriculture chemicals.

5.5. Government setting up a licensing board to register all seller and user of agrochemical.

5.6. Supervision on the storage of agrochemicals in premises
5.7. Implementation of stringent law and regulation on the supply and usage of agrochemicals.

5.8 Setting up of agriculture chemicals association at national and state levels

5.9 Encourage natural and traditional planting system as control of weeds and insects.

5.10 Organic farming should be introduce in the vast scales throughout the countries of the developing and under-develop world.

6. References


**American Dream Re-Imagined: Adult Education in the 21st Century and Beyond**

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**Abstract**

The diversity of community colleges’ student population requires a shift in educational programming to satisfy the demands of the evolving workforce and academia. Some of the changes had been successful in increasing the rates of student retention, persistence and completion of programs of study and also showed promise in terms of student retention and completion of degrees and credentials. Many
participants were adults returning to school after stopping out, immigrants lacking
English fluency and basic skills, students of color, first in their families to go to
college, and other groups who had limited access to higher education. Mostly housed
in community colleges or community-based organizations and in partnership with
other stakeholders, these educational initiatives offered access to education which
provided adult students the academic and employment skills needed for the 21st
century and beyond. Though some were difficult to implement, they nevertheless
showed that collaborations among different entities can result in meaningful education
for adult students. For example, contextualized curricula and interdisciplinary, theme-
based instruction connect students to real-life situations; while bridge programs
shorten their time-to-degree completion. Academic planning, career advising and
tutoring likewise provide student support. Salient to the success of these initiatives
were inter-department collaboration among faculty members, deans and leaders from
the businesses; convenient class scheduling for adult students, mandatory career
advising and academic planning, and faculty professional development. For those who
still believe in education as the gateway to the American Dream, it is possible if they
focus on completing their education and with others’ help and support.

Keywords: Higher education, Bridge programs, Adult education

Introduction

As part of the U.S. higher education system, community colleges in the
country have a 116-year history starting from the founding of the oldest community
college- Joliet Junior College in Illinois which was founded in 1901. It was first
conceived as a “fifth year” high school by William Rainey Harper, the president of
the University of Chicago at the time, and the superintendent of the Joliet Township
High School, J. Stanley Brown with the goal of preparing students for college (Tillery
& Deegan, 1985). They became a national entity in the 1960s, evolving into what they
are now: educating those who would not be otherwise able to afford the more
expensive four-year universities and colleges especially those who are from low-
income families, underrepresented and minority students of color, the first in their
families to go to college, and immigrants whose first language is not English and who
sometimes have difficulties understanding the nuances of the language and its
appropriate use. Because community colleges are located in different parts of the
country, their mission and goals usually reflect the needs of their communities and
industries in their region. As diverse as they are, there are common elements that
characterize them: “open access, a non-elitist approach to higher education,
responsiveness to the needs of their communities and industries, a focus on the success of their students, and a willingness to be creative to avoid bureaucratic processes”. This focus on the success of students meant that education should shift from instruction to student learning as espoused by the previous president of the American Association of Community Colleges, George Boggs (2010). The overarching purposes of community colleges are to provide general and liberal arts education which are transferable to and credited by universities depending on articulation agreements between partner institutions; vocational and technical education; adult and continuing education, developmental studies and college preparation; and placement and student development. Community colleges maintain an “open access” philosophy which allows them to offer free courses to adult students, many of whom have been left behind by the secondary school system or have stopped out from their schooling. Some of them are newly-arrived or longtime immigrants who are trying to complete a general education development certificate (GED), an alternative high school diploma, or are studying English in order to integrate in the American society and pursue their “American Dream”. Under the umbrella Adult Education, free courses that range from English classes to bridge programs that pair non-credit classes with credit-bearing courses offered by community colleges are often funded through a combination of federal, state and private grants to ensure that those who have not been served by other institutions can have access to completing their education. In the long run, the goals of adult education are ones that adhere to the principles of accessibility and equity in education. The re-authorization of the Workforce Investment Act (WIA-1998), a law enacted by the U.S. federal government in 1998 requiring investment in the workforce to increase the employment, retention and occupational skills of participants, and its revision in July of 2015 as the Workforce Innovation and Opportunity Act (WIOA) specified adult education as one of the key partners in the core team made up of youth organizations, organizations working with disabled individuals, workforce boards and industries in pushing for initiatives that would train adults, youth, and other individuals toward sustainable employment and meet the demands of the workforce particularly in Allied Health, Manufacturing, Transportation and Logistics, and other high-demand industries. The specifics of the law such as accelerating the transition of adult students into credit-bearing courses, gaining stackable credentials and completing their program of study, required the revision of curricula in various content areas such as Math and English to integrate them with other credit-bearing courses such as robotics, medical terminology, and other curricular programming and activities to help students be more successful in their chosen career or college pathway.

Re-framing Adult Education: Work, Society, and Societal Transformation

The term adult education has its origins in England in the early 19th century (Stubblefield & Keane, 2) and was then used in the U.S. in the latter part of the century to describe outreach activities for adults offered by various institutions such as museums, public libraries, public schools, and universities. It was in 1910 that the term was used to describe activities and educational programs offered to adults. It was a comparatively new social movement in the U.S. which culminated in the founding of the American Association for Adult Education in 1926 through the efforts of the Carnegie Corporation- the catalyst for its organization as a social movement. The
corporation launched several studies to research activities of adults in university extensions, Chautauquas, lyceums, libraries, etc. Later definitions of adult education characterized it as a “voluntary activity…self-direction of adult learners who were attempting to improve their personalities” (3). It was Eduard Lindeman, however, who crystallized its purpose which is “to put meaning into the whole of life” (5), and Cyril Houle who noted the Renaissance as an example of lifelong learning (1961). Organizations that worked with adult learners, however, believed that adult education’s purposes encompassed remedial education, occupational, and liberal education and emphasized the motivation of participants to improve themselves. Because of its broad orientation, historians who documented the evolution of adult education such as Malcolm Knowles, who researched on adult learning, recognized for his concept of “andragogy” and was the founding father of adult education in the U.S., and Cyril Houle who was credited with the creation of the American Association of Adult and Continuing Education (AAACE) wrote of a social movement that was constantly changing-both ideologically and politically. Revisionist historians of adult education advocated for a more inclusive history to acknowledge the contributions of women-underscoring approaches that valued a critical approach to analyzing the twists and turns of the movement. Such critical approach was emphasized to understand how a history that was Eurocentric influenced how the movement’s history was written. Adult education then, as it is now is widely accepted for its promotion of self-improvement though it seemed like it was an “ideology only appropriate for the fortunate and prosperous” (59) and few prospects were offered at the time for the poor working class, women and the minorities. The proliferation of mechanics institutes, the focus on literacy to enable adults to read religious texts became the driving force of literacy activities, and “lectures” in public libraries became the predecessors of what adult education is in contemporary times: improving the options and opportunities of adults through work-based skills training, literacy, and access to education. Currently, the field has become a strong advocate for the education of minorities and immigrants, training and retraining for family-sustaining jobs, civics and citizenship, and education beyond English classes and high school completion in order for adults to transition to higher education –obtaining a college degree or a credential to increase their employability. It has shifted its goals and mission to respond to the country’s changing demographics and labor landscape as well as the demands of rapidly-technologizing industries. Civic engagement and participation in the democratic practices embedded in English literacy classes as well as other adult education classes, working and collaborating with multicultural and diverse team members, financial and technology literacy are common themes in adult education classes nowadays to prepare participants for future jobs and future academic work in the global community. Social justice, societal transformation and equity had also been crosscutting themes in adult education classes along with the teaching of critical and analytical thinking skills-themes that are influenced by the philosophy of Paolo Freire (1980). Thus, successful adult education classes aspire to not only educate adults who are well-prepared for the job requirements of the 21st century and beyond, but also engender agency- enabling students to become agents of change and transformation in their communities, but most of all, having a piece of the American Dream.

The re-authorization of the former Workforce Investment Act (1998) which required investment in the workforce to enhance the employability, occupational skills, retention and earnings of adults into the Workforce Innovation and Opportunity...
Act in July of 2015 (WIOA), further emphasized investment in the workforce—but also required agencies, organizations and workforce boards to work in close coordination and collaboration with each other to train and prepare out-of-school and disabled youth and adults, immigrants with low-English fluency, displaced homemakers and workers, adults without high school diplomas and those who lost their jobs in the Great Recession of 2007-2009. WIOA underscored the role of organizations and institutions running adult education programs in workforce training, with emphasis on high-demand industries as Allied Health and related fields, manufacturing which integrates automation, robotics, and other technologies used in the field, Transportation and Logistics, and other regional industries. As a result of the requirements of WIOA, adult education programs needed to implement initiatives that aligned with the law, including curriculum revision to align the curriculum with workforce needs, professional development focusing on contextualized curriculum and instruction, bridge programs and learning communities/cohorts. Moreover, with the emphasis on college and career readiness by institutions of higher education, a parallel academic preparation was also implemented through curricula that fused Math and English and training faculty for interdisciplinary and theme-based instruction.

Work-based Bridge Programs: A. Integrated Basic Education and Skills Training (I-BEST)

One of the models often cited in integrated work-based and English training is the I-BEST which was developed in the state of Washington. The model was developed by the Washington State Board for Community and Technical Colleges (SBCTC) in conjunction with five of the state’s technical colleges and 29 community colleges, driven by the fact that employers had difficulty finding workers with post-secondary credentials after they re-emerged from the bruising “tech bust” in 2001. The program’s primary goal was to increase the rate of advancement of adults with basic skills to completion of postsecondary programs. Results of the preliminary analyses were promising-generating interest in its replication in other parts of the country especially in the light of low completion rates of adult students enrolled in adult education programs in community colleges. The study performed through field interviews by the Community College Research Center of Columbia University’s Teachers College (2010) concluded that it was a good model for increasing the rate of adult students’ transfer to career-based post-secondary education and succeed in their programs. Although the 34 community colleges that participated in the I-BEST initiative agreed that it achieved its goal of increasing post-secondary education and completion of its adult students, funding was a source of concern, because it was expensive to implement. I-BEST students paid the same tuition for I-BEST courses as they would college-level credit courses, and got credited for these I-BEST courses, whereas regular basic course students pay a minimal fee to register for basic skills courses such as reading, writing, and math. By 2007-2008, all 34 community and technical colleges in the state of Washington were offering I-BEST programs. A sample career pathway in Early Childhood Education through the I-BEST program shows the career/degree track that students will follow to get a bachelor’s degree or other credentials in Early Childhood Education (8):
As explained in the application form of the I-BEST application form, the career pathway of participants begins with the Basic Skills or English program and ends with a Bachelor’s degree should they continue on—which is the primary goal of the program. Though students may choose not to finish their four-year degree, there are credentials and pathways they can pursue, and the job that corresponds to the career pathway they choose. They are not going to be stuck in basic skills education, because of the choices available to them. However successful the program was in transitioning students to their careers and credit-bearing programs, educators and administrators involved in the program reiterated that I-BEST was an expensive program and that other sources of funding were needed to augment financial resources allocated to it.

B. Accelerating Opportunity (AO)

Launched in 2011, the initiative aimed at increasing the ability of adults with low basic skills to earn credentials, obtain a well-paying and life/family-sustaining employment and hold and sustain a rewarding career. Participants attend for-credit career and technical education concurrently with English and basic skills courses.
Five states joined the initiative during its first year of implementation in Spring of 2012: Illinois, Kentucky, Kansas, North Carolina and Louisiana in the Fall. They received 1.6 million from Jobs for the future to pilot AO. The three-year initiative was evaluated by The Urban Initiative in partnerships with the Aspen Institute and the George Washington University (2014). Key design elements which were requirements for participation in the initiative were: *offering two or more integrated career pathways, creation of acceleration strategies, provision of academic and social student supports, use of dual enrollment strategies (credit+non-credit courses), marketable and stackable credit-bearing certificates, the awarding of college-level professional degrees, partnerships with investment boards and employers, and evidence of strong local demands for career pathways selected by the participating community colleges*. The initiative adopted the I-BEST model and was evaluated three years. They presented some positive results such as strong leadership and state support at the executive level bolstered college efforts, and state policies also supported student success. They also emphasized the crucial role of college internal partnerships though time and labor-intensive and required commitment from those involved in implementing it. Likewise, they noted the equally important partnerships with employers and industries which provided support to students and staff though difficult to develop and sustain. Evaluators also found that team teaching and planning for support services and resource allocation the initiative required a lot of time and staff should therefore be given ample time to do so. However, participants in the initiative who came from adult education and did not have their high school credential appreciated the fact that they could credit-bearing courses while finishing their high school completion classes (or English classes- in the case of other community colleges). Overall, 60% of students who participated in AO were satisfied with the initiative. Across the five participating states, Manufacturing and Allied Health were the most common pathways participants chose, coinciding with labor and market demands. The median age of participants in AO was 27-35, although 20% were in the age ranges 20-22, 27-35, and 36-54. The Aspen and Urban Institutes released their findings in Sept. of 2014 which included the data below:

### Table 2: Accelerating Opportunity (AO): Student Participants in Year 1 Implementation

<table>
<thead>
<tr>
<th>States</th>
<th>Number of Students</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>All states</td>
<td>2,588</td>
<td>2,588</td>
</tr>
<tr>
<td>ILLINOIS</td>
<td>419</td>
<td>419</td>
</tr>
<tr>
<td>KANSAS</td>
<td>1,001</td>
<td>1,001</td>
</tr>
<tr>
<td>KENTUCKY</td>
<td>499</td>
<td>499</td>
</tr>
<tr>
<td>LOUSIANA</td>
<td>451</td>
<td>451</td>
</tr>
<tr>
<td>NORTH CAROLINA</td>
<td>208</td>
<td>208</td>
</tr>
</tbody>
</table>
Table 3: AO Year 1 Credentials and Credits Awarded

<table>
<thead>
<tr>
<th>States</th>
<th>Credentials</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>All States</td>
<td>2,641</td>
<td>13,382.5</td>
</tr>
<tr>
<td>ILLINOIS</td>
<td>581</td>
<td>4,221</td>
</tr>
<tr>
<td>KANSAS</td>
<td>1,190</td>
<td>4,802.5</td>
</tr>
<tr>
<td>KENTUCKY</td>
<td>449</td>
<td>2,063</td>
</tr>
<tr>
<td>LOUISIANA</td>
<td>369</td>
<td>1,629</td>
</tr>
<tr>
<td>NORTH CAROLINA</td>
<td>52</td>
<td>667</td>
</tr>
</tbody>
</table>

C. Integrated Career and Academic Preparation System (ICAPS)

In the design phase of Accelerating Opportunity, the Illinois Community College Board (ICCB) was one of 11-state governing bodies involved in its planning and conceptualization. One of the requirements in the design phase was for participating states to develop a state plan to re-design adult education and post-secondary programs to improve students’ transition rate to credential-bearing degrees and post-secondary degree or certificate attainment. Illinois chose Integrated Career and Academic Preparation Systems (ICAPS) as its marker for the AO initiative. Eight community colleges in Illinois participated in the design and pilot implementation of the initiative. The participating community colleges were evaluated and audited by the Office of Community College Research and Leadership (OCCRL) housed at the University of Illinois in Champaign-Urbana. Bridge curricula in different credential-bearing occupational sectors such as Health Sciences, Science, Engineering, Technology and Math (STEM), Automotive Technology, were developed and paired with classes in developmental education (Reading, Writing, and Math) to accelerate completion of students’ career pathways. Internal and external partnerships were created with career and technical education, employers, community-based social services to provide wraparound support for students and reduce barriers and challenges that confront them. Dependable and affordable daycare, bus passes, free tutoring, mentorship to name a few. Partnerships with employers and local workforce boards for internships and future jobs also encouraged student retention. At the end of the design phase, OCCRL suggested that success of future participants in the initiative depended on well-informed key leaders in institutions as well as staff who are directly involved in programs operations as they are critical in providing support for its success; student support services should be integrated as full-time student services support are vital to the retention and completion of students in the program; financial solutions to students’ financial need should be available to them so that they need not worry about tuition and fees and other expenses that they not be able to pay; curricular reforms needed to be supported and implemented to enable faculty to team teach; professional development should be offered to faculty and staff who will be involved with the initiative; prior experience in bridge programming, contextualized curricular design and interdisciplinary teaching should be used as references as they can guide subsequent programming; and the program should be evaluated at the end of an academic year to incorporate changes for the following academic year. Below is the summary of information provided by the eight community colleges in the design/implementation phase of ICAPS through the three-year duration: (2011-2014)
Table 4: Illinois ICAPS Summary (Design phase in 2011 through 2014)

<table>
<thead>
<tr>
<th>Community College</th>
<th>Career Pathways</th>
<th>No. of Students in Pathways</th>
<th>Transitioned to College</th>
<th>Employed</th>
<th>Total No. of Credentials Awarded by College</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Lake County</td>
<td>Computer Numerical Control (CNC) Automotive Technology Welding</td>
<td>67 (through 2014)</td>
<td>5</td>
<td>32</td>
<td>78</td>
</tr>
<tr>
<td>Danville Community College</td>
<td>Certified Nursing Assistant (CNA) Automotive Technology</td>
<td>111 (through 2014)</td>
<td>3</td>
<td>31</td>
<td>174</td>
</tr>
<tr>
<td>Elgin Community College</td>
<td>CNC/Dental Office Aide/Welding/Heating, Ventilation and Air Conditioning (HVAC)</td>
<td>84 (through 2013)</td>
<td>9</td>
<td>55</td>
<td>54</td>
</tr>
<tr>
<td>Lewis and Clark Community College</td>
<td>Automotive, Welding and New Media Technologies/Emergency Medical Technician</td>
<td>72 (through 2013)</td>
<td>25</td>
<td>40</td>
<td>182</td>
</tr>
<tr>
<td>Lakeland Community College</td>
<td>Manufacturing/Health Science</td>
<td>112 (through 2014)</td>
<td>No data reported</td>
<td>49</td>
<td>182</td>
</tr>
<tr>
<td>Lincoln Land Community College</td>
<td>Health Care/Early Childhood Education/Automotive Technology</td>
<td>114</td>
<td>14</td>
<td>33</td>
<td>171</td>
</tr>
<tr>
<td>McHenry County College</td>
<td>Admin. Office Assist. Manufacturing Design Technology/Automotive Maintenance Technology</td>
<td>59</td>
<td>6</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Richard Daley College</td>
<td>CNC/Basic Nursing Asst./Pharmacy Tech Phlebotomy Tech Health Aide</td>
<td>228 (through 2013)</td>
<td>11</td>
<td>156</td>
<td>156</td>
</tr>
</tbody>
</table>

D. Triton College: Bridge Programs, ICAPS and Contextualized Curricular Designs

Triton College is a two-year community college with 12,000 students enrolled. It is located southwest of the Chicago O’Hare Airport and serves 25 villages, cities and towns. Its student population is 38% Spanish-speaking, 16% African Americans, 3% Asians, 3% of undeclared ethnicities and 40% native-born Caucasian-Americans. The college has four main divisions: Arts and Sciences, Allied Health and Public Service, Career and Technical Education, and Adult Education. Many of the initiatives which were aimed at increasing the transition of students to credit-bearing courses or career pathways were implemented in the Division of Adult Education. With almost 2500 students, 2/3 of whom are in the English classes, and the remaining third in the High School completion program, the number of students completing their
programs and transitioning to credit-bearing courses or career pathways is low. In Fall of 2012, a dual enrolment approach was piloted to gauge students’ interest and assess how they would fare in credit classes. The curriculum for the integrated English for nonnative speakers and Applied Medical Terminology was developed by the collaborative efforts of an English instructor and the Dean of Allied Health. Another English instructor in partnership with the Allied Health instructor taught the class, where the content of the English class focused on Medical Terminology but incorporating aspects of the English language such as essay writing in different rhetorical modes: Descriptive, Cause and Effect and Process essays, along with word-formation and etymologies. Cross-cultural health and medical practices were also incorporated to allow students to present information about health practices from their country of origin compare and contrast them with practices in the U.S. and discuss critically and analytically the advantages and disadvantages of such cultural practices. Students attended the English class on Monday and Wednesday, and the Medical Terminology class on Tuesday and Thursday. In the following academic year, fall of 2013, the Division of Adult Education was selected as a bridge site by the Illinois Community College Board. The bridge program required the contextualization of curriculum, creation of career pathways, and hiring of a transition staff who will be advising students on their career choices. The result of the pilot dual enrolment class with five female students was used to revise planning and programming of a full-scale dual enrolment approach. Below is an excerpt from the Allied Health Contextualized curriculum:

Table 5: Allied Health and English as a Second Language Bridge Course

<table>
<thead>
<tr>
<th>English Content (Adult education=non-credit)</th>
<th>Medical Terminology Focus (Allied Health = 2 credits)</th>
<th>Goals/Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root words, suffixes and prefixes</td>
<td>Suffixes and prefixes</td>
<td>Discuss how prefixes and suffixes could change the meaning of a word</td>
</tr>
<tr>
<td>Medical terms and abbreviations</td>
<td>Medical terms</td>
<td>Write a simple medical report using accepted medical terms and abbreviations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Say or pronounce correctly target medical terms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Develop a system to memorize medical terms</td>
</tr>
<tr>
<td>Therapeutic Intervention</td>
<td>Therapeutic Interventions</td>
<td>Compare and contrast therapeutic interventions as applied in the U.S. and students’ country of origin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Discuss how cultural beliefs and</td>
</tr>
</tbody>
</table>
practices can impede the application of appropriate therapeutic interventions

Write a comparison & contrast essay

Of the five female students who joined the dual-enrolment classes, three successfully completed the courses, one moved out of state, and another withdrew from the class before the end of the term because of scheduling conflict with her job. Students’ feedback after the end of the semester described their challenges in being in the dual-enrolment pilot: that they had to pay for the credit course was tough on their budget as they did not qualify for financial aid, the classes were intense and that the medical term class was very difficult for them, there was not enough time or opportunity for them to practice English- the language they were trying to master, and other personal issues and challenges that got in the way, e.g., babysitting/daycare, balancing a full-time job with the classes. In spring 2013, the division was selected as a bridge site, and the selected career pathway was an Introduction to Basic Electronics—an introductory course that leads to Engineering Technology and/or robotics. The Medical Terminology and Allied Health bridge was revised—where students had to take a free preparatory course (Career Planning in Allied Health that included résumé writing, financial literacy to enable students to approximate the amount of dollars they needed to save to finance their studies in Allied Health (Nursing, Diagnostic Medical Technology, Surgical Technology, Certified Nurse Assistant, Medical Coding, etc.) and the use of technology in the field and in research.

Six male students and one female joined the Algebra (non-credit) and Basic Electronics course (3 credits).

All were in the higher level of Math (Algebra) and were almost finished with the Math track of their GED program—which would allow them to take the Math GED exam, one of the components of the four-part exam (History and Social Sciences, Science, English and Reading and Math) which is most difficult for students to pass. Passing all four components meant that they will be awarded their alternative high school diploma. Because students tend to drop out of the Algebra course, the division dean in partnership with the Chairperson of Engineering Technology decided that it would be a good starting point for the real-life application of algebraic concepts. The Basic Electronics course covered topics such as currents and measurement of currents, prefixes for powers of ten, electricity production, current flow in a circuit, parallel and series circuits, magnetic and electromagnetic applications, etc. while topics in algebra covered conversions of units, slope of a line, geometric measurement and dimensions (GMD), using Ohm’s Law to find an unknown value, order of operations to add resistance in series and parallel circuits, etc. Unlike the bridge program in Allied Health, in Basic Electronics, the Math instructor was also the Basic Electronics instructor—creating more engaged students as they already knew the instructor. Below is a sample of the contextualized curriculum in Algebra showing the content focus of both courses in Week One of Instruction:
Table 6: Algebra and Basic Electronics Bridge Course

<table>
<thead>
<tr>
<th>Math Content: Algebra (non-credit)</th>
<th>Electronics Focus (3 credit hours)</th>
<th>Goals/Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week One- Part two</td>
<td>I= Q/t formula:</td>
<td>State the two laws of electrostatic charges</td>
</tr>
<tr>
<td>Electrical charge</td>
<td>Coulomb</td>
<td>Define coulomb</td>
</tr>
<tr>
<td>Current flow</td>
<td>Electrical charge</td>
<td></td>
</tr>
<tr>
<td>Scientific notation</td>
<td>Current Flow</td>
<td>Describe and define the relationship of amperes, coulomb, and time through formula</td>
</tr>
<tr>
<td>Review of the different</td>
<td>Scientific notation</td>
<td></td>
</tr>
<tr>
<td>functionalities of a calculator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week Two</td>
<td>Resistance</td>
<td>State Ohm’s Law with reference to voltage, and resistance</td>
</tr>
<tr>
<td>Conversions of units</td>
<td>Conductors</td>
<td></td>
</tr>
<tr>
<td>Fractions to decimals</td>
<td>Resistors</td>
<td>Describe how the total current flows differ between series and parallel connections</td>
</tr>
<tr>
<td>Slopes</td>
<td>Ohm’s Law</td>
<td></td>
</tr>
<tr>
<td>Calculate percentages to</td>
<td>Kirchhoff’s Current and</td>
<td></td>
</tr>
<tr>
<td>calculate resistor’s tolerance</td>
<td>Voltage Laws</td>
<td></td>
</tr>
</tbody>
</table>

Of the six who registered for dual credit-non-credit courses, three finished and completed the course. The only female participant withdrew from the class before the midterm of the 90-hour dual course (45 hours algebra and 45 hours Electronics). Student evaluations at the end of the dual-course liked the fact that the algebra instructor was also their electronics instructor. They also wrote that they understood algebraic concepts better because of the application in electronics. However, because the latter did not have a laboratory component to it, there were not many hands-on lessons and activities that students wished they had to give them practice. At the very end, only two of the students continued on to Electronics/leading to a certificate degree in robotics/engineering technology. Because they were only enrolled in one credit class, students did not qualify for financial aid as they needed to be full-time students to apply and qualify for financial aid. Students admitted that they were not ready for the burden of paying for credit classes- choosing to go back non-credit classes and finish all the courses they needed to pass and complete to take and pass the GED exams and be awarded the high school certificate – their passport to academic and career pathways.
E. Designing Bridge programs, Contextualizing Curricula and Transitioning Students: Lessons Learned and Looking Forward and Beyond

Subsequent bridge courses were created to prepare students to their career and/or academic pathways. For example, an English and academic bridge that combined students who finished their English preparation classes but are not quite ready to be placed in college English and students completing their Math sequence courses were joined and co-taught using the interdisciplinary approach. The English and Math faculty who co-taught the class decided that students would learn better and reinforce information they gained from both classes if they used themes that would capture the marriage of English and Math. While the major theme was Immigration and people's movement, they also discussed related topics such as housing and education, crime and security, local income and tax distribution, changing demographics and natural disasters, income tax and the effects of population density on rapid urbanization, employment and jobs, all the while integrating language topics such as punctuations, sentence structures, rhetorical modes/ patterns of organization, citation of references, research, editing and proofreading one’s composition, grammar rules, etc. Math covered topics such as graphing, statistical projections and trends, graphing with a computer/smartphone, drawing inferences from given data and statistics, conversions and basic blueprint designing. The capstone or end-of-semester project required students to create a three-dimensional model of affordable housing including a blueprint of the proposed housing project (as an application of what they learned in Math) and incorporating environmentally-friendly features. Students were grouped and were to “defend” their design to invited judges composed of faculty and office staff of the adult education division and others from the college. Piloting the academic bridge started spring, 2017. Fifteen (15) students registered for the Academic English class, and eighteen students (18) for the Algebra class. At the end of the 45-hour class, 10 completed and passed the English class, a 66% completion and pass rate, while 8 completed and passed the Algebra class- a 44% completion and pass rate. While the results are not very high, it is not surprising as many of the students have not been exposed to academic requirements and culture for some time and are returning to finish their schooling, or are immigrants getting used to academia. Age range of students is 25-35, with some approaching their forty’s. Algebraic concepts had been a challenge to some and those who stayed and eventually passed the class used the Tutoring Center for extra help. In spite of the low completion and passing rate, students felt that the interdisciplinary teaching was a good method, and the required group research and other group work assigned by the faculty enabled them to help, support and learn from each other. They also viewed positively the informal learning community that resulted from it, and the cross-and interdisciplinary method of teaching. Students’ evaluation showed that they preferred to be in the same method of instruction and learning in their next class. The expectation for students who registered in the academic bridge is for them to transition to the general education courses, complete the requirements and graduate with a degree in Associate in Arts or Science- transferable to a four-year university. Articulation agreements with universities enable students to transfer most if not all of the courses they completed with passing grades to universities and be awarded the four-year bachelor’s degree after two to years. The two+two model of pursuing higher education saves students money at least for the first two years of their college education. Should students go
straight to a university, they would have been required to live in a dorm, which adds to the cost of their education.

Later models show a 2+2+2 model which described partnerships that begin at the junior and senior level of high school to prepare students ready for college or their careers, and skip developmental education at the community college. For adults trying to complete their interrupted high school or college education and who have been out of the educational system for quite some time, it can be challenging to juggle job, family responsibilities, school work and other challenges that confront them every day. For those who are raising children while at the same time caring for their elderly parents, the challenges are even more, and for some- stopping out or dropping out of school again is the easiest way out.

In designing bridge programs, contextualizing the curricula to make them meaningful to students and to connect their experiences with instruction is the easy part. The hard part is changing the culture and the mindset of students- where the assumption that education is linear and hierarchical is the steadfast rule. “Selling” them the idea that dual enrolment in a basic skills that uses the topics in a credit class, and using an interdisciplinary approach to instruction takes time as potential students who have not been exposed to these approaches seem to be skeptical at first, though they later on show strong preference for them. Scheduling classes is a logistical nightmare especially if staff who are involved in it cross disciplines, and will have to work with faculty from two different content and academic areas. Figuring out schedules that are convenient to adult students who have full-time jobs is sometimes hit-or-miss. Students’ job schedules routinely change because they not the office type work schedules which are fixed and predictable, but rather, service industry schedules as in restaurants, hospital clean-up crew, hotels, janitorial services, construction and manufacturing, which is one reason why it was also difficult to recruit students as they worried how class schedules would fit in their work schedule. Planners cannot always predict that students who enroll at the beginning of an academic year will have the same work schedule in the subsequent semester. The most difficult challenge planners is seeing to it that there are available support services for students: from one-on-one intrusive academic advising so that there is a specific career pathway leading them to credentials, regular meeting with faculty, availability of dependable but affordable daycare, a dependable means of transportation (whether a car or a bus service), and financial support from the institution through scholarships and grants. Internships especially when they are paid internships not only provide financial support to students, but also connecting theories and knowledge learned in the classroom. No one can dispute the importance of faculty designing and revising curricula and testing them in the classroom. If an initiative were to be successful, it needs faculty engagement and buy-in right from the very beginning as they will be assessing and evaluating what worked and what did not in the implementation stage. They will also need professional development and training as well as support and encouragement from senior leadership. Students also need to be transitioned to credit-bearing programs of study seamlessly, and this can be achieved by staff who will be working closely with students and other entities in the college, e.g., admissions, registration, financial aid, counselors, etc. Like initiatives that have been field-tested and scaled in different parts of the country, there needs to be clarity in terms of sources of funding, as the best- and the most-well-planned educational initiatives are bound to fail if no budget is allocated to support personnel cost, textbooks, computers,
other educational materials. Plans are as good only as the availability of financial resources. Most of all, everyone involved in planning, implementing, and evaluating bridge programs should remember that student success is the desired and utmost goal—-the benchmark that determines if programs failed or succeeded.

Conclusion

The American Dream means many things to Americans, but the underlying philosophy is that the opportunities are available to everyone, and everyone can improve himself or herself. It is a powerful magnet that draws people from different walks of life and orientation, but most especially to immigrants who came to the country seeking a more stable future for them and their families. To secure one’s slice of the American is to have a job that would enable individuals to own a home and a dependable car, bring food on the table, send one’s children to good schools and save for the future. Increasingly though, the Dream has become harder to reach, especially for people of color and minority groups who can barely hold on to their current jobs because of lack of appropriate skills and education. They feel left behind and are “stranded” in minimum wage work that could hardly sustain their families. It is disheartening and disenchanting, especially those who are professionals in their country of origin. But in the U.S. and elsewhere, people still believe in the power of education to transform lives and societies. However, educational institutions need to change radically to provide meaningful learning to students, one that will provide them with the tools to succeed in the demands of constantly evolving workplaces along with changing technologies. Educational institutions, especially those in higher education need to come down from their ivory towers to serve individuals who have been shut out of their doors because they cannot afford to pay the staggering cost of furthering their education. They need to be more accessible and create programs and initiatives that will provide non-traditional students with quality instruction to prepare them for further education and help them secure degrees and credentials. Different from their traditional, college-bound high school graduate counterparts, adult students face barriers and challenges as well as responsibilities to fulfill. Too often, “life gets in the way” leading them to drop out of the educational system. Community colleges have been leading the charge in helping non-traditional students by offering bridge programs that allow them to dually enroll in non-credit and credit courses shortening the length of time that it takes for them to complete their schooling; contextualized curriculum and instruction that integrate academic and workplace content that focus on real-life situations; and support services that transition them smoothly to college and careers of their choice. I-BEST, Accelerating Opportunity-ICAPS are examples of what institutions can achieve if they collaborate with partners who will ensure the success of students. The initiatives showed promising results such as higher retention and completion rate among participants compared to students who were on the traditional, hierarchical and lockstep completion of their programs of study. Though the number of students who participated is relatively small in comparison with students who are in the traditional track, their positive response to the initiatives can be used to improve future broader-scale implementation of promising educational practices that aim to accelerate students’ completion of their studies. More importantly, collaborations among stakeholders- education and community leaders, business and industry partners, workforce boards are as crucial as faculty engagement and commitment in any successful implementation of an innovative educational project/program. The American Dream can still be reached by those who are
determined to improve themselves, but educational institutions need to do their part of re-imagining and re-designing the Dream with them so that it is easier for all to be on the right track toward the Dream- in a much shorter time.

References


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**A Characterization of Junior High Students with Anxieties towards Learning Mathematics**

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Abstract

This work is concerned with the assessment of difficulties felt by Japanese junior high school students who feel anxiety towards learning mathematics. More specifically, the aims of this work are (i) to understand how the awareness differs across the grades and gender; (ii) to get some insights into the characteristics of the students who feel anxiety towards mathematics learning activities by using conjoint analysis. To accomplish these purposes, a survey study based on the conjoint analysis method with conjoint cards expressing three attributes, each composed by two levels was designed to assess the students’ perceptions of ‘being good at’ and ‘being not good at’ towards the learning modules of mathematics classified as ‘algebra calculation’, ‘functions’, and ‘geometrical figures’. The data collection was carried out at a typical public junior high school, and only respondents who reported being ‘not good at’ mathematics were extracted for analysis. There were 276 eligible respondents (89 first-year, 76 second-year, and 111 third-year, aged 12 to 15 years) out of 616 answerers in total. The data processing consisted first of clustering the respondents according to their answers, and then application of conjoint analysis on these groups to pursue their characteristics. It turned out that there were differences in the perceptions of difficulties for the three learning areas of mathematics. Moreover, more than half of the respondents have perceptions of difficulties for each learning area. The contribution of this paper is that these findings may provide some clues and a method to understand the issues related to the difficulties that students have in learning mathematics in school.

Keyword: Mathematics education, Conjoint analysis, Clustering, Japanese junior high school students

Introduction

Over the past decades, increasing attention has been paid to the issue regarded to the decreasing number of students choosing mathematics and science fields for their future professional careers. As far as the anxieties in learning mathematics is concerned, several studies have shown that the percentage of Japanese students in compulsory education, who feel anxiety towards learning mathematics, increases as the academic year goes up (Nishikawa and Izuta, 2017; Fukaya, et al., 1995; TIMSS, 2012; TIMSS, 2016). Moreover, in “National Assessment of Academic Ability”
survey as of 2016, the percentage of junior high school students who answered to the question "Do you like mathematics studies?", the total percentage rate of the answers 'not' and 'rather not' was over 40%. However, there is a report showing that despite these results so far, there are many students who feel that mathematics learning is indispensable (NIER, 2016). This study is motivated by the authors’ previous research which examined the feelings of junior high school students towards three main areas of mathematics learning, and showed the overall trend by gender and grades (Izuta and Nishikawa, 2017). As a matter of fact, here we examined the students' feelings for the three major areas of mathematics learning using conjoint analysis focusing on students who feel not good at mathematics learning.

Methods

The respondents were students of a public junior high school located in Niigata Prefecture. Their ages were from 12 to 15 years. The survey was carried out at the end of the academic year 2016 in March. In all, 616 students (182 first-year, 212 second-year, and 222 third-year) participated in the study. They were asked to answer about their feelings towards learning mathematics. The questions were based on the five-point Likert scale corresponding to ‘bad at’, ‘somewhat bad at’, ‘neutral’, ‘somewhat good at’, and ‘good at’. Only ‘bad at’ and ‘somewhat bad at’ answers were analyzed.

The questionnaires (conjoint cards) are shown in Figure 1. It consists of three attributes, that is ‘Algebra calculation’, ‘Functions’, and ‘Geometrical figures’, each with two levels, namely ‘Good At’, and ’Not Good At’. The respondents were asked to rank up the cards from number 1 (fulfills or closest to what they think or feel) through number 4 (less applicable case).

Statistical analysis was carried out as follows. First, the respondents were grouped by gender and academic year by means of a clustering method previously suggested by the authors (Izuta et al., 2016). Note that according to this processing procedure, the answers that fail to fall in one of the clusters were put together in the final group that had answers statistically uncorrelated. Then these cluster were analyzed on the grounds of conjoint analysis, for which Microsoft Excel 2013 was used as suggested in the literature (Orme, 2009).

<table>
<thead>
<tr>
<th>Card 1</th>
<th>Algebra calculation</th>
<th>Geometrical figures</th>
<th>Functions</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Card 1</td>
<td>Good At</td>
<td>Good At</td>
<td>Good At</td>
<td></td>
</tr>
<tr>
<td>Card 2</td>
<td>Good At</td>
<td>Not Good At</td>
<td>Not Good At</td>
<td></td>
</tr>
<tr>
<td>Card 3</td>
<td>Not Good At</td>
<td>Good At</td>
<td>Not Good At</td>
<td></td>
</tr>
<tr>
<td>Card 4</td>
<td>Not Good At</td>
<td>Not Good At</td>
<td>Good At</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1. Conjoint card used in the survey

Results
In this section, the results of both clustering and conjoint analysis processing for each academic year and gender are described.

**Characteristics of the Clustered Groups**

Table 1 presents the characteristics of the clustered groups obtained from the application of clustering method. For first year students, male students were divided into five groups. The largest group G1 was composed by 11 respondents, which amounts to about 42.3% of the total number. G2, G3 and G5 had the same percentages of males, namely 15.4%. In addition, G4 accounted for 11.5% of the males. On the other hand, female respondents were divided into seven groups, whose percentages were 42.9%, 17.5%, 15.9%, 9.5%, 4.8%, 3.2%, and 6.3% for groups G1 to G7, in this order.

The data clustering results for second year male students were gathered into four groups. Group G1 clustered 55.6% of the boys whereas 18.5% of respondents composed group G2. In addition, group G3 had 11.1%, and group G4 marked 14.8%. On the other hand, six groups were computed out of the answers given by second year female students as follows. The group G1 accounted for about half of the whole second grade female respondents, namely 49%. The second group G2 consisted of 10 respondents, which amounts to about 20.4% of the total number; G3 was 8.2%; G4 and G5 accounted for 6.1%; and G6 for 10.2%.

As for the results accomplished from third year students, males composed six groups whereas females seven groups. For males, group G1 clustered 36.4% of the male students; G2 comprised of 27.3%, and G3 of 13.6%. Furthermore, G5 and G6 were 6.8%, and G4 was 9.1%. For females, group G1 comprised 35.8% of respondents. G2 and G3 had both the same percentages, namely 17.9%; and both G5 and G7 were 6.0%. As for the remaining of female groups, G3 and G6 were 11.9% and 4.5%, respectively.

<table>
<thead>
<tr>
<th></th>
<th>First Year</th>
<th>Second Year</th>
<th>Third Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male (n = 26)</td>
<td>Female (n = 63)</td>
<td>Male (n = 27)</td>
</tr>
<tr>
<td>Groups</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>G1</td>
<td>11</td>
<td>42.3</td>
<td>27</td>
</tr>
<tr>
<td>G2</td>
<td>4</td>
<td>15.4</td>
<td>11</td>
</tr>
<tr>
<td>G3</td>
<td>4</td>
<td>15.4</td>
<td>10</td>
</tr>
<tr>
<td>G4</td>
<td>3</td>
<td>11.5</td>
<td>6</td>
</tr>
<tr>
<td>G5</td>
<td>4</td>
<td>15.4</td>
<td>3</td>
</tr>
</tbody>
</table>

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Characterization of First Year Students

The results of conjoint analysis for all the groups of first year male students are shown in Figure 2. The precision of measurement in the conjoint analysis were 0.84, 1.0, 0.93, 0.91, and 0.3 for the groups G1 through G5, respectively. From the relative importance graph, it is clear that the largest group G1 focused mainly on ‘Algebra calculation’ with 67.7%, ‘Geometrical figures’ with 25.8%, and ‘Functions’ with 6.5% of importance, in which the conspicuous, attribute levels are ‘Not Good At (Algebra calculation)’, ‘Not Good At (Geometrical figures)’, and ‘Not Good At (Functions)’. Next, the importance value chart of group G3 was similar to the one of G1; however, as for the levels of their attributes, there were different in regard to ‘Geometrical figures’, which unlike G1 was ‘good at’. Now, the importance of attribute for G2 marked 66.7% for ‘Functions’ and 33.3% for ‘Algebra calculation’ while their dominant attribute levels were ‘Not Good At (Functions)’ and ‘Not Good At (Algebra calculation)’; and G4 ranked 66.7% for ‘Geometrical figures’ with ‘Not Good At (Geometrical figures)’, 22.2% for ‘Functions’ with ‘Not Good At (Functions)’, and 11.1% for ‘Algebra calculation’ with ‘Good At (Algebra calculation)’. Finally, group G5 had importance 50.0% for ‘Functions’ assessed as ‘Good At (Functions)’, 25.0% for both ‘Algebra calculation’ with ‘Good At (Algebra calculation)’ and ‘Geometrical figures’ with ‘Not Good At (Geometrical figures)’ representing their respective attributes.

Figure 2. Comparison of conjoint analysis for all the groups of first year male students. (A) Relative importance of attributes. (B) Partial utility values of groups.

Figure 3 illustrates the results accomplished from first year female students. The precision of measurement in the conjoint analysis were 0.80, 0.97, 0.85, 0.83, 0.91, 1.0, and 0.13 for groups G1 to G7, in this order. Focusing on the largest group G1, the attribute with the highest importance value was ‘Algebra calculation’ (58.4%) which had the level ‘Not Good At (Algebra calculation)’ representing it. The second largest attribute was ‘Functions’ with 39.0%, for which the relevant attribute level
was ‘Not Good At (Functions)’. Like G1, the values of the attributes in G2 increased following the order given by ‘Geometrical figures’, ‘Functions’, and ‘Algebra calculation’. Yet, looking at the levels of attributes they both had attribute level ‘Not Good At (Algebra calculation)’ for attribute ‘Algebra calculation’ and differed for attribute ‘Function’ since, unlike G1, G2 was ‘Good At (Functions)’. Furthermore, the graphs of importance for G3, G4, and G5 had similar patterns. The attributes for G3 ranked 53.3% for ‘Functions’, 43.3% for ‘Geometrical figures’, and 3.3% for ‘Algebra calculation’ while their representative attribute levels were ‘Not Good At (Functions)’, ‘Not Good At (Geometrical figures)’, and ‘Good At (Algebra calculation)’; G4 measured 55.6% for ‘Functions’ with ‘Good At (Functions)’, 38.9% for ‘Geometrical figures’ with ‘Not Good At (Geometrical figures)’, and 5.6% for ‘Algebra calculation’ with ‘Not Good At (Algebra calculation)’; G5 had 66.7% of importance for ‘Algebra calculation’ with ‘Good At (Algebra calculation)’, and 33.3% for ‘Geometrical figures’ with ‘Good At (Geometrical figures)’. Finally, the importance values of attributes in G6 and G7 were both zeroes for ‘functions’, although their graphical patterns of the attribute levels differed from each other.

Characterization of Second Year Students

Figure 4 indicates the conjoint analysis of the all groups of second year male student. The precision of measurement in the conjoint analysis were 0.76, 0.84, 0.91, and 0.23 for the groups G1 to G4, in this order. For males, each importance graph had its own specific pattern. In fact, for the largest group G1, the values of importance and relative partial utilities were 61.0% for ‘Functions’ with ‘Not Good At (Functions)’, 36.6% for ‘Algebra calculation’ with ‘Not Good At (Algebra calculation)’, and 2.4% for ‘Geometrical figures’ with ‘Not Good At (Geometrical figures)’. As for G2 the figures were 76.9% for ‘Geometrical figures’ with ‘Not Good At (Geometrical figures)’, 15.4% for ‘Functions’ with ‘Good At (Functions)’, and 7.7% for ‘Algebra calculation’ with ‘Not Good At (Algebra calculation)’; whereas G3 became polarized...
and measured 55.6% for ‘Algebra calculation’ and 33.3% for ‘Geometrical figures’ while and their respective attribute levels were ‘Good At (Algebra calculation)’ and ‘Good At (Geometrical figures)’. Lastly, group G4 had importance values of 66.7% for ‘Algebra calculation’ with ‘Not Good At (Algebra calculation)’, and 16.7% for both ‘Functions’ - ‘Not Good At (Functions)’ - and ‘Geometrical figures’ - ‘Not Good At (Geometrical figures)’.

![Figure 4. Comparison of conjoint analysis for all the groups of second year male students. (A) Relative importance of attributes. (B) Partial utility values of groups.](image)

Importance and partial utility value graphs for all the groups of second year female students are shown in Figure 5. The precision of measurement were 0.79, 0.94, 0.93, 0.91, 0.91, and 0.30 for groups G1 to G6, in this order. As far as the largest group G1 is concerned, the group G1 had 70.3% of importance for ‘Functions’, 23.4% for ‘Algebra calculation’, and 6.2% for ‘Geometrical figures’, and their attribute levels were ‘Not Good At (Functions)’, ‘Not Good At (Algebra calculation)’, and ‘Not Good At (Geometrical figures)’, respectively. Interestingly, males and females had similar graphical patterns for G1 as clearly seen in Fig.3. Now, the second largest group G2 focused mainly on ‘Geometrical figures’ with importance value of 66.7%, ‘Functions’ with 26.7%, and ‘Algebra calculation’ with 6.7%; in which the attributes levels were ‘Not Good At (Geometrical figures)’, ‘Not Good At (Functions)’ and ‘Not Good at (Algebra calculation)’, respectively. Note that the patterns of importance graphs of G2 and G3 are alike but the attribute levels are not, as easily seen in attribute level ‘functions’. G4 depends only on the attributes ‘Algebra calculation’ and ‘Geometrical figures’, with levels ‘Not Good at (Algebra calculation)’ and ‘Not Good At (Geometrical figures)’, respectively. Similar pattern in importance values was seen in G6 which was characterized by attribute ‘Algebra calculation’ scoring 85.7%, and attribute level ‘Good at (Algebra calculation)’. Finally, G5 came up with 63.7% of importance for ‘Algebra calculation’ with ‘Not Good At (Algebra calculation)’, 22.2% for ‘Geometrical figures’ with ’Not Good At (Geometrical figures)’, and 11.1% for ‘Functions’ with 'Good At (Functions)'.
Figure 6 shows the results of conjoint analysis accomplished from third year male students. The precision of measurement in the conjoint analysis were 0.80, 0.80, 0.91, 0.85, 1.0, and 0.24 for groups G1 to G6, in this order. In regard to the largest group G1, it gave importance values of 63.0% for ‘Algebra calculation’, 28.3% for ‘Geometrical figures’, and 8.7% for ‘Functions’. These attributes were expressed by the attribute levels given by ‘Not Good At (Algebra calculation)’, ‘Not Good At (Geometrical figures)’, and ‘Not Good At (Functions)’. Note that the graphical patterns of the importance and partial utilities graphs resemble pretty much the one found for group G1 of G1 of first year male students (Fig 1). As for the importance values of G2, it had 58.3% for ‘Functions’, 30.6% for ‘Geometrical figures’, and 11.1% for ‘Algebra calculation’, in which their attribute levels were respectively ‘Not Good At (Functions)’, ‘Not Good At (Geometrical figures)’, and ‘Not Good At (Algebra calculation)’- whereas G3 ranked 55.6% for ‘Functions’ with ‘Not Good At (Functions)’ and 44.4% for ‘Geometrical figures’ with ‘Good At (Geometrical figures)’. G4 was described by ‘Algebra calculation’ (80.0%) with ‘Good At (Algebra calculation)’ and ‘Function’ (20.0%) with ‘Not Good At (Function)’; and G5 had 66.7% for ‘Geometrical figures’ and 33.3% for ‘Functions’ with partial utilities given by ‘Not Good At (Geometrical figures)’ and ‘Good At (Functions)’. Lastly the group G6 had importance value of 60.0% for ‘Functions’ with ‘Good At (Functions)’, 20.0% for both ‘Algebra calculation’ with ‘Not Good At (Algebra calculation)’ and ‘Geometrical figures’ with ‘Good At (Geometrical figures)’.
The results of conjoint analysis for all the groups of third year female students are as shown in Figure 7. The precision of measurement were 0.80, 0.89, 0.82, 0.93, 1.0, 1.0, and 0.9 for the groups G1 through G7. Focusing on the largest group G1, Fig 7A shows that G1 was characterized by 56.9% of importance value for ‘Geometrical figures’, 33.3% for ‘Functions’, and 9.7% for ‘Algebra calculation’, with corresponding partial utilities being ‘Not Good At (Geometrical figures)’, ‘Not Good At (Functions)’, and ‘Not Good At (Algebra calculation)’ whereas G2 by 23.5% for ‘Geometrical figures’ - with level ‘Not Good At (Geometrical figures)’, 5.9% for ‘Functions’ - with level ‘Not Good At (Functions)’; and G3, whose partial utility pattern was similar to G2, by 13.9% for ‘Geometrical figures’, 25.0% for ‘Functions’, and 61.1% for ‘Algebra calculation’. G4 marked 66.7% for ‘Functions’, 25.0% for ‘Algebra calculation’, and 8.3% for ‘Geometrical figures’ and their attribute levels were ‘Good At (Functions)’, ‘Not Good At (Algebra calculation)’, and ‘Not Good At (Geometrical figures)’; and the importance values of G5 and G1 as well as G6 and G4 had similar the graphical patterns with the utilities of G5 given by ‘Not Good At (Geometrical figures)’ and ‘Good At (Functions)’ and G6 by ‘Not Good At (Functions)’ and ‘Good At (Algebra calculation)’. Finally the last group G7 had importance value of 66.7% for ‘Geometrical figures’ with ‘Good At (Geometrical figures)’, 16.7% for both ‘Algebra calculation’ with ‘Good At (Algebra calculation)’ and ‘Functions’ with ‘Not Good At (Functions)’.

Figure 6. Comparison of conjoint analysis for all the groups of third year male students. (A) Relative importance of attributes. (B) Partial utility values of groups.
Discussion

The data processing yielded groups according to their anxieties towards learning mathematics. Each group is characterized by specific combinations of the anxieties related to the learning areas. The largest groups G1s comprised ‘Not Good At’ for all the attribute levels, independent of academic year and gender meaning that a significant number of students feel anxiety towards learning mathematics; and since G2 of first year males, G2 of second year females, G4 of second year male, and G2 of third graders are also characterized in the same way, this proportion increases sensitively. Yet, the results suggest that over half of the surveyed students - both males and females- feel anxieties towards learning mathematics, and the other half do feel anxieties but for one or two particular learning areas. In percentage terms these proportions account each for about half of 276 answers taken for processing, which on considering the total number of respondents - 616 in all - their percentages reach each to approximately 22% of the students.

It is also worth noting that there were groups without any attribute level ‘Not Good At’ as the groups G6 of first grade girls and G3 of second grade boys. The reason for this might be due to the fact that in some cases the feeling of anxiety toward mathematics is reported by students taking other subjects as reference such as language, which has higher average score compared to mathematics. Even though the opposite is also a possibility, the likelihood that mathematics be more affected is still higher.

Final Comments

This work was concerned with the assessment of difficulty perceptions of Japanese junior high school students towards mathematics learning. It was found that
more than half of the students feel anxieties towards the three learning areas of mathematics. The use of conjoint analysis-based assessment may help teachers to identify the level of anxiety that students are going through and decide how to cope with these issues.

Acknowledgement

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The Impact of School Environmental Factors to the Motor Development of Students with Autism Spectrum Disorder (ASD) in Pinaglabanan Elementary School, San Juan City

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Abstract

Environment has a big impact to every child’s development. It can affect their social, emotional or physical development. Thus, this study aims to determine the impact of the school environmental factors to the motor development of students with Autism Spectrum Disorder (ASD). The study is both descriptive and qualitative in nature. It restricted its respondents only to the administrator, SpEd teachers and parents/guardians of the students. And it has been limited to the use of self administered survey questionnaire and interview questionnaire. A cross sectional study design was utilized to determine the impact of the school environmental factors to the motor development of students with autism spectrum disorder (ASD) ages 5 to 12 years old that were under the school year 2013-2014 in Pinaglabanan Elementary School San Juan City, Philippines. Based on the summary of the impact of environmental factors on the motor development of students with autism assessed by the school administrators and SPED teachers it resulted with the average impact ($X = 2.3$) and likewise, the parents strongly agreed the same level of impact was also on the average, ($X = 2.66$), respectively. Given that, in Special Education the environmental factors should not be taken for granted. This should be included in the school’s main priorities for improvement. The school administrator should review and check the different school environmental factors and its importance. The evaluation of the school environmental factors should be strengthened. Concrete evaluation of the motor skills of the students should then be done and properly documented.

Keywords: Autism Spectrum Disorder (ASD), motor development, school environment
Introduction

Environment has a big impact to every child’s development. It can affect their social, emotional or physical development. Thus, giving an experientially rich environment should be considered for every child’s optimum development. According to the Ecological theory, microsystem is the physical and social situations that directly affect a child and one of those is the school environment.

The school environment has a big impact to a child’s physical development. Motor development is greatly affected especially because children spend most of their time in school. Factors found in school that can help improve a child’s motor development that includes indoor and outdoor physical environment, resources and activities given by the teachers, child’s peers in school, and number of hours spent in school which allows more opportunity for exposure. As such, deprivation of these factors may delay a child’s motor development.

Motor development is a step-by-step process. A child is born with basic motor abilities such as flexion and extension of extremities. A child then learns to turn his body from side to side, creep, stand, and walk. However, complex movements such as fine motor activities are learned through a combination of physical growth and developing it through practice and experiences. Motor skills development enables a child to do things and to enjoy life because through it, they can walk, run, write and enjoy their play. Without proper motor development, a child might struggle in any aspects in their lives or may not receive the appropriate amount of physical activity. Motor development is especially important to children with ASD wherein most of them are delayed with their motor skills. Delayed motor skills development greatly affects their lives especially their interaction. By helping them develop their motor skills, it can also help improve their other symptoms such as their behaviours and social interaction.

Background of the Study

Pinaglabanan Elementary School of San Juan is known to be a regular school and later on Sped program was incorporated to their school.

By pursuing this study, many schools and professionals will be enlightened the importance of school environment to the motor development of students especially the students with autism spectrum disorder. They will be able to know what areas of environment to improve for motor development of learners.

Theoretical Framework
Many theories have cited that environmental factors have significant implication in the motor development of a child. This study based its assumption on The Ecological Theory.

This Ecological Theory uses a theoretical framework proposed by Bronfenbrenner (1995) that includes a strong environmental view of child development. He proposes that the child is influenced by five interactive and overlapping ecological systems.

Microsystem is the setting in which the child lives. It is the physical and social situations with the family and peer group that directly affect the child.

This study focused on the child’s Microsystem wherein the main focus is in the impact of the school environmental factors which include the physical environment of the school (indoor & outdoor equipment), the teachers and peers to the motor development of the students with ASD.

**Conceptual Framework**

![Conceptual Framework of the Study]

Figure 1 is the schema of the study. The framework assumes that environment has an impact on the motor development of the students with ASD.

Autism Spectrum Disorder is considered the fastest rising developmental disability in the world. The characteristics of Autism Spectrum Disorder range widely from individual to individual, but they tend to fall across different axes.

Motor skills delay is usually seen in children with Autism Spectrum Disorder (ASD) and it is commonly neglected. Motor skills delay may be a result of multiple interacting systems one of which is the lack of stimuli or sensorial experience from the environment.

**Statement of the problem**
This study aims to determine the impact of school environmental factors to the motor development of students with Autism Spectrum Disorder (ASD) ages 5-12 years old in Pinaglabanan Elementary School in San Juan.

Specifically, the study sought answers to the following questions:

1. How do the school administrators and teachers; and parents assess the school environmental factors to the motor development of students with ASD?
2. Is there a significant difference between the assessments of the school administrators and special education teachers, and parents as regard the influence of the school environmental factors to the motor development of student’s with ASD?
3. From the findings of the study, what proposed instructional plan of action is offered to further enhance motor development of the students with ASD?

Scope and Limitation

The study limited itself to the students with autism spectrum disorder (ASD) of Pinaglabanan Elementary School in San Juan City ages 5-12 years old that were under the school year 2013-2014. Moreover, the study restricted its respondents only to the administrator, SpEd teachers and parents/guardians of the students since significant information of the school environmental factors may only be identified by them. The study limited itself to the use of survey and interview. Sets of survey questionnaire were distributed individually to the parents/guardians and to the SpEd Teachers/administrator of the students with autism spectrum disorder.

Significance of the study

This study is significant to the following:

First, to the administrators of educational institutions where there is a special program being implemented, specifically, at Pinaglabanan Elementary School in San Juan City. The findings will provide information that would be valuable in planning and improving their future school environment.

Second, to the teachers of students with autism, the results of this study will provide information and insights that may enhance their classroom environment, methods and techniques of teaching.

Third, to the parents and guardians of the students with autism, the result of this study will make them aware and realize the significance of sending their children to a school with good environment.

Fourth, to the students with autism spectrum disorder, the result of this study can help improve their school environment and it would be beneficial for them to improve their motor development.
Finally, to the SpEd practitioners and researchers, the outcome of the study may serve as a baseline data for future use in conceptualization of the school environment.

Review Of Related Literature And Studies

Foreign Source

According to Mastrangelo, S. (2009), play is an important component of any child’s education: It is through play that children learn about the world around them, test ideas, ask questions, and come up with answers. It is all the more important to provide ample opportunities for play for children with ASD, so they can begin to acquire the skills that will help them in other domains such as communication, reciprocity, and sensory processing.

Much of the play of children with ASD involves manipulating objects with which they are thoroughly familiar, parents, teachers, siblings, and friends can begin reciprocal interactions with objects that are of salience to the child.

Play is a powerful way to teach a child with ASD, and the key to success is balancing developmental approach to play that encompasses some structure coupled with following the child’s lead.

Researchers agree that play is a universal phenomenon, a culture that is unique to children, is most important to a child’s development, and is a human right (Weider and Greenspan, 2003; Wolfberg, 2003).

Play is also an avenue for children to explore, discover, solve problems, and master new skills (Quill, 2002; Westby, 2008; Wolfberg, 1999, 2003; Ziviani, Boyle, Rodeger, 2001). Specifically, children with ASD frequently enjoy playing activities and materials that involve physical, sensorial experiences such as running, jumping, spinning, and bouncing. Without directions from others, these children will most likely not engage in functionally appropriate play with objects (Wolfberg, 2003; Boucher and Wolfberg, 2003).

According to Hudson, S., Thompson D., & Mack, M. G., play areas should include opportunities for the development of fundamental motor actions along with intellectual challenges to make choices of activities. If children are not given opportunities to choose environmental conditions which will enhance their development, they will assume that there is only one way to use the environment or equipment.

In child care (2013), they mentioned that Play is crucial to the development of children's gross and fine motor skills. Through play, children practice and perfect control and coordination of large body movements, as well as small movements of hands and fingers. Child care providers can support young children's motor development by planning play activities that provide children with regular opportunities to move their bodies.
Sachs, N. & Vicenta, T. (2011) mentioned that, early intervention is one of the most important keys to improvement in autism symptoms - one reason why appropriate outdoor learning environments are crucial. All children learn and develop cognitively as well as physically through play, and a growing body of research points to the important role that nature plays in that development. Creating a supportive environment can go a long way in helping children with special needs experience the world in a meaningful way.

Likewise, Chawarska K., Klin A., & Volkmar, F., (2008), in the developmental approaches, it recognizes that most learning in childhoods takes place in the social context of daily activities and experiences. Efforts to support a child’s development occur with caregivers and familiar partners in everyday activities in a variety of social situations, and not primarily by working with a child in isolation. Natural environments are the everyday routines, activities, and places that are typical or natural for the family and usually include locations such as the home, child care facility, homes of extended family, and friends, and other community locations such as park or church.

Lisa A. Kurtz (2008) mentioned that repetition is an important concept in motor learning. She emphasized that new motor skills must be practiced, or rehearsed, in order to become strong, fluid, and well coordinated. Also, Kurtz gave suggestions for improving the motor planning skills such as expect that teaching new skills will require considerable practice and repetition, and may have to be re-taught periodically even after the child seems capable performing the task. Begin teaching session by first providing sensory experiences that help the child to be more aware of body sensations, or that offer vestibular or tactile sensation. This helps the child to be ready to “listen” to his or her body. And add sensory cues, usually, tactile or visual, to help the child attend to selected aspects of the task. She also discussed the principles on how to help the child to develop fine motor control; these are: Help the child with exercises and activities that develop shoulder, elbow, and wrist stability and engaged the child in activities that promote speed and ease of movement when using the fingers to manipulate small objects.

Children with Autism who are in a secure and supportive environment have indeed shown an improvement in their play behaviour. The children were observed to spend more time playing, have a higher level of play, and more symbolic play behaviour (Naber et al, 2003).

Local Source

Dizon (2000) came up with a book that specified principles and guidelines, goals and objectives, target skills and suggested activities, instructional strategies and sample lesson plans in the areas of behaviour management, psychosocial area, psychomotor area, cognition and communication area, reading area, quantitative area and activities of daily living, personal management, and livelihood. Curricular contents include: (a) gross motor skills, (b) physical fitness, (c) fine motor skills: pre-writing, (d) cognition, (e) receptive and non-verbal communication, (f) verbal communication, (g) written communication, (h) word discrimination, (i) vocabulary
building, (j) reading comprehension, (k) activities of daily living, (i) personal management, and (m) livelihood.

Ramon Aboitiz Foundation Inc. (RAFI) also wrote about Playgrounds for all, they said that playgrounds are important places for children. In playgrounds, children meet other children and learn how to share a common space. Playgrounds provide children with equipment where they can move in different ways, thereby developing their motor skills. Children also learn to assess situations and take on risk while navigating through a playground.

Research Method and Procedure

Research Method

A cross sectional study design was utilized to determine the impact of the school environmental factors to the motor development of students with autism spectrum disorder (ASD) ages 5 to 12 years old in Pinaglabanan Elementary School San Juan City.

Respondents of the Study

The respondents of the present study were SpEd administrators/teachers and parents/guardians of students with ASD ages 5 to 12 years old presently enrolled in Pinaglabanan Elementary School. There are 11 students with ASD ages 5 to 12 years old enrolled in Pinaglabanan Elementary School. As shown in Table 1, the researcher had requested one (1) school administrator, four (4) SpEd teachers, and eleven (11) parents/guardians to be the respondents of the study. Below is a tabular presentation to describe subject population. There were 31.25 percent of SpEd teachers and an administrator and 68.75 percent of parents. The School Administrator and SpEd teachers and parents comprised the two (2) major groups of respondents. They were chosen purposively and conveniently.

Table 1- Frequency Distribution of the Respondents of the Study in Pinaglabanan Elementary School, San Juan City

<table>
<thead>
<tr>
<th>RESPONDENTS</th>
<th>F</th>
<th>%</th>
<th>RANK</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Administrator/SpED Teachers</td>
<td>5</td>
<td>31.25%</td>
<td>2</td>
</tr>
<tr>
<td>Parents</td>
<td>11</td>
<td>68.75%</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16</td>
<td>100.00%</td>
<td></td>
</tr>
</tbody>
</table>

Teacher, administrator, and parents/guardians of all students with ASD ages 5 to 12 years old were the subjectss in this study.
Sampling Procedure

Purposive sampling was utilized in selecting the participants in the study. All teachers and parents of the registered students with autism spectrum disorder ages 5 to 12 years old in Pinaglabanan Elementary School were included and made subjects of the study.

Instrumentation

Two instruments were used to gather data in the study: a self-administered questionnaire and an interview questionnaire.

A self administered survey questionnaire was utilized to gather the much needed data in the study. The questionnaire was structured considering the different environments in the school measuring the impact to the motor development. Furthermore, in order to measure the degree of impact of the school environmental factors to the motor development, the following rating was formulated:

3 - Great impact - signifies that the student has improved or has known 4-5 new skills from the start of the school year 2013 regardless if it is gross or fine motor skill.

2 - Average impact - signifies that the student has improved or has known 2-3 new skills from the start of the school year 2013 regardless if it is gross or fine motor skill.

1 - Minimal impact - signifies that the student has improved or has known 1 new skill from the start of the school year 2013 regardless if it is gross or fine motor skill.

0 - No impact - signifies no impact of the school environment in any areas of motor development.

The questionnaire was presented in a Likert Scale, a self reporting instrument in which a format was the most applicable for the study since each choice is given a numerical value and the total score is presumed to indicate the belief in the question.

An interview question on each of the factors was also prepared to assess the impact of the school environment which may not be described in the self administered questionnaire.

Both the self-administered questionnaire and interview questionnaire were reviewed and assessed by the experts to determine the validity and reliability. Two experts were chosen for this activity; a coordinator from the Special Education Department; a Dean from the Education Department.
The researcher sought the permission of the Division Superintendent of San Juan City and the principal of Pinaglabanan Elementary School to access the needed information in determining the students under study and locating their parents or guardians. With the permission granted, the researcher went to the SpEd teachers to orient them about the study and the data gathering procedure. The following data were acquired: names of the students; gender; grade level; parent’s/guardian’s name; address and contact number.

After gathering the pertinent information in selecting the students, purposive selection was done. The researcher then contacted all the parents/guardians of the selected subjects for survey schedules. The researcher considered the respondents’ time availability, place of survey and convenience. As soon as a schedule was set individually on all the parents and teacher, actual administration of the survey was conducted through the use of the self-administered questionnaire.

Furthermore, an interview on respondents was also held from the parents and teachers. The questions focused on the impact of the school environmental factors that cannot be described by the survey questionnaire in order to come up with a more comprehensive descriptive study of the subject.

After all questionnaires and interviews were completed, collation of data started. Analysis of the collected data followed and the researcher started analyzing the impact of school environmental factors to the motor development of students with autism spectrum disorder. Descriptive analysis was done and findings were drawn from the data.

**Statistical Analysis of the Data**

The data in the questionnaires collected were tallied and frequency distribution was carefully made. Likewise, the data gathered from the interviews were carefully considered in the frequency distribution for veracity and consistency.

- Percentage.
- Ranking.
- Weighted Mean.
\[ X = \sum (f)(p) \]

Where:

- \( X \) = the weighted mean
- \( f \) = frequency
- \( p \) = allocated points
- \( n \) = number of respondents
- \( \sum \) = summation

\[ \text{F test.} \]

\[ t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}} \]

Where:

- \( t \) = difference between means
- \( \bar{X}_1 \) = mean of the first group
- \( \bar{X}_2 \) = mean of the second group
- \( s_1^2 \) = variance of the first group
- \( s_2^2 \) = variance of the second group
- \( n_1 \) = number of sample of the first group
- \( n_2 \) = number of the sample of the second group

**Presentation, Analysis And Interpretation Of Data**

The following are the findings of the study based on the survey and interviews conducted.

Specific Problem No. 1
Level of Assessments of the School Administrators and SPED teachers and Parents/Guardians as to the Impact of the School Environment to the Motor Development of the Students with Autism Spectrum Disorder (ASD).

From the conduct of the surveys and interviews, the researcher arrived at the following findings.

Table 2 presents the assessments of the groups of respondents with regard to the impact of the motor development of the special learners.

As defined in Table 2, the assessed levels of impact of the environmental factors to motor development of students with ASD as demonstrated by the School Administrators and Special Education Teachers revealed very strong evidence that there was only average impact of the school environment to the motor development of the special learners.

Among the assessments of the school administrators and and Sped teachers, they evaluated all the environmental factors having an average impact with obtained means of $X=3.20$ each and were ranked 5, respectively. This signifies that the students have improved or have known 2-3 new skills from the start of the school year 2013 regardless, if it is gross or fine motor skill.

As supported by the administrator/teachers answered during the interview,

“Students’ fine motor skills have developed (E.g, tracing lines, shapes, letters, numbers, and writing names).”

One Sped teacher claimed that her students have improved her motor skills such as able to grasp the pencil, color the pictures, jump, and can now imitate steps when doing the exercises.
On the other hand, the parents obtained varied values of means, from the highest, $X= 3.82$ on the great impact of school fine motor activities provided by the Sped teachers which was ranked 1, with $X= 3.64$ the impact of the school gross motor activities provided by the Sped teachers and school outdoor space which were ranked 2.5, $X= 3.55$, all to the great impact; and the impact of playtime activities provided by the Sped teachers which was ranked 4, $X= 3.36$ the impact of resources provided by the Sped teachers and school indoor space which were ranked 5.5, $X= 3.09$ the impact of play activities with peers and number of school hours stay which were ranked 7.5, $X= 3.00$ the impact of using the school indoor equipment which was ranked 9, and $X= 2.45$ the impact school outdoor equipment which was ranked 10.

Having a total mean of 2.66, the parents of the students believed that the environmental factors have an average impact in the motor development of their children. Average impact indicates that the students have improved or has known 2-3 new skills from the start of the school year 2013 regardless if it is gross or fine motor skill.

On the interview conducted, 6 parents claimed that their children’s writing skills have really improved. One respondent emphasized that his child can now brush his teeth and dress up on his own.

The overall obtained means of $X= 3.2$ by the administrator/Sped teachers and $X= 2.93$ by the parents are manifestations that the Department of Education should closely work together, coordinate, and network to democratize access to public education service, especially the learners with special needs, who need special treatment/intervention for them to also lead a meaningful and fruitful life.

**Specific Problem No. 2**

Significant Difference between the Assessments of the School Administrator/Special Education Teachers and Parents on the Level of impact of the Environmental Factors to the Motor Development.

To answer the research hypothesis (Ho) raised in the study, the researcher treated the data applying the non-parametric tool, the t-test. Using the Statistical Package for Social Science (SPSS), a computer aided statistical tool, the summary of the results of the application of t-test is reported in Table 3.
A closer examination of Table 3 on the results of the application of t-test, was found to have a no significant difference in the assessments since the computed $t=1.784$ from the sum of means of $X=3.20$ (administrator/Sped teachers) and $X=2.66$ (parents) is a computed t-value which exceed the critical $t=1.782287556$ (one-tail) and $t=2.17881283$ (two-tail) test, hence, retained the null Ho of no significant difference at .05 alpha level and at df=12.

The result signifies that there is no significant difference in the responses of the administrator/Sped teachers and parents on the impact of environmental factors to the motor development of students with ASD. Thus, hypothesis Ho is retained, which states that, “There is no significant difference in the responses of the administrator/Sped teachers and parents on the impact of environmental factors in the motor development of students with ASD”. This implies that the replies of the respondents on the environmental factors are aligned with a distinct degree of impact, which an average impact is shown in the frequency distribution in Table 3.

Specific Problem No. 3

Instructional Plan of Action is Offered to Further Enhance Motor Development of the Students with ASD. (Kindly email the author to request for the Proposed Instructional Manual Plan of Action to Enhance Motor Development of the Special Learner)

Conclusions And Recommendations

Conclusions

Based on the research findings, the impact of environmental factors on the motor skills of students with ASD, the following conclusions are drawn:

At most, the environmental factors only have an average impact on the motor development of students with autism spectrum disorder (ASD) according to both administrators, and Sped teachers; and parents. These environmental factors are in school fine and gross motor activities, resources provided by the sped teachers, school indoor and door spaces, school indoor and outdoor equipment, and the time spent by the students in the school. According to the parent’s assessment, it revealed that the school indoor and outdoor equipment have only minimal impact to the motor development of their children. On the other hand, the interviews with the teachers and parents revealed that the manipulatives have greatly helped the students in improving their motor development.

There is no significant difference in the responses of the parents and school administrators and SPED teachers on the impact of environmental factors to the motor development of students with autism spectrum disorder which implies of an uncertained development from some elements of the environmental factors. There were identified environmental factors that affected the motor development of the
subjects of the study; however, it was only on the average level on the development skills. The utilization of the different kinds of equipment for ASD learners greatly helped them enhance their motor

**Recommendations**

Based on the conclusions drawn in this study, the following are recommended:

Given that, at most, the environmental factors only has an average impact on its students’ motor development, the Department of Education (DepEd) and the school administrator should review and check the different school environmental factors and its importance. The evaluation of the school environmental factors should be strengthened. Concrete evaluation of the motor skills of the students should then be done and be properly documented. This can serve as basis for continued improvement of the school environmental factors.

The Department of Education, through the school administrators, should also monitor the school environmental factors of their school throughout the school year. Proper documentation can serve as basis for improvement.

In Special Education, the environmental factors should not be taken for granted. This should be included in the school’s main priorities for improvement.

Further studies can be undertaken by other researchers in the same field of study using other school setting and special groups of learners.
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Characterization of the Japanese Social Concerns with Health and Care for Natural Disaster Vulnerable in an Eventual Catastrophe

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Abstract

This work aims to characterize the social concerns related to health and caring for vulnerable people that Japanese adults are faced with in an eventual natural disaster strike. To accomplish it, firstly, a review of the literature related to disasters and calamities containing testimonies and reports of rescuers, medical staff, social workers, government members, victims, volunteers, witnesses and others was carried out in order to grasp an overall picture of the issues regarded to health and care for vulnerable people taking temporary refuge in evacuation centers and shelters; secondly, a survey consisting of questionnaires spanning over the topics found in the literature research was prepared and field work was conducted on 90 residents of Tohoku region, which locates in the northeastern part of Japan and is a natural hazard-prone area. Then, the data was modeled on the grounds of structural equation modeling (sem) frame of reference, for which statistical software application R was used. Finally, the findings were discussed within the scope of current social situation in Japan.

Keyword: Social concerns, Natural disaster, Vulnerable people, Modelcharacterization
1. Introduction

1.1 Background

Japan is a country subject to numerous natural disasters with the statistics pointing to comparatively high figures. In fact, over 20.5% of the world’s annual earthquakes of magnitude above Richter scale 6 occur on the Japanese archipelago comprising a land portion of mere 0.28% of the terrestrial surface of the globe; yet 7.0% of the world’s active volcanoes are scattered within its territorial perimeter alone (JICE, 2015), so that it is not too much to say that people’s lives are somewhat constantly threatened by a potential strike coming out of some kind of hazardous natural phenomenon.

To cope with them, risk management and mitigation strategies including detection, assessment and mapping of imminent occurrences, prevention measures, implementation of public policies, establishment of alert systems, evacuation plans and many other critical items on the agenda of crisis management and control are world widely top notch and uniquely developed technology due to continuous improvements of emergency logistics as well as technical apparatus and resources relying on the introduction and successful employment of ever-developing cutting-edge technologies on the spot. All these synergistically contributing to rank Japan as the country with the lowest rate of disaster’s toll in the whole world, accounting for less than 0.3% of the total annual number (JICE, 2015).

Despite these numbers, victims of natural disasters have reported enduring many a problem during their temporary living in provisory housings, shelters and evacuation centers. Among them, anxieties and stress caused by concerns with health and care for vulnerable members of family and relatives have been focused on by the media covering the aftermath and evacuees’ harsh living conditions in these environments. Seemingly, these issues taking a toll on those people are by-products of mainly the aging population and low birth rate events that have impinged heavily upon the society (JRI, 2007).

Taking into consideration this social background, the aim of this work is to study the anxieties and concerns that ordinary adult people have in what relates to health and care for vulnerable family members and relatives in case they will ever have to undergo refuge lives due to a natural catastrophe in their surroundings. For this purpose, firstly, testimonies and reports of professionals, government officials, victims and volunteers found in the literature were scrutinized and researched on to obtain a sketch of the main factors associated with anxiety and stress that attack evacuees emotionally in time of disaster. Secondly, a survey consisting of questionnaires made out of the previous literature browsing was prepared, then sent via postal email to be answered by 90 residents of Tohoku region. Then, the answers
were analyzed and modeled by means of structural equation modeling (SEM) method in order to characterize the respondents.

1.2 Literature Review

Okada (2011) describes the life conditions of elderly people as evacuees living in shelters after the Great East Japan earthquake, in which the interviewees provide some detailed information regarding the anxiety and distress that they are suffering from in their struggle to pull through the natural accident. Ito (2014) provides an overview of the policies and measures enforced by the public administrations and their bureaus aimed to manage the risk and control of crisis. Apropos, practical measures adopted by the private sector in charge of welfare and nursing care services are presented in Kanai (2015) who yields some accounts of the issues connected to primarily disaster vulnerable people as the elderly and handicapped in case of an eventual state of emergency. Obara and Sakai (2012) calls our attention to the mental health care of evacuees, whereas Suga et al. (2008) investigates these theoretical sociological concepts on the grounds of volunteering activities. As a matter of fact, mental health care during calamities has made its way into being a branch of several research fields as can be seen in Enc (2013), Enc (2011), and Kuroki (2011). Indeed, the effects and influences of anxiety and stress on people’s lives and health are reported in Ohta et al. (1996) and Hattori and Yamada (1999), for example.

2. Methods

2.1 Survey

The survey questionnaires were designed to embody the main factors triggering anxiety and stress related to the health and care for disaster vulnerable family members and relatives. The questions are as shown in Table 1.

<table>
<thead>
<tr>
<th>Exogenous Variable Tag</th>
<th>item</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>concerns of whether you will get an evacuation place suitable to a next of kin in need or disaster-vulnerable family member</td>
</tr>
<tr>
<td>A2</td>
<td>concerns of whether you will be able to cope with both their own problems and caregiving of a next of kin in need or disaster-vulnerable family member</td>
</tr>
<tr>
<td>A3</td>
<td>concerns of whether you will find support of volunteers to take care of a next of kin in need or disaster-vulnerable family member</td>
</tr>
<tr>
<td>A4</td>
<td>concerns of whether a next of kin in need or disaster-vulnerable family member will be able to endure the disaster with mental and physical health</td>
</tr>
</tbody>
</table>
Table 1. Anxieties reported during natural disaster events that were used as exogenous variables in order to investigate how concerned people are with the effects of disasters on a next of kin in need or disaster-vulnerable family member

| A5 | concerns of whether you will be able to endure the disaster with mental and physical health |
| A6 | concerns of whether there will be medical doctors and medical services available to a next of kin in need or disaster-vulnerable family member |
| A7 | concerns of whether there will be welfare services available to a next of kin in need or disaster-vulnerable family member |
| A8 | concerns of whether you will be able to access facilities with welfare services for a next of kin in need or disaster-vulnerable family member |
| A9 | concerns of whether there will be medical doctors and medical services available to you in case you need |
| A10 | concerns of whether you will be able to access medical centers |
| A11 | concerns of whether there will be advice and counseling personnel available to a next of kin in need or disaster-vulnerable family member |
| A12 | concerns of whether there will be advice and counseling personnel available to you in case you need |
| A13 | concerns of whether you will be able to get necessity articles for a next of kin in need or disaster-vulnerable family member |

2.2 Respondents

The respondents were adults living in Tohoku region (northeastern area of Japan). Half of the 90 respondents were asked directly to answer to the survey whereas the other half responded via postal mail under request for collaboration. The later were selected randomly by recruiting out some college students who could ask on our behalf for their parents to answer the survey. As there were four invalid answers, only 87 surveyees (37 males, 49 females) were considered for analysis. Moreover, the age distributions were 7 females in twenties, 11 males and 18 females in forties, 16 males and 16 females in fifties, 6 males and 4 females between 60 and 65 years old, and 4 males and 9 females over 65 years old.

2.3 Data Analysis

Exploratory data analysis approach was adopted to investigate the characteristics of the answers. To accomplish it, statistical data processing software application R (Ihaka and Gentleman, 1996) along with its packages ‘vss’, ‘fa’ and
‘sem’ were used to first perform exploratory factor analysis and then structural equations modeling, which were here selected as the framework to draw out the implicit features of exogenous variables.

### 3. Results

#### 3.1 Exploratory Factor Analysis

Using ‘vss’ (very simple structure) function which is embedded in the package ‘psych’ for statistical software R, the optimal number of factors is 2. However, scree analysis processed with ‘fa.parallel’ leaves some room for a couple of more factors. Table 2 shows the results of factor analysis with 2, 3 and 4 factors.

<table>
<thead>
<tr>
<th>exogenous variable</th>
<th>Number of Factors (varimax rotation, maximum likelihood)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 Factors</td>
<td>3 Factors</td>
<td>4 Factors</td>
</tr>
<tr>
<td></td>
<td>F1</td>
<td>F2</td>
<td>F1</td>
</tr>
<tr>
<td>A1</td>
<td>0.75</td>
<td>0.31</td>
<td>0.22</td>
</tr>
<tr>
<td>A2</td>
<td>0.75</td>
<td>0.35</td>
<td>0.33</td>
</tr>
<tr>
<td>A3</td>
<td>0.60</td>
<td>0.29</td>
<td>0.42</td>
</tr>
<tr>
<td>A4</td>
<td>0.71</td>
<td>0.23</td>
<td>0.35</td>
</tr>
<tr>
<td>A5</td>
<td>0.47</td>
<td>0.64</td>
<td>0.29</td>
</tr>
<tr>
<td>A6</td>
<td>0.78</td>
<td>0.19</td>
<td>0.92</td>
</tr>
<tr>
<td>A7</td>
<td>0.77</td>
<td>0.15</td>
<td>0.61</td>
</tr>
<tr>
<td>A8</td>
<td>0.63</td>
<td>0.26</td>
<td>0.40</td>
</tr>
<tr>
<td>A9</td>
<td>0.36</td>
<td>0.78</td>
<td>0.29</td>
</tr>
<tr>
<td>A10</td>
<td>0.18</td>
<td>0.83</td>
<td>0.07</td>
</tr>
<tr>
<td>A11</td>
<td>0.45</td>
<td>0.36</td>
<td>0.25</td>
</tr>
<tr>
<td>A12</td>
<td>0.14</td>
<td>0.47</td>
<td>0.05</td>
</tr>
<tr>
<td>A13</td>
<td>0.69</td>
<td>0.32</td>
<td>0.31</td>
</tr>
</tbody>
</table>

| Tucker Lewis Index | 0.884 | 0.925 | 0.958 |
| RMSEA              | 0.11  | 0.092 | 0.073 |

Table 2. Exploratory factor analysis results showing 2, 3 and 4 factors.

Looking at Tucker-Lewis Indices of the factors, it is clear that they increase proportionally to the number of factors and consequently the mean square errors (RMSEA) decrease. For the number of factors given by ‘vss’, namely 2, Tucker Lewis Index is 0.884, which is a little lower than the generally expected value of 0.95; in addition, 0.11 for RMSEA falls short of the standard reference value of 0.05. Note that 4 factors yields a good Tucker-Lewis index (0.958) and a fair RMSEA (0.073). In what follows, these results are taken as clues to build models based on structural equation modeling framework.
3.2 SEM Models

Hereafter, since a model with 4 factors did not provide a feasible solution in the sense of structural equation modeling, models with only 2 and 3 factors generated with R package ‘sem’ and plotted originally with ‘semPaths’.

Figure 1 shows a model composed by 2 factors. The main indices of the model are ‘Model Chisquare = 119.7’, ‘Df = 64 Pr(>Chisq) = 3.04e-05’, ‘Goodness-of-fit index = 0.828’, ‘Adjusted goodness-of-fit index = 0.755’, ‘RMSEA index = 0.105’, and ‘Bentler CFI = 0.906’. Goodness-of-fit indicates that the model is fair and we can expect to obtain some useful information about the factors underlying it. Now, the factors were named according to the exogenous variable they are correlated with as <anxieties related to a next of kin or disaster-vulnerable family members' physical and mental health, medical assistance and counseling service support> (F1), and <anxieties related to respondents' own concerns about physical and mental health, medical assistance and counseling service support> (F2). The relatively strong mutual interaction between these two factors is endorsed by the correlation index valor of 0.70. Note that the errors associated with the exogenous variables have values greater than 0.5 for A12, A3, A8, and A11, in which the correlation indices of A12 and A11 with their respective factors are less than the errors values suggesting that care should be taken as interpreting the influence of these variables on the factors.
Next, Figure 2 illustrates a model with 3 factors in a parallel connection structure in which the correlation are pair wisely computed. The main indices are as following: Model Chisquare = 101.15, Df = 62 Pr(>Chisq) = 0.0012, Goodness-of-fit index = 0.855, Adjusted goodness-of-fit index = 0.787, RMSEA index = 0.09, and Bentler CFI = 0.934. Compared to the previous model, there can be seen a little improvement in goodness-of-fit which means that this 3 factor model gives out more information than its counterpart. The factors here are <anxieties toward medical assistance and welfare services for a next of kin or disaster-vulnerable family members> (F1), <anxieties related to respondents' own concerns about physical and mental health, medical assistance and counseling service support> (F2), and <anxieties related to a next of kin or disaster-vulnerable family members' physical and mental health and counseling service support> (F3). Note that the correlation indices between pair wisely taken latent variables are all fair with values greater than 0.50, and the errors embedded in exogenous variables are very similar to those seen in the previous models.
4. Discussion

With the rapidly aging society and low birth rate, Japanese society has confronted with a great deal of social issues that have cast a shadow of doubt on whether and how the society will be able to sustain its future developments. This has been to some extent shown to be the case during the last huge scale earthquakes that have stricken several regions of the country triggering an exodus of a large proportion of its population to evacuate somewhere else and live as evacuees in a variety of adverse circumstances.

Table 1 is compilation of the aspects related to heath and care that evacuees undergoing this kind of provisional exile had experienced in the past. Basically, it covers the issues related to both its own concerns and those of disaster vulnerable from their perspective as the one who will have to look after someone else whether family members or relatives.
This kind of dichotomy between ‘self’ and ‘in need’ is reflected very explicitly in the exploratory factor analysis as shown in Table 2. There the number of factors set to 2 was found to be the optimal number, and in fact, it mirrors how Table 1 was built. However, as shown in Table 2, taking numbers greater than 2 to express the factors lead to better representation of the model as far as the evaluation indices of factor analysis are focused on.

The model with 2 factors is given in Figure 2 whereas with 3 factors is in Figure 3. For the former, considering the original source of information to build Table 1, the meaning of the two factors and their definitions make a lot of sense.

On the other hand, pushing the boundaries a little further and setting the number of factors to 3, the model proposes that there are in fact two distinct factors that affect the level of anxiety and stress related to disaster vulnerable family members or relatives that the respondents would feel in case of sheltering. Thus, it proposes that the respondents feel that the issues related to disaster vulnerable have two facets, namely ‘physical and mental’, and ‘medical assistance and welfare support’. Recalling the aging society problems, this three-factor model sounds a little more reasonable and precise than the previous one. Indeed, as a huge number of disaster vulnerable people are the elderly, this group will basically split into two subgroups: one constituted by people requiring continuous and special medical assistance as well as welfare services, and the other by those healthy people whose main concern is with maintenance of their normal conditions.

Finally, these results suggests that these three factors should be considered separately in order to better understand what an aging society endures in times of state of emergency as when an earthquake strikes.

Acknowledgment

The authors would like to express the deepest gratitude to the respondents. The authors also feel indebted to their colleagues and staff members of Yonezawa Women’s Junior College and their institution for the research grant. Finally, the authors would like to thank in particular to Miss Nana Okitsu for her help and assistance in data collection and fruitful discussions.

References

Some Insights into the Attitudes of Young People towards Contents of the Traditional Media and Social Networking

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Abstract

This work is aimed at understanding the feelings of Japanese young people toward the contents spread out by the traditional media as TV and magazines, and social media represented by social networking systems (SNS) running over the internet in what concerns to the importance, influence and credibility levels that viewers feel when interacting with them. In order to shed some light on these issues, a survey research on the grounds of seven-point Likert questionnaires to evaluate many a facet of the interactions that young people have with these on- and off-demand streams of information was carried out at a college in northeastern region of Japan with 161 respondents in all. Yet, the study focused essentially on contents related to entertainment, fashion and daily living. The implicit factors and their relationships were pursued by means of exploratory factor analysis followed by further structural analyses, in which the model dimensionality probing was performed with ‘Iclust’ function whereas model reliability with ‘omega’, both implemented on statistical computation software R and included in its add-on package ‘psych’. The models were evaluated according to their performance indices and correlation index values between the latent variables and surveyed items. Finally, the models chosen to express the youth’s attitudes were discussed in the context of their current social behavior toward information driven society and social cognitive theory.

Keyword: Traditional media, Social media, Exploratory analysis, Social system modeling

1. Introduction

1.1 Aim of the Study

In the past two decades, the world has witnessed an explosive growth and widespread use of the internet, as a result of the tremendous development of www-based services as Facebook and twitter (Ellison and Boyd, 2013), which have hugely contributed to kaleidoscopic social changes in the way humans interact with each other in their daily lives by allowing not only folks to reconnect with old and new acquaintances, friends and relatives over the web, but also by providing a ubiquitous environment for instant communication, as well as active and passive interactions regardless of factors as friendship status, gender, language, culture, and geographic gap between the online parties, whether these are humans, or a mix of human and web
system. Yet, these systems coined social media have pervasively come to join the already traditional media as TV and magazines; thus, playing the central role as sources and hubs of information streaming which has to a greater or lesser extent influence on the way people form and reshape their values, habits, customs, and social concepts; particularly among youths.

In the Japanese society ambit, a recent survey (Soumu, 2015) reported that teens and twenty somethings spend more time on the internet than TV compared to other generations, with daily averages of 112.2 for the former and 146.9 for the latter during the weekdays, and nearly doubling during the weekends with their figures marking 221.3 and 210.0 hours. In addition, these groups distinctly showed gender patterns of internet service use: female teens and twenty somethings spent respectively 71.0 and 52.0 hours a day on average on social networking during weekdays, and 126.3 and 70.1 hours during weekends against daily 45.3 and 40.5 hours during weekdays, and 64.2 and 70.0 hours during weekends reported by their male peers.

This social background scenario motivated us to question how Japanese young females deal with the contents broadcast by the traditional media as well as social media (SNS). The study focus essentially on the importance and influence on their daily lives, behavior, and ways of thinking exerted by constant exposure to life style, clothing fashion, and daily life related contents. In addition, their attitude toward whether the contents are credible or not was also investigated.

To figure out what a model to explain these attitudes looks like, a survey based on seven-scale Likert questionnaires was performed at a public college in northeastern region of Japan with 161 female respondents in all. The framework to analyze the latent variables building up the model was exploratory factor analysis along with structural equation modeling, which comprised modeling with statistical processing software R (Ihaka and Gentleman, 1996) and its package ‘psych’ (Revelle, 2017) equipped with functions ‘Iclust’ (Revelle, 1978) and ‘omega’ (Revelle, 2016). Finally, the models were discussed in the scope of social cognitive theory, as well as information driven society and how young people deal with these technologies.

1.2 Literature Review

In what follows, the underlying literature is presented. As far as social cognitive theory (Bandura, 1986) is concerned with, it claims the existence of a model composed by a triad, namely personal determinants comprising cognitive, biological and affective factors; behavioral determinants; and environmental determinants. These determinants mutually interact pair-wisely to govern the individual’s behavioral pattern which is formed through the processes of observation, learning, and reshaping, and directed to fit the individuals to their social environments. These theoretical concepts are later further developed in the scope of mass communication in order to explain the social patterns seen in the interactions between human and mass communication (Bandura, 2001).
Actually, this theory was adopted by Stefanone et al (2010) to investigate the influences of TV reality shows on viewers’ social networking behavior, and it was shown that there was a positive correlation between TV consumption and time spent on these web sites.

From a little different framework, Urista (2009) brought about in an exploratory work taking from granted the uses and gratification formalism that young adults basically use social networking sites for entertainment and collecting information.

Incidentally, a survey on the theories applied on social networking issues can be found in Ahn (2011), who published a survey report featuring controversies on the effects of social networking on youths and pointed out that despite many a study available, empirical investigations supporting those theoretical backgrounds are yet needed.

By the way, apparently there are issues specific to women and SNS as pursued by Klein (2013) who analyzed the potential impacts the SNS have on women’s behavior toward their body image; calling our attention that women are perhaps somehow more vulnerable to contents referring to female beauty and surrounding themes as diet, clothing, fashion, style, looks, appearance, physique, and so on.


2.1 Experiment

The investigation consisted of a seven-scale Likert survey whose items are as given in Table A1. These items were defined following a pilot investigation prior to this project by means of an interviewing research targeted to female students that was carried out during the pre-trial phase. There the points to be evaluated were singled out, and the most relevant keywords that later came into being part of the questionnaires were identified. As a result the survey sheet composed implicitly by two groups was drawn up: one related to the traditional media and the other to social media, and such that each has three groups of questions each assessing the importance, influence and credibility of their contents.

2.2 Respondents

The respondents were 161 female students at a public Japanese college with humanity course only, and based in Tohoku region (northeastern area of Japan). They were all healthy students from local region and majoring in one of the four courses offered by the college, which are social and information science, Japanese language and culture, Japanese history, and English language and culture. Moreover, their ages ranged from 18 to 20 years old, and they were all in either first or second grade.
2.3 Data Analysis

Of 161 respondents, 154 were valid answers and used in the analysis. For data processing, the computer software R, which is a computer platform-independent computer application specific for statistical computation, as well as an open source type software available publically free of charge, was used throughout the whole exploratory analysis. Besides, the package ‘psych’ (Revelle, 2017) was added on to R in order to allow us to make two basic structural analyses, which are of dimensionality and reliability.

3. Results

3.1 Utilization Time

Figure 1 show the daily average of time spent on traditional media and social networking typified by an application very popular among Japanese people, and called LINE. The respondents were asked to declare the number of hours on each media, counting separately the time they are doing both simultaneously, when so. From the figure, it is clear that respondents who spent less than 2 hours on either media tended to put a little more time on traditional media than its counterpart whereas those who spent more than 2 hours were more likely to stay online than on aired waves.

![Fig. 1 Distribution of utilization time](image)

3.2 Exploratory Analysis

In this work, the number of factors composing the model generated by factor analysis was computed by two different functions available for R, namely fa.parallel and vss (very simple structure) both stuffed in the package ‘psych’. Figure 2 depicts their processing results for factor method set to ‘ml’ (maximum likelihood). Function fa.parallel outputs 4 for the number of factors whereas vss complexity 1 yields 2 factors, and vss complexity 2 provides 3 factors.
To establish the dimensionality of model that most adequately describes how young students interact with both traditional media and social networking, an analysis of the reliability of the model on the basis of ‘omega’ evaluation index is carried out first in order to obtain a clue to figure out the number of factors building up the structural interconnections. It turned out that omega analyses with factors suggested by fa.parallel, and vss complexity1, which are respectively 2 and 4 factors, rendered a little weaker omega model than 3-factor scheme as shown in Fig.3. Note that the link between the latent variable F1 and exogenous item Q4 has negative correlation, which means that in this case it can be discarded from the actual analysis. Note also that ruling out the connection to F1, Q4 is shared by F2 and F3. It is also worth noting that the links from Q13 to F1 and F2, Q14 to F1, Q4 to F3, and Q15 to F2 have relatively small correlation index values falling short of 0.5. Thus, F1 could well be represented by the exogenous variables Q6, Q7, Q10, Q11, and Q12; F2 by Q1, Q2, Q3, Q4, and Q5; F3 by Q8 and Q9. Apropos, the indices related to omega analysis read 0.83 for alpha, 0.9 for G.6, 0.35 for omega hierarchical, 0.4 for omega H asymptotic, and 0.9 for omega total of g, 0.83 for omega total of F1, 0.77 for F2, and 0.83 for F3.
Taking into account the outcomes so far, the dimensionality of the model is then examined using function Iclust with 3 factors as one of its options; and the model diagram generated by iclust.diagram function is as illustrated in Fig. 4. It is clear that this Iclust model resembles omega model quite well. In fact, since alpha and beta values of C7 and C8 are relatively smaller than other and less than 0.6, items Q13, Q14, and Q5 can be left out of the model, and thus the following correspondence can be reasonably established: cluster C3 to F3, chunk made of clusters C1, C2, C9, and C10 to F2; and the block of remaining clusters to F1.
4. Discussion

The results suggest that a three factor model is a good candidate to explain reasonably well the set of answers collected from the respondents. As seen in Table A1, the survey had basically two parts, one dealing with the traditional media and the other with social networking with each further focusing on the importance, influence and credibility of their contents. Despite these six groups of questionnaires, the analysis basically brought about three factors in all. In fact, F2 associated with Q1, Q2, Q3, Q4, and Q4 says that all those three topics related to traditional media melt down to one single factor whereas F1 packing up Q6, Q7, Q10, Q11, and Q12 along with F3 which bunches up Q8 and Q9 imply that attitude toward social media has two distinct aspects, one bundling up issues concerned with importance and influence, and another bearing upon credibility of the contents that the viewers would access.

A possible account of this difference in the behavioral patterns can be discussed in the scope of social cognitive theory (Bandura, 2001). For, it is interesting to note first that young generations are intensively instructed and trained in schools
and homes to be careful when it comes to the internet and its storms of pernicious as well as beneficial information, so that people are in general always concerned with potential cyber trouble that can outbreak anytime and anywhere. Thus recalling self-regulatory capability which according to this theory means proactively managing discrepancy production and discrepancy reduction, users react sensitively more to credibility of SNS related contents than to traditional media as though they were abiding by the social norms and internal standards. Yet, from the self-reflective and vicarious capabilities, the viewer’s apparently experienced through others’ experiences and comments on the contents to then decide whether the contents fitted in their social environment. Unlike this attitude toward SNS, people tend to see the traditional media as a commodity and their contents as something socially acceptable, as well as carefully screened and approved for broadcasting; so that importance, influence and credibility blend altogether into a single factor.

Acknowledgement

The authors would like to express the deepest gratitude to the students for their cooperation and understanding. The authors also feel indebted to their colleagues and staff members at Yonezawa Women’s Junior College and their institution for the research grant. Finally, the authors would like to thank in particular to Miss Rina Kurosawa for her help and assistance in data collection and fruitful discussions.
References


Appendix

The survey sheet used in this work is given below.

<table>
<thead>
<tr>
<th>Q1</th>
<th>How important is the traditional media to get information about entertainment, fashion and daily life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2</td>
<td>How indispensable is the traditional media to get information about entertainment, fashion and daily life</td>
</tr>
<tr>
<td>Q3</td>
<td>How concerned are you about credibility and biases of traditional media when it comes to information about entertainment, fashion and daily life</td>
</tr>
<tr>
<td>Q4</td>
<td>Do you think that traditional media intentionally engineers the situation and information related to entertainment, fashion and daily life</td>
</tr>
<tr>
<td>Q5</td>
<td>How much does the traditional media influence your life with information about entertainment, fashion and daily life</td>
</tr>
<tr>
<td>Q6</td>
<td>How important is the social media to get information about entertainment, fashion and daily life</td>
</tr>
<tr>
<td>Q7</td>
<td>How indispensable is the social media to get information about entertainment, fashion and daily life</td>
</tr>
<tr>
<td>Q8</td>
<td>How concerned are you about credibility and biases of social media when it comes to information about entertainment, fashion and daily life</td>
</tr>
<tr>
<td>Q9</td>
<td>Do you think that social media intentionally engineers the situation and information related to entertainment, fashion and daily life</td>
</tr>
<tr>
<td>Q10</td>
<td>How much does the social media influence your life with information about entertainment, fashion and daily life</td>
</tr>
<tr>
<td>Q11</td>
<td>How interested are you in other users’ comments when you see contents about entertainment, fashion and daily life on the social media</td>
</tr>
<tr>
<td>Q12</td>
<td>How much influence does the other users’ comments have on you when you see them in contents about entertainment, fashion and daily life on the social media</td>
</tr>
<tr>
<td>Q13</td>
<td>Compared to traditional media, how superior is the influence of SNS on you in terms of contents about entertainment, fashion and daily life</td>
</tr>
<tr>
<td>Q14</td>
<td>How frequent do you check on SNS information about entertainment, fashion and daily life that you saw on traditional media</td>
</tr>
<tr>
<td>Q15</td>
<td>How frequent do you check on traditional media information about entertainment, fashion and daily life that you saw on social media</td>
</tr>
</tbody>
</table>

Table A1: Survey sheet with questions to be evaluated on a seven point Likert scale ranging from 1 (not at all) to 7 (very much)
Exploring Inquiry-Based Stress Reduction (IBSR) as a Counselling Intervention

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Abstract

Utilising mindfulness-based approaches and techniques within counselling has become increasingly popular with mental health professionals. Research has shown that practicing mindfulness can have positive implications for both clients and therapists. Relatively new to the field of counselling is a meditational, mindfulness-based approach known as Inquiry-Based Stress Reduction (IBSR). This qualitative study explored therapists’ experience of using IBSR both personally and in their clinical practice. Employing Interpretative Phenomenological Analysis (IPA), six participants who were mental health professionals and had attained certification in IBSR were selected for this study. Seven main themes emerged from the findings including: IBSR’s influence on the therapist; self-care and burn-out; broader perspectives; IBSR’s strengths and therapeutic benefits; challenges and limitations; client populations and characteristics; and the therapeutic alliance.

A range of benefits were identified as a result of utilising IBSR including the potential for immediate and life-changing effects for those experiencing IBSR, as well as supporting therapist wellbeing and protecting against burnout. Participants viewed IBSR as an effective self-care tool which promoted self-awareness, self-compassion, acceptance towards clients, greater cognitive flexibility and metacognitive awareness. The approach was also regarded as having positive implications for the therapeutic alliance. Some challenges and limitations were noted such as the short-term engagement with clients having detrimental financial impacts on therapists; and the ‘turnarounds’ (a way to explore different interpretations of an identified stressful belief) as a possible contraindication. Clients’ openness to IBSR was viewed as a key factor to the effectiveness of the approach.

Keywords: counselling; mindfulness; The Work of Byron Katie; Inquiry-Based Stress Reduction; short-term interventions
Background

In recent years the application of mindfulness-based approaches in the areas of psychology and counselling has grown. In 2013, Brown, Marquis and Guiffrida found there were more than 1500 articles on the topic of mindfulness in the PsycINFO electronic database. In addition, a Psychotherapy Networker poll surveying 2,600 therapists found that more than 41% utilised mindfulness-based practices within their therapy (Brown et al., 2013).

Originating from a range of contemplative, philosophical, Buddhist and yogic traditions (Brown et al., 2013; Bruce, Manber, Shapiro, & Constantino, 2010; Kabat-Zinn, 2003) mindfulness can be described as “the awareness that arises from paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally” (Paulson, Davidson, Jha, & Kabat-Zinn, 2013, p. 91). There is a focus on observing and accepting thoughts without attempting to change them (Melbourne Academic Mindfulness Interest Group, [MAMIG], 2006). The psychological experience of mindfulness has universal applicability, that is, it can be experienced by anyone regardless of a person’s culture or religion (Bruce et al., 2010; MAMIG, 2006).

Research into the use of mindfulness in counselling practice has consistently demonstrated beneficial outcomes for clients (Brown et al., 2013). Studies have shown that mindfulness improves wellbeing, increases positive emotions, engenders acceptance, patience and empathy; as well as reducing anxiety, depression, emotional reactivity and negative affect (Brown et al., 2013; Goodman & Calderon, 2012; Huston, Garland, & Farb, 2011). A notable theme in the literature is the effectiveness of mindfulness in improving mental health generally, as well as relieving symptoms associated with a range of mental health conditions such as: addiction, depression, generalised anxiety disorder, borderline personality disorder and chronic stress (Brown et al., 2013; Skovholt & Trotter-Mathison, 2011).

Within the therapeutic context, there are various mindfulness-based techniques and practices that may be employed (Chiesa & Serretti, 2009). Recognised, evidence-based approaches include Mindfulness-Based Stress Reduction (MBSR), Dialectical Behaviour Therapy (DBT) and Acceptance and Commitment Therapy (ACT) (Milton & Ma, 2011).

Inquiry-Based Stress Reduction (IBSR)

One relatively new mindfulness-based approach showing promising therapeutic outcomes is Inquiry Based Stress Reduction (IBSR) (Landau et al., 2014; Leufke, Zilcha-Mano, Feld, & Lev-ari, 2013; Lev-ari, Zilcha-Mano, Rivo, Geva, & Ron, 2013; Schnaider-Levi, Mitnik, Zafrani, Goldman, & Lev-Ari, 2017; Smernoff, Mitnik, Kolodner, & Lev-Ari, 2015). Commonly known as The Work (of Byron Katie) and often referred to as ‘inquiry’ (France, McDonald, Conroy, & Byrne, 2015; Katie,
IBSR is an experiential, meditational, mindfulness-based practice which has also been described as possessing elements of cognitive behavioural approaches (Bunker & Skolnick, 2005; Nye, 2011).

IBSR was discovered in 1986 by an American woman, Byron Katie. After many years of suffering from a range of issues including depression and alcoholism, Katie had a profound realisation: she was not her thoughts and identification with stressful thoughts created suffering (Katie, 2002).

In alignment with mindfulness-based practices, IBSR does not seek to control or modify thoughts (London, 2008; Nye, 2011; Van Rhijn, Mitnik & Lev-ari, 2015). Rather, thoughts are welcomed and met with understanding. They are viewed as ‘visitors’ – they come and then they leave, they are not who a person is (Leufke et al., 2013). According to Katie (2002), people are not responsible for their thoughts. It is when one attaches or identifies with a stressful thought that s/he suffers.

Consisting of four questions and ‘turnarounds’ (i.e. a way of considering different perspectives to an identified stressful belief), IBSR is a method of identifying and questioning thoughts that provoke stress and suffering (Katie, 2002). Van Rhijn et al. (2015) describe the approach:

*The basic structure of the technique is the ability to identify the thoughts that cause stress and suffering in a systematic and comprehensive way, and to meditatively "investigate" these thoughts by a series of questions and turnarounds, which enable the participant to experience a different interpretation of reality as he/she perceives it* (p. 4).

IBSR has reportedly been used to address a wide range of issues including: parenting, grief and loss (Katie, 2002), stress associated with physical illness (Katie, 2002; Lev-Ari et al., 2013; UNAIDS & Stop AIDS Alliance, 2015), sexual and psychological abuse, addictions, work-related stress and social problems (Katie, 2002). In addition, it has been employed in educational (Katie, 2002; Schnaider-Levi et al., 2017) and institutional settings and in different populations including those with diagnosed mental illnesses, war veterans, prisoners and people from different cultural and religious backgrounds (Katie, 2002; Katie, 2015). People who practice IBSR report a range of benefits including a reduction in depression, stress levels and anger as well as healthier relationships, improved mental clarity and more peace in their lives (Byron Katie International [BKI] n.d.; Nye, 2011).

Although not widely known within the counselling profession, there are an increasing number of mental health professionals utilising IBSR in their practice (Bunker & Skolnick, 2005; Coumar & Hidalgo, n.d.). According to Coumar and Hidalgo (n.d.) IBSR can be utilised as the primary therapeutic intervention or it can be integrated with other counselling approaches. However, in contrast to other therapeutic methods, while therapists may facilitate IBSR with clients, IBSR can be self-facilitated and therefore does not necessitate a therapist (Katie, 2015; Nye, 2011).

**The Process of IBSR**
IBSR consists of two parts: firstly, stressful beliefs are identified and thereafter these beliefs are examined and questioned in a meditative way (Smernoff et al., 2015). Once a stressful belief (e.g. ‘he rejected me’) has been identified, the IBSR questions are then asked in relation to the belief (Katie, 2002; Van Rhijn et al., 2015).

The IBSR questions are as follows:

1. Is it true?
2. Can you absolutely know that it’s true?
3. How do you react, what happens when you believe that thought?

Questions 1 & 2 ask for a ‘yes’ or ‘no’ answer. If a client answers ‘no’ to question 1, then question 3 is asked. However, if a client answers ‘yes’ to question 1, then the facilitator proceeds to question 2: ‘can you absolutely know that’s true?’ (Katie, 2002). The client is invited to meditate on their answers to the above questions and go beyond cognitions, allowing answers to emerge from an ‘inner-knowing - wise mind’ (Van Rhijn et al., 2015, p. 6).

After answering the IBSR questions, the original thought (e.g. ‘he rejected me’) is then turned around as follows:

To the self: I rejected myself
To the other: I rejected him
To the opposite: He didn’t reject me (Katie, 2002).

For each of the above turnarounds, the client is invited to find three genuine examples of how the turnarounds could be true (Katie, 2002; Lev-ari et al., 2013). After exploring the effects of holding the particular belief in the first four questions, the turnarounds offer an opportunity to experience perspectives that may not have previously been considered (Nye, 2011; Van Rhijn et al., 2015). For example, the turnaround ‘I rejected him’ allows the client to find evidence of times when s/he rejected him – either in her mind or in reality. She may find that she had rejected him on several occasions, even if only in a subtle manner. The turnaround ‘he didn’t reject me’ opens up the possibility of noticing the ways and the moments in which he didn’t reject her, having possible positive implications for the client. In this way, the turnarounds are said to promote ‘non-dual awareness’ that is, by exploring other perspectives a person may discover that the very thing that s/he disliked of another person is also true of him/herself (Bunker & Skolnick, 2005; Nye, 2011).

Example of the IBSR process Table 1

<table>
<thead>
<tr>
<th>Stressful belief: He rejected me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Situation: I ask him if he would like to go out and he says he is not free (he has not</td>
</tr>
<tr>
<td>Question</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Q1: Is it true (that he rejected me)?</td>
</tr>
<tr>
<td>Q2: Can you absolutely know that it’s true (that he rejected me)?</td>
</tr>
<tr>
<td>Q3: How do you react, what happens when you believe this thought ‘he rejected me’?</td>
</tr>
<tr>
<td>Q4: Who would you be without that thought ‘he rejected you’?</td>
</tr>
<tr>
<td>Turnaround to the original statement: ‘he rejected me’</td>
</tr>
<tr>
<td>- He said that he wasn’t free – that doesn’t mean rejection. It could be true.</td>
</tr>
<tr>
<td>- He spoke to me, he responded to my question – he didn’t ignore me.</td>
</tr>
<tr>
<td>- He was actually quite nice towards me – he smiled and said goodbye afterwards.</td>
</tr>
<tr>
<td>Turnaround to the other: I rejected him</td>
</tr>
<tr>
<td>- I was cold to him after he said that he wasn’t free – I disengaged from the conversation almost immediately.</td>
</tr>
<tr>
<td>- After he said he wasn’t free, in my mind I started trying to find faults with him and criticize him.</td>
</tr>
<tr>
<td>Turnaround to the self: I rejected me</td>
</tr>
<tr>
<td>- When I believed that he rejected me I lost my sense of presence and connection with myself.</td>
</tr>
<tr>
<td>- He was actually quite nice to me, it was me who decided that he rejected me and in doing so, experienced rejection towards myself.</td>
</tr>
</tbody>
</table>

**Aims of the study**

Although there is a limited, but growing body of research examining the psychotherapeutic effects of IBSR, there has been little exploration of how the approach is used within the counselling context. Furthermore, although there are therapists utilising IBSR in their counselling practice, anecdotally IBSR appears to be relatively unknown.
While research has focussed on the effects of IBSR on individuals, to date there has been no published research examining the influence of IBSR on the practitioners themselves. As mindfulness-based practices have been identified as a way to reduce burnout and improve therapist self-care (Christopher & Maris, 2010), IBSR may represent an additional self-care strategy for therapists as well as delivering beneficial outcomes for clients.

Given the existing gaps in the literature, application of IBSR within the counselling environment and the influence of IBSR upon therapists may lead to a better understanding of IBSR’s value as a therapeutic intervention. Therefore, the current qualitative study explored therapists’ experience of using IBSR both personally and in their clinical practice.

The aims of this study were to:

- explore practitioners own experience with IBSR and how it shapes their work with clients;
- explore IBSR practitioners’ experience of using IBSR with clients;
- identify the challenges, limitations and strengths of utilising IBSR within a psychotherapeutic/counselling context;
- identify how IBSR therapists experience self-care and burnout prevention; and
- consider IBSR’s role as a counselling intervention.

**Method**

Employing the research method Interpretative Phenomenological Analysis (IPA), six mental health professionals who had attained certification in IBSR were selected for this study. Accordingly each participant was interviewed, utilising a semi-structured interview format.

An interpretative phenomenological approach (IPA) was particularly suited to the research questions and aims of this study as the researchers were seeking in-depth, rich accounts from IBSR practitioners to better understand how they experience the phenomenon, both personally and professionally. IPA represents a qualitative research strategy which privileges the lived experience of individuals (Pringle, Hendry, & McLafferty, 2011), recognising that people are the experts of their own lives (Reid, Flowers, & Larkin, 2005). The objective of IPA is to undertake an in-depth exploration of how a person makes sense of their world. It is inductive and does not try to confirm or reject hypotheses which are based on the extant literature (Smith, 2004). Instead, themes emerge from the data which may inform future quantitative research directions by providing possible hypotheses and building blocks to expand the field of vision with respect to IBSR.

To facilitate the emergence of rich, in depth and relevant data, purposive sampling was carried out (DiCicco-Bloom & Crabtree, 2006), selecting interviewees with expertise relevant to the research questions (Palinkas et al., 2015). As such, all participants were mental health professionals (i.e. psychologists, counsellors and
psychiatrists) who had attained certification in IBSR and were using the approach in their counselling practice with clients. In order to obtain certification in IBSR, students must undertake an intensive program which can take several years to complete and involves fulfilling a range of requirements including extensive practical experience (Institute for the Work [ITW], 2016).

Sample sizes of between three to six participants have been recommended to keep data collection manageable for small studies such as this (Smith, 2008), whilst also aiming for data saturation whereby no more major themes emerge from the data (Guest, Bunce, & Johnson, 2006). The interview schedule comprised of open-ended questions that were developed to explore the study’s research questions. The open-ended, exploratory approach ensured that relevant topics were covered as well as allowing sufficient flexibility to explore any interesting and relevant insights that may arise through the interview (Smith, 2008; Smith, Larkin & Flowers, 2009).

Informed consent was obtained from participants prior to the interviews. This included providing information regarding the data collection process, probable outcomes of data analysis and an outline of areas to be discussed (Smith et al., 2009). Quotes from transcripts were checked to ensure anonymity, and data was de-identified. As such, each participant was assigned a one of the following pseudonyms: Paula, Jean, Tim, Margaret, Carol and Jill. While all participants were fluent in English, for two participants it was their second language.

An extensive analysis of the data from each of the six interviews was undertaken. Each interview was analysed separately as per IPA’s idiographic focus. Identified themes were extracted and then sorted into clusters to identify emergent secondary themes. As themes were clustered, they were checked against the original transcripts to ensure that they reflected what was actually said by the participants. Data was recorded in a table in a way that facilitated analysis and tracking throughout the process (Smith et al., 2009). Thereafter, an analysis was conducted across the interviews, identifying areas of convergence and divergence amongst the participants. The data was then organised into main themes and sub-themes, according to the research questions of the current study (Smith, 2008).

**Findings and Discussion**

The main themes which emerged from the data were as follows: Influence on the therapist; Self-care and burnout; Broader perspectives; Strengths and therapeutic benefits; Challenges and limitations; Client populations and characteristics; and the Therapeutic alliance. From these themes, the most significant findings have been outlined below:

*Life-changing, short-term intervention & a life-long practice*

All participants experienced immediate and life-changing shifts after engaging with the process of IBSR. Participants also said that they had observed similar
experiences in their clients. Participants Paula and Tim describe their first session with an IBSR facilitator:

*I had a really big stress with my boyfriend, it was the ex-boyfriend in this time. And he left me with eh... 40,000 Euro... um... debts... money. And I was without my job, no, I had a job but I didn't like it and I had no friends. I was new in this country... and um... I was really, very um... sad and lonely and anxious and then a friend of mine sent me the link from a video from Byron Katie and it fascinated me and I wanted to know this method and I called a certified facilitator, did The Work with him and after three hours, I... quit my job... and um... um... And eh... trusted the universe that it will bring me through [laughing].* (Paula)

... so I went and had a session with him and it was... I could feel this... kind of like a somatic shift after the session. And I thought 'wow, this is really powerful'. *(Paula)*

*The findings in this study suggest that IBSR has the potential to effect profound life-changing shifts not only with IBSR practitioners but also with their clients – this may occur within a single session. As such IBSR may represent a single session and/or short-term therapeutic intervention. According to Bloom (2001) there is “consistent evidence that planned short-term psychotherapies, often as short as a single interview, generally appear to be as effective as time-unlimited psychotherapies” (p. 76), with short-term therapies also representing cost savings for funding agencies and insurance companies (Gingerich & Eisengart, 2000). Furthermore, with many mental health resources unable to cope with client numbers, single-session and short-term therapies can also reduce client waiting lists and thereby improve mental health service accessibility (Young, Weir & Rycroft, 2012). Although IBSR appears to have the potential to bring change with rapidity, as with other mindfulness approaches, IBSR was regarded as a life-long practice.*

**Strengths & benefits of IBSR**

Participants identified a range of strengths and benefits associated with the practice of IBSR, viewing IBSR as a transformative tool which encourages growth, self-realisation and self-empowerment. Notably all participants spoke of a reduction in depression related symptoms and the rapidity of the method in bringing peace and relieving stress.

IBSR was regarded as having positive effects on relationships, creating more space for connection and understanding to occur. According to the participants, these changes could be observed through improved relationships, both for themselves personally and in their clients’ relationships.

In alignment with research conducted by Felton, Coates and Christopher (2015) and Shapiro, Brown and Biegel (2007), participants in this study reported a range of benefits such as increased self-compassion, self-awareness, self-acceptance and acceptance towards clients as a result of using IBSR with clients and on themselves.
Participants described a depth to the practice which comes from beyond the mind. Carol refers IBSR’s potential to bring a person into a space of non-dual awareness, stating that she does not know of any other practice that facilitates this:

*It is a tool embedded within... the therapy process that moves people from the lower stages of development to the highest potentially in terms of non-dual awareness and... or, you know, these sort of philosophical stages, you know the mind is transcending itself. I don’t know of any other therapy that does that. Existential therapy helps people, you know deal with the existential stressors of life [pause]. So I like it for that. But in a way it transcends all these disciplines.*

IBSR was viewed as a tool which supported therapist wellbeing and was sufficiently flexible and versatile that it could be integrated with other psychotherapeutic approaches.

**Challenges and limitations**

Participants outlined a number of challenges and limitations to using IBSR, the most commonly occurring themes being: the short-term engagement with clients having detrimental financial implications for therapists; difficulties in working with clients who want to remain identified with their stories; and the challenges of working with clients who are seeking therapist validation, which is not the role of an IBSR facilitator. Some participants cautioned against using IBSR with clients who are not ‘open’ to it:

*I’ve had success in doing The Work with [pause] with everybody really. I mean potentially, it’s just whether their minds are open. Yeah, that’s, that is the ultimate, determining... if they’re open to the questions. (Carol)*

*I think a person’s readiness or openness is key. If they’re really attached to their story, or attached to... their anger or blame mode, they’re not too available to it. (Margaret)*

Participants also suggested to proceed with care when working with those who have experienced trauma. While participants said that IBSR works with trauma, it appears that some preparatory work may be needed before this can occur.

Although participants acknowledged that turnarounds can broaden perspectives, participants also explained that turnarounds can be used to engage in self-blame. Some participants described how people may misunderstand IBSR and that this can also present as a challenge.

**Cognitive flexibility & metacognitive awareness**

A common theme across all six interviews was how IBSR assists people to expand their understanding and develop new perspectives. Participants appeared to view the mind and identification with thoughts as the cause of suffering, with the
turnarounds representing a powerful way of experiencing different perspectives to a stressful belief. Hence, much like Garland, Gaylord and Park’s (2009) conceptualisation of meta-cognitive awareness as a mechanism to increasing one’s cognitive flexibility, the findings from the current study appear to offer support for this process. This understanding is reflected in how the participants talk about IBSR and how it appears to offer each person a sense of trust, understanding and acceptance in how they experience the world.

Participants distinguished between believing one’s thoughts and Byron Katie’s concept of ‘reality’: Katie (2002) describes reality as the truth, it is ‘what is’, that is, whatever is really happening or has happened. Identifying with thoughts that do not concur with reality create discord and stress.

Margaret describes how people look for evidence to support beliefs and stories to the exclusion of other evidence and then shares how IBSR can broaden a person’s perspective:

... so in an interaction we think we see a slight and it’s not even there [...] when we have a story it filters our world and our experience and of course then we act in accord with that story [...] The Work offers a way to investigate our projections onto reality and... become open to what’s actually there, rather than our story of what’s there.

All participants spoke of the turnarounds as a powerful and significant component of the IBSR process, regarding the turnarounds as an opportunity to experience a different perspective from what they had originally been thinking and believing.

**Therapeutic alliance**

Overall participants indicated that IBSR supports the therapeutic alliance through engendering empathy and connection with clients. In contrast to conventional therapies, IBSR was described as supporting a more egalitarian therapist/client relationship. Jean talks about experiencing ‘oneness’ with her clients:

... sometimes there’s a real sense of lack of separation. It’s like The Work is being done by both of us at the same time [...] it’s much more of, um, a level relationship in a sense, rather than the top down therapist knowing what’s best for the client. So it’s a real meeting.

One participant offered a divergent view suggesting that IBSR may adversely affect the alliance, particularly if introduced too early in therapy.

**Burnout & Self-care**
All participants communicated that practicing IBSR was a means of preventing burnout and promoting self-care. While IBSR was described in terms of a self-care tool that participants could access at their discretion, facilitating clients in IBSR also appeared to promote therapist wellbeing.

… you know The Work really does prevent burn out (Carol)

When I was very much in The Work then I feel better and when I don’t do The Work so much, like these days I don’t feel so good, I know that I have to do The Work on my own now several times then I would feel better again, I know that. It’s like a medicine. (Paula)

I think The Work is better than other therapies, it doesn’t matter what other therapy. I think The Work contributes to less burnout. (Jill)

I suppose what stands out for me about The Work is that I’ve got a self-care tool in place that I can use […] I don’t wait for the supervision at the end of the month or until things get so bad to look at them. I know when something’s stressful. And if I was just doing other modalities, I don’t know that I’d have that tool, or I wouldn’t have that tool and I’d be looking for other tools. (Jean)

In contrast to other approaches, all participants said they do not get tired from facilitating IBSR with clients and several explained that they felt energised from using IBSR. Trusting that clients have their own inner wisdom and not seeking to rescue clients appeared to be liberating factors for participants and represent aspects of the associated IBSR teachings. Furthermore, participants noted that when they practice IBSR on a regular basis, they feel markedly better.

**Application of IBSR**

According to the participants in this study, IBSR can be used with a diverse range of people. No known cultural barriers were identified. In terms of presenting conditions, all participants stated that they had used IBSR to treat depression and anxiety. Other presenting conditions mentioned by participants included: Post-Traumatic Stress Disorder (PTSD), severe developmental trauma, sexual abuse, physical abuse, bipolar disorder, suicidal ideation, grief and loss, relationship issues, insecurity, addiction, transitions, adjustment disorders, personality disorder, paranoid schizophrenia, Asperger’s, physical illness, business and work issues. Nevertheless, participants viewed clients’ openness to the approach, rather than the presenting condition as the key factor in determining IBSR’s effectiveness.

**Conclusion**

The findings from this study suggest a range of benefits as a result of practicing IBSR. According to the participants in this study, IBSR represents an approach which can be integrated into counselling practice, either in complement to
other psychotherapeutic approaches or as a stand-alone intervention. While most participants regarded IBSR as having positive implications for the therapeutic alliance, all agreed that IBSR has the potential to effect beneficial change with rapidity. In this respect IBSR may represent a potential single session and/or short-term counselling intervention. An additional significant finding which emerged from this study was that IBSR was viewed as a means of preventing burnout and promoting therapist self-care.

The findings also appear to support the limited research examining the effects of mindfulness on therapists. This suggests that IBSR may facilitate healing in the therapist when working with clients, as well as healing when therapists apply IBSR as a personal practice. It may be surmised that as IBSR is a meditational practice: when therapists are facilitating clients in IBSR, they, like their clients, are experiencing many of the benefits associated with mindfulness.

Certain challenges and limitations associated with IBSR were also noted. For example, the ‘turnarounds’ were highlighted as a possible contraindication as they may be misinterpreted and used for self-blame. In addition, for those clients who are not emotionally ready to engage in IBSR or are seeking therapist validation, the approach may not be suitable.

This study was the first to explore IBSR within the counselling context, hence further qualitative research into this area could assist in supporting therapists to better understand the approach. Furthermore, given the high rates of burnout and emotional fatigue within the area of mental health, additional research examining IBSR as a possible protective factor to burnout could greatly assist the therapeutic community. Taking account of the findings in this study, other areas that future research could explore include the application of IBSR in the context of trauma and the implications of IBSR as a self-care tool for both therapists and their clients.
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The Use of Computer Based Method to Support Dietary Intervention among Children

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Abstract

This paper presents the findings from a dietary intervention designed specifically to change in dietary knowledge, attitude, intention and unhealthy diet of school children. A total of 201 (treatment group N= 106, control N= 95) children, aged 10 participated in this study. Participants in both the treatment and the control group completed a baseline questionnaire (pre-test) related to dietary knowledge, attitude, intention and unhealthy food intake, and were re-administered (post-test) after three months to assess the change. Respondents in the treatment group received intervention combining the use of computer based method with traditional method (PowerPoint presentation, classroom discussion, hands on group activities techniques) for three consecutive weeks. The score between pre-test and post-test measures showed no significant changes of dietary knowledge and intention in both treatment and control groups. Nonetheless, at post-test, treatment group reported significantly higher intention to avoid unhealthy food and higher negative attitude towards unhealthy food than the control group. Treatment group reported significant decrease in fast food, soda drink, junk food and sweet food. Findings of this study suggest that computer based intervention will therefore may complement other intervention methods, and have the potential to help practitioners tailoring an effective intervention to address dietary problem among children.
Keywords: Computer based intervention, Unhealthy eating, Children, Malaysia

1. Introduction

Poor eating habits are known to play important role in developing certain risk factor for chronic diseases and malnutrition (i.e. underweight and overweight) in the population. Epidemiological studies (Balkish et al., 2013; Khor, 2012) have shown an alarming rate of childhood overweight and obesity in Malaysia. Balkish et al. (2013) found that one out of five of 7-12 year-old-children in Malaysia were overweight. At the same time, a number of reports (Khor & Sharif, 2003; Wong et al., 2014) reported the prevalence of underweight and childhood malnutrition especially in poor rural communities. It is therefore an urgent need to develop and identify efficacious dietary intervention for combating this complex problem among the children.

A growing area of research has been the incorporation of information and communication technology including computer based method for designing behavioural intervention (Norman et al., 2007). Computer intervention defined as ‘a program delivered through a computer to promote health related changes in behaviour’ (Hamel & Robbins, 2012, pp. 2) is a technique that has been quite popular in health education (Oenema et al., 2001). A systematic review of 15 studies (Hamel & Robbins, 2012) concluded that computer based interventions can be an effective means to improve eating behaviour outcomes among children and to supplement of other methods in the efforts to promote healthy eating. A study by Turnin et al., (2001) for instance, evaluated a prospective study micro-computer nutritional teaching games and their contribution to the children’s acquisition of nutritional knowledge and improvement of eating habits. Based on 1876 students (aged 7-12), they found that children in the game group (intervention group) had significantly better nutritional knowledge and dietary intake compared to children in the control group. In addition, studies (Casazza & Cicazza, 2007; Oenema et al., 2001) comparing the effectiveness of different methods for delivery of nutrition education have also indicated that computer based interventions are more effective in influencing dietary behaviour change than other modalities such as print materials.

Computer based intervention appears to be a logical choice for children as it allows for more comprehensive approach to behaviour change and children are able to access and assimilate information at their own pace and have an experience that is enjoyable, exciting, and effective (Kreisel, 2004). Given that the above studies have highlighted the value of using computer based programs to enhance the effectiveness of eating intervention, the main objective of this study is to assess the effectiveness of dietary intervention which combined the use computer based method with other traditional methods (PowerPoint presentation, hands on group activities and class discussion) to improve dietary knowledge, change attitude towards unhealthy food, increase intention to avoid unhealthy food in order to diminish unhealthy eating.
among children. It was hypothesised that compared with the participants in the control group, participants in the treatment group would: (1) increase in dietary knowledge (2) change attitude (negatively) towards unhealthy food (3) increase intention to avoid unhealthy food and (4) decrease the consumption of unhealthy food.

2.Materials and Methods

Description of the intervention and sample characteristic

A total of 201 children (intervention group N= 106, control group N= 95) from 4 primary schools, aged 10, in Setiu Terengganu participated in this study. Setiu was among the districts which displayed the highest number of malnourished children in Terengganu (Wong et al., 2014). A pre-test-post-test design was used to assess the effectiveness of the intervention on changes in dietary knowledge, attitude, intention and unhealthy eating pattern. Participants in both treatment and control group completed a baseline questionnaire (pre-test) related to attitude, intention and dietary intake, and were re-administered (post-test) after 3 month to assess change. The study was approved by University Malaysia Terengganu. Permission for data collection was attained from the Malaysian Ministry of Education, and the principal of the respective school.

Intervention program

While participants in the control group received no intervention, participants in the treatment group received intervention sessions over a 3-week period. The intervention included three modules including the use of food pyramid to choose a healthy meal and making selection on healthy and unhealthy food. The module also incorporated elements to increase children’s dietary knowledge, modifying children’s attitudes towards unhealthy eating and creating awareness about the effect of eating on health and diseases. The intervention included 2 hours classroom based teaching, PowerPoint presentation, class discussion and hands on group activities. The computer based intervention includes interactive games and animated presentation designed specifically to reduce unhealthy eating habits (junk food, fat intake, soft drink consumption). A ‘Pyramid game’ teaches the children to classify food according to their food groups. “Shoot the unhealthy” game helps the children to differentiate between unhealthy and unhealthy food. In ‘Eatwell’ game children must plan a nutritional balance for main meals (breakfast, lunch and dinner) for the day. Each child was provided individual laptop available in the school computer lab and was given 15-30 minutes to play the game for every session.

Questionnaire

Data was collected using self-reported questionnaire which assessed respondents’ demographic background, dietary knowledge, attitudes, intention and dietary habits.
Demographic background

The children reported their names and gender status. BMI was calculated from height and weight measurements. Data about parent’s backgrounds came from school records.

Dietary knowledge

The dietary knowledge was assessed using 20 items. The questions covered food groups according the pyramid food, identifying unhealthy food and relating food to diseases.

Attitude and Intention

The questions related to attitude and intentions were adapted from Kothe et al. (2012). Attitudes were measured with 6 items for unhealthy food. Respondents had to rate on a 5 point (For me eating unhealthy food everyday would be…enjoyable-un-enjoyable and harmful-beneficial). These questions included pictures of foods being asked about. A higher score indicates a stronger positive attitude. The Cronbach’s alpha computed for this study showed good internal consistency (6 items for unhealthy food, $\alpha = .86$ for pre-test and $\alpha = .87$ respectively). 1 items was used to measure intention to avoid unhealthy food. Respondents were asked to rate on a 5-point Likert scale (e.g. I intend to avoid unhealthy food everyday…. strongly disagree to strongly agree).

Dietary habits

Respondents were asked about their dietary habits using non-quantitative food frequency questionnaire, requiring only about the usual frequencies of food group without specification of portion size. The five items assessed the unhealthy food, with representative items include junk food group, sweet food group, fast food group and soda drink. The scale had point responses format of (none, 1, 2, 3, 4, 5 and more) times per day.

Statistical analyses

Data were processed with SPSS.24 software. Paired t-tests were used to examine the extent to which participants within each group changed their knowledge, intention, attitude and consumption between pre and post-tests. Pearson’s correlations was used for association between variables. The mixed-design ANOVA model (SPANOVA) was used to test for mean differences between the treatment and control groups at pre and post-tests.

2. Results

Intervention effects on dietary knowledge, attitude and intention
The pre- and post-test scores for dietary knowledge, attitude and intention are presented in Table 1. At pre-test, there was no significant differences in the score of dietary knowledge, intention and attitude between the treatment and control groups. With regard to nutritional knowledge, score between pre-test and post-test measures showed no significant effect in both treatment and control groups. However, a trend suggesting an increase in dietary knowledge in the treatment group compared to the control group, in that the mean of the post-test for the intervention group was higher than the one in pre-test. However, the effect did not reach statistical significance. Similarly, paired t test indicated that no significant change in intention were observed in both groups. At post-test, the results indicated a statistically significant differences between the groups for intention (t (199) = 1.91, p=.05), in that children in the interventions group (M= 4.08, SD= 1.13) had higher intention to avoid unhealthy eating than those in the control group (M= 3.78, SD= 1.19). Next, there was a statistically difference between pre and post-test for attitude towards unhealthy eating in both treatment (t (105) = 10.38, p <.001) and control group (t (94) = 10.76, p <.001). At post-test children in the treatment group (M=2.21, SD=.71) had significantly more negative attitude towards unhealthy food than control group (M= 2.51, SD=.67). Data were analysed using SPANOVA with a within-subject factor of test (pre-test, post-test) and a between subject factor of group (treatment, control) indicated that all interactions were non-significant, all F≤ 2.95, p ≥ .08, $\eta^2_p<.01$.

Table 1: Dietary Knowledge, Intention and Attitude Scores for Treatment and Control

<table>
<thead>
<tr>
<th></th>
<th>Treatment group n= 106</th>
<th>Control group n= 95</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>Knowledge</td>
<td>12.71 ± 3.17</td>
<td>13.03 ± 4.13</td>
</tr>
<tr>
<td></td>
<td>3.482 ± .72</td>
<td>2.22 ± .71</td>
</tr>
<tr>
<td>Attitude</td>
<td>4.04 ± 1.18</td>
<td>4.08 ± 1.13</td>
</tr>
</tbody>
</table>

Intervention effects on dietary intake
Dietary intakes are presented in Table 3. The repeated measures time by group interactions were examined to investigate potential differences in treatment and control groups. Statistical interactions were found for fast food $F(1,280) = 10.49, p =.001, \eta^2_p = .05$, soda drink $F(1,294) = 15.69, p < .001, \eta^2_p = .07$, junk food $F(1,284) = 11.03, p =.001, \eta^2_p = .05$, and sweet food $F(1,296) = 11.25, p =.001, \eta^2_p = .05$. In line with the hypothesis, results showed significant difference in the scores in unhealthy food favouring the treatment group. At post-test, compared to the control group, children in the treatment group showed significantly decrease in self-reported fast food consumption ($t(199) = -3.28, p < .001$), soda drink consumption ($t(199) = -4.37$, $p < .001$), junk food consumption ($t(199) = 3.72, p < .001$), and sweet food consumption ($t(199) = -2.98, p < .01$). From pre-test to post test, only the treatment group showed significant reduction in fast food consumption ($t(105) = 3.47, p < .001$), soda drink consumption ($t(105) = 3.23, p < .01$), junk food consumption ($t(105) = -2.91, p < .01$), and sweet food consumption ($t(105) = 3.41, p < .01$).

Table 2: Unhealthy food scores for Treatment and Control groups at Pre- and Post-tests.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Intervention group n= 106</th>
<th>Control group n= 95</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>Mean ± SD</td>
<td>Mean ± SD</td>
<td>Mean ± SD</td>
</tr>
<tr>
<td>Soda drink</td>
<td>1.51±1.48</td>
<td>1.00±1.19</td>
</tr>
<tr>
<td>Fast food</td>
<td>2.20±1.36</td>
<td>1.65±1.28</td>
</tr>
<tr>
<td>Junk food</td>
<td>2.00±1.43</td>
<td>1.58±1.24</td>
</tr>
<tr>
<td>Sweet food</td>
<td>2.26±1.50</td>
<td>1.70±1.28</td>
</tr>
</tbody>
</table>

Association between theoretical concepts

Examination of the relationship of the theoretical concepts indicated statistically significant correlations between dietary knowledge intention ($r=.27, p<.001$) and inversely related to attitude ($r=-.23, p<.001$) and unhealthy eating ($r=-.23, p<.001$). Finally, attitude was significantly related to eating unhealthy ($r=.35, p<.001$). The associations between the theoretical concepts are depicted in Table 3.

Table 3: Association between Theoretical Concepts

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Knowledge</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2.Attitude</td>
<td>-.23**</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>3.Intention</td>
<td>.26**</td>
<td>-.06</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>4.Unhealthy eating</td>
<td>-.23**</td>
<td>.35**</td>
<td>.03</td>
<td>-</td>
</tr>
</tbody>
</table>
3. Discussion

The research is the first to evaluate the effect of dietary intervention among school children which incorporate computer based method with traditional classroom methods in Malaysian context. While the results did not indicate significant changes in dietary knowledge and intention in the treatment group, at post-test, children in the treatment group reported had higher dietary knowledge, and had significantly higher intention to avoid unhealthy food than did those in the control group. With regard to attitude, both treatment and control groups significantly reported significantly negative attitude towards unhealthy food at post-test, but results were more pronounced in the treatment group. Associations among the study variables showed that children with higher knowledge tend to report higher intention to avoid unhealthy food, have negative attitude towards unhealthy eating and consume less unhealthy food. In addition, having negative attitude towards less healthy food was significantly related to lower consumption of unhealthy food. These findings are encouraging because previous studies reported knowledge (Long, & Stevens, 2004), intention (Andriaanse et al., 2011) and attitude (Dabone, Delisle & Receveur, 2016) were important determinants to diminish unhealthy food consumption.

The results of the present study support the prediction that exposure to dietary intervention can be effective to diminish unhealthy eating compared with no exposure. From pre-test to post intervention, there were significant decreases in the consumption of fast food, junk food, soda drink and sweet food in the treatment group, but not in the control group. Furthermore, at post-test, children in the treatment group significantly consumed less unhealthy food than the control group. The results were consistent with the previous Western studies (Casazza & Ciccazzo, 2007; Turnin et al., 2001) which demonstrate that computer based intervention using interactive, animated presentation has the potential to elicit greater behavioural changes. Previous studies (Blanchette & Brug, 2005) indicated that multi-component interventions with longer duration and more contact hours generally achieve better outcomes than the shorter one. Hence, the success of this study warrants further investigation of its use with a more extensive follow-up period.

This study is subjected to several limitations. Caution needs to be used when generalizing the results to other study population. Increasing the statistical power by increasing number and diversity of the sample (urban vs. rural areas) is needed in further study. In addition, it is also helpful to include covariate variables (gender, body mass index (BMI), school factor) in the study and analyse their influences to the intervention outcomes.

4. Conclusion

The findings of the study demonstrate that computer based method can be effective addition to traditional method to reduce unhealthy eating consumption. Nonetheless,
more evidence from further intervention study with improve methodology and comprehensive intervention strategies such as parental and community involvements is needed to better determine how computer based method could bring positive impact on children’s eating behaviour.

References


Casazza K., & Ciccazzo, M. (2007). The method of delivery of nutrition and physical activity information may play a role in eliciting behaviour changes in adolescents, Eating Behavior, 8, 73-82.


Students’ learning experience: The importance of social presence in online learning toward non-traditional students (NTS)

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Sandrotua Bali, National Dong Hwa University, Taiwan

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Abstract

Interactive classes offered using the internet as a means of delivering course content are a growing phenomenon. The students who enroll in distance education programs find out that they must learn on their own while the instructor is taking on a facilitator role. Based on qualitative in-depth interviews (IDIs) and focus group discussions (FGDs), this study aimed to explore and describe the students’ learning experience through online learning for NTS (non-traditional students) who are identified based on age, employment, family and financial responsibilities associated with it. Meanwhile, five NTS students in this study are Indonesian migrant workers who are studying in Indonesia Open University, Taiwan branch. They are workers and students at the same time who want to get knowledge which will be used for their subsequent career. The findings of this qualitative study argued that there are several challenges and problems for students when they study through online learning. However, there are also some advantages of distance education toward NTS. In addition, this study also found that instructor presence is substantial to establish social presence in online learning in order to create success in distance education.

Keywords: Interactive classes, Learning experience, Online learning, Non-traditional students (NTS), Social presence.
1. Introduction

The potential for distance education and online learning is growing now. It is recognized that the use of technology for distance education affect how learners learn, and how instructor teach. The use of online learning have grown out of and enhanced the changes now occurring in the delivery of education since the ability of internet access has made online education itself become the largest sector in delivering courses to the students, particularly for higher education students who are non-traditional students (NTS). They are identified as working adults returning to school or students, who are unable to attend the classes on school for other reasons.

Several studies show that student join online learning mainly due to efficient cost (Bartley & Golek, 2004), rapid, affordable, and in accordance with current economic conditions (Clarke & Hermens, 2001). Research also shows that students can gain some advantages in following online education due to satisfaction and the quality of online education itself (Rob, 2010) because students no longer need to attend face-to-face learning. Tutors and students can enhance online learning classroom learning through software or application learning and have communication via computer or gadget with students. In contrast, institutions have challenges to implement good quality experience for students due to the limitation of online learning. There are also some problems in delivering online courses to the students to create a transformative learning environment because of lack of social presence. In regard to that, tools problem which can be impair the goal of online learning also can be a challenge in delivering online courses, and indeed, it will affects students’ learning experience. As Bartley & Golek (2014) demonstrated, there are some effects of distance education courses, namely distraction of cutting areas, prevention of social interaction, not listening to the courses, late comers, and distraction of others. Therefore, instructors must be able deals with the technology with a multitude of learning theories and learning styles in order to build social presence and interactive online classroom to the students. Without meaningful interaction with the instructor, students can feel disconnected and become demotivated.

We have to acknowledge that interaction in a traditional classroom is much different with the interaction in distance education, more specifically interaction through online learning. Social presence as a pivotal aspect is needed to create the success of students’ learning experience. Because social presence is crucial toward students’ learning experience, therefore instructor plays important role as facilitator to guide the students, though online learning lies on student pace. Instructors should have interpersonal interaction toward the students due to the lack of social presence in
online learning. In summary, we believe that social presence is one of the most important things in distance education, more specifically in online learning.

As Bartley & Golek (2004) argued, actually technologies are not the main problems associated with the online learning environment, but the problem is pedagogical assumptions and conceptions of instructor work toward the students, due to the lacks models in online education. Therefore, instructors are expected to have knowledge and skills to operate online learning. Of course, if the instructors don’t have enough knowledge and good skill, it is certain that online learning itself will not work properly. However, we argue that online learning is still being touted as the best way and best possible solution to the problem of access to NTS students, because it meets their needs.

Because interaction is the heart of online learning, it seems obvious that there is a need to understand which strategies and activities can promote interaction in online education. Driven by this overarching research purpose, two specific research questions are raised for this study. What are the challenges of online learning for NTS students? How do the NTS students perceive online learning?

2. Literature Review

2.1 Learning Experience through Online learning

Most of authors defined online learning as access to learning experiences via the use of some technology (Benson, 2002; Carliner, 2004; Conrad, 2002). Distance education also basically refers to online learning due to the use of technology for distance education itself. It is also a form of distance learning and has become the largest sector of distance education currently (Evans & Haase, 2001). Online learning deals with connectivity, flexibility, and ability to promote varied interactions. It means online learning must has strong power in promoting interactions to the students. Subsequently, instructor as a main role in guiding online learning acts as group facilitator, developer, as well as content provider.

Online learning environment has many benefits for learners. The advantages are flexibility, the quantity and quality of participation, open and accessible communication, and archived postings from participants for reference (Morse, 2003). Also, online learning has its own environment that is different with traditional classroom due to the use of technology in delivering courses. Online learning which is refer to online technology such as email, course management systems, discussion boards, video conferences and social media also can cover the efficient and convenient ways to achieve learning goals for distance education students (Chen, Lambert, & Guidry, 2010; Junco, Elavsky, & Heiberger, 2013). Most importantly, considering its cost effectiveness ratio, on-line learning is widely used to combat the rising cost of postsecondary education, credit equivalency at the postsecondary level, and the possibility of providing a world class education to anyone with a broadband connection (Bartley & Golek, 2004; Gratton-Lavoie & Stanley, 2009).

2.2 Social Presence
Social presence can be defined as the importance of person in mediated communication to another person (Short, Williams, & Christie, 2006). Additionally, Garrison (2007) stressed social presence in online learning community deals with effective communication, open communication, and group cohesion. Social presences, cognitive presence, as well as teacher presence have connection in online learning. For those three aspects, instructor or teacher has pivotal role to guide the students. As Salmon (2004) argued, the importance of social presence is to build the successful of communication and group cohesiveness while cognitive presence deals with exploration, construction, critical thinking, and practical learning. Meanwhile, the integration of these aspects should be combined which is called as “weaving”, as one of the role of instructors.

Social presence itself could be established by instructor and students. Social presence actually also refers on instructors and students relationship. Another key thing to remember, social presence deals with instructors’ feedback toward the students. It means, instructors feedback play an important role in building social presence toward students (Boling, Krinsky, Saleem, & Stevens, 2012). Basically, social presence which is established by tutors likely more important than social presence that established by student. Therefore, tutor must undertake the features in Learning Management System (LMS) very well, operate the application based on students’ need in order to get the goal of learning.

In addition to social presence, video feedback in online learning is one aspect of social presence (Thomas, West, & Borup, 2017). Video feedback in online learning can establish the instructor-students relationship. Several studies have reported that video feedback can be added on social presence because feedback has social dimension even when its primary focus is on course contents (Evans, 2013). Likewise, audio feedback as well as text feedback is also belong to social presence (Thomas, West, & Borup, 2017).

In order to better understanding to social presence, Richardson & Swan (2013) demonstrated that social presence that instructors can do to the students such as:

- Lectures, notes, reading assignments
- Written assignments
- Individual projects
- Group projects
- Self-test, module test, final exam.

Social presence can be viewed as primarily influenced by the medium of communication. It emphasizes the interactivity and meaningful correspondence between instructor and students (Wright, 2015). Some research has supported the necessity of social interaction with a sense of group belongingness reflecting better academic performance on coursework (Graff, 2006). However, Garrison and Arbaugh (2007) then again emphasized that the establishing social presence are not solely for creating social supports networks, interaction and communication but also it have to consider regarding to quality interaction in order to reach the success in online learning. Having said social interaction in online learning, this study focused on synchronous discussions in online learning platform. Synchronous in this study means students were involving in learning at the same time with their peers which is
guided by instructors through online learning software or application via chats or video conferences.

3. Research Method

3.1 Research Design

We conducted qualitative research to explore NTS experiences and views of online learning. Yin (2011) elucidated the five features of qualitative research which focus on studying the meaning of people live, views and perspectives of the people, contextual conditions within which people live, human social behavior, and using multiple sources of evidence. Therefore, this study focuses on describing how these five NTS experience of online learning phenomenon, how they perceive it, describe it, and feels about it (Guest, Namey, & Mitchell, 2013).

3.2 Participants Selection and Ethical Considerations

We have pointed out that all of participants in this study are NTS students. A traditional student is defined as one that enrolls immediately after graduating from high school and completes the degree by age 24 (Kimbrough and Weaver, 1999; Philibert, Allen, and Elleven, 2008). It means, NTS are students who are 25 years old or above. The sequence of NTS priorities are 1) work, 2) family, and then 3) school (Chartrand, 1992). Meanwhile, all of them are 25 years old or above who are Indonesian migrant workers and students at Indonesia Open University, Taiwan branch. They are workers and students at the same time.

<table>
<thead>
<tr>
<th>Name (Pseudonym)</th>
<th>Age</th>
<th>Gender</th>
<th>Status</th>
<th>Major/Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1: Ani</td>
<td>26</td>
<td>Female</td>
<td>Single</td>
<td>Management/II</td>
</tr>
<tr>
<td>P2: Desi</td>
<td>25</td>
<td>Female</td>
<td>Single</td>
<td>English/III</td>
</tr>
<tr>
<td>P3: Ester</td>
<td>29</td>
<td>Female</td>
<td>Married</td>
<td>Communication/I</td>
</tr>
<tr>
<td>P4: Via</td>
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<td>Married</td>
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</tr>
<tr>
<td>P5: Yessy</td>
<td>26</td>
<td>Female</td>
<td>Single</td>
<td>Communication/II</td>
</tr>
</tbody>
</table>

Table 1. Participants’ background

The criteria of selecting participants consisted of undergraduate-NTS majoring in varied major of Indonesia Open University, Taiwan branch. They were voluntarily joined this study from three major (Indonesia Open University, Taiwan branch has three majors only). To protect the participants who were involved in this study, the ethical research including informed consent was applied. Informants were provided
information regarding study purpose and methods as well as about their rights to confidentiality and withdrawal from the study any time.

3.3 Data Collection and Data Analysis

Data collection gained from in-depth interviews (IDIs) and focus group discussions (FGDs). The interview process was the first step to understand students’ experience regarding to online learning. Meanwhile, qualitative data in the form of IDIs and FGDs were collected from five NTS students. To enrich the data, FGDs schedule with potential participants were arranged ahead of fieldwork lasted from 20 minutes to 30 minutes. We met the students face-to-face on two occasions of brief FGDs, and gave them a brief introduction to this study. In addition, we discussed the issues associated with their learning experiences through online learning. We carried out one-on-one interviews in Indonesian language as the participants’ request which lasted from 30 minutes to 40 minutes for each interviews.

Since the data obtained from IDIs and FGDs, therefore this study used qualitatively analysis. We record while IDIs and FGDs were conducting. Then, we transcribed each interviews from the audiotape interviews recordings into text data. Finally, we coded the interviews with reading the data several times and dividing it into categories (Esterberg, 2002).

4. Findings and Discussions

4.1 NTS’ Expectation toward Online Learning

Many researchers assume that instructors play a different role from that of traditional classroom instructors when they teach online courses (Kim & Bonk, 2006). Therefore, teaching in traditional classroom is different with teaching in online classroom. A very striking difference between teaching in traditional and teaching in online classroom is the use of technology and the tools of learning. Teaching and learning in online classroom seems more complex rather than teaching in traditional classroom. NTS students in this study expecting that online learning should be more interesting than face-to-face classroom.

*I learn through online learning just because limited time. However, even though most time I study through online learning, I expected that I can understand well. Despite it is different with face-to-face learning; I expected that I can understand the lesson similar with face-to-face learning. At least, I just hope that face-to-face learning will equal with online learning (P2, FGD)*.

Actually, all of the participants experiencing blended learning in their u. They have two times meeting of face-to-face learning and the rest meeting are conducted through online learning by using application that can be reached by their gadget or their personal computer. We asked all of the participants whether they prefer to face-to-face learning or online learning, and most of them were prefer to face-to-face learning rather online learning, and one student said that she felt the same way.
It doesn’t matter to study through online learning, however I’d like better to study by face-to-face learning because it feels more enjoy and focus. I am expecting that online learning would be the same with face-to-face learning, stay focused and enjoyed (P3, FGD).

Because mostly our meeting is designed for online learning, I don’t have any choice, right? For myself is no problem actually. My friends might say study through online learning is not interesting, but I don’t think so. As well as the tutors are nice and we have high spirit to study, it doesn’t matter. I believe, study both through online or face-to-face are the same. The different is just the tools we used (P4, FGD).

Despite the fact that online learning is growing, many students still prefer the traditional courses that allow face-to-face interaction (Maki, 2002). However, because they are NTS, online learning is a good alternative for them so that they can work and pursue higher education. Online learning through qualified instructors must know the students’ needs to improve their academic achievement. Because expectations significantly affected learning satisfaction, hence, instructors should be able to design the online learning environment quality in delivering online courses.

4.2 Lack of Social Presence

4.2.1 The Importance of Video, Audio, and Text Feedback

The main problem of distance education itself is lack of social presence, which resulting negatively impacted. Therefore, instructors need to construct social presence by utilizing some features of media such as computer, interactive video, audiotape (Richardson & Swan, 2003) as participants explain,

I can see directly if my tutors provide their video feedback. I can see their expressions when they teach me. It feels also like face-to-face learning (P1, IDI).

The interaction is less. My tutors never display their video feedback or their video face. I couldn’t see the tutors’ expression and also our classmate expression. Maybe my friends were sleepy, or the do something to do that tutor couldn’t see. If their video appears, tutor indeed can see them and warn them to study (P2, IDI).

The interaction is more reciprocal if tutor provide video. It feels like face-to-face learning (P5, IDI).

Mostly, their tutors give the feedback to these NTS students through audio feedback as well as text feedback at the same time. In general, several studies argued that audio feedback can be advantageous in developing social presence (Thomas, West, & Jered, 2017). Therefore, these NTS student feel that the feedback from their instructors still not optimal. Hence, giving text feedback to the students for some subjects is really important, because the students can review the text feedback from
their tutors. Furthermore, the quality of audio feedback is a problem for them. For instance, due to internet connection problem, the audio feedbacks from their tutor were annoying. Participants said,

Figure 1. Developing social presence through synchronous learning in online learning platform.

Regarding in giving feedback through video, audio, and text, participants said,
I prefer to text rather than audio for English writing subject. It helps me a lot, I can read it again, and again (P2, IDI).

Sometimes I couldn’t hear the audio clearly, whereas through text is more detail and I can review the text as well, because if the tutors talk unclearly, I am reluctant to ask them to repeat, due to the limited time. I feel not comfortable with this online course (P3, IDI).

In regard to figure 1, developing social presence through synchronous online learning platform can be done through video, audio, as well as text. Meanwhile, video, audio, and text have the advantages and disadvantages. For instance, participants mentioned that it feels more interactive if their instructors provide them video feedback. However, the qualities of video occasionally were poor, similarly with audio, due to internet connection issue. In addition, some of students prefer if their instructors provide text to them, because they can review the text again, even though it has consuming time to type. However, giving video feedback, audio feedback and text feedback can promote social presence. Video feedback, audio feedback and text feedback can be given at the same time in order to improve interactive class.

4.2.2 Lack the Use of Emoticons

Not only delivering the courses, instructor also can develop effectiveness of learning with technology functions in order to establish social presence to the students. For instance, Thomas, West, & Jered (2017) demonstrated that the instructor can utilize the function of video, chat box, even the emotions (e.g. exclamation marks, capitalization, emoticons, smiling, laughing, animation, disappointment, and irritation) to support desirable pedagogical dimension of online learning. The use of emotions tends to add clarity to the context and help forge connections between participants in the online learning classroom. Table 2 describes the use of common emotions in online learning platform.

<table>
<thead>
<tr>
<th>Typed text</th>
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<tr>
<td>:-)</td>
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<tr>
<td>:(</td>
<td>Frown</td>
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<tr>
<td>&lt;3</td>
<td>Love</td>
</tr>
<tr>
<td>LoL</td>
<td>Laugh out Loud</td>
</tr>
<tr>
<td>(y)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 2. The use of common emotions in online learning platform

Emoticons, are very helpful at clarifying text-based messages (Derks, Bos, & Grumbkow, 2008). It also can supports online learning because it helps instructor and students to interact. It can improve the communication of instructor and students, because using different of emoticons can counter the ill-effects of absent social context cues specifically in online learning platform (Tu and McIsaac, 2002). Emoticons also regarded as constructive feedback to the students. For instance, emoticons can soften critical feedback in online learning, so that the students receive the feedback positively.
In order to better understanding regarding to emotions, these five students were glad if their instructors use emotions. Actually, giving emoticons to the students is an easy thing. Although it is simple, it also can build social presence in online learning platform. Research has shown that emoticons are usually placed as closers, openers, or interjectors in written conversations. In regard to that, these NTS are glad if their instructors greet them, together with using emoticons. One participant mentioned that it feels clearer if their instructor uses emotions. One participant said that using emoticons in chat box is fun. However, just few tutors use emoticons to them. They usually just presenting e-book and giving feedback through text. Briefly, students feel more pleased with the presence of emoticons.

4.3 Tools Problem

Tools for online communication are increasingly used in education, but they are not without problems. NTS come to university and deal with online learning with a variety of experiences, expertise and expectations, both of higher education and of Information and communication technology (ICT). In this study, all of the participants’ courses were delivering through online courses. It means, students have to deal with technology and they tools that they use to study (e.g. personal computer/laptop or gadget/smartphone). For instance, they even don’t know how to operate those tools at the first time. Furthermore, their tools also occasionally have problem while online classes were conducting. They emphasized,

Because the problem is internet connection, sometimes the quality of audio is bad and it is difficult to log in (P4, FGD).

Online learning at my first semester was very interesting because that was the first time my experience in online learning. However, sometimes the internet connections were error, and I couldn’t hear the tutors’ voice clearly (P1, IDI).

Besides internet connection, their tool to reach online learning also becomes the problem that can disturb their learning experience. They cannot do anything to
solve this problem. Therefore, they couldn’t follow the online classroom well. They said,

*Occasionally the slides couldn’t appear if I use smartphone, I don’t know why. However, I have to use smartphone because I used to work and study at the same time (P5, IDI).*

*My laptop is too old. It doesn’t work properly, and of course I couldn’t follow the classes. I just keep it closed if my laptop got slow. This is what I hate study through online learning (P2, IDI).*

Conclusive evidence that online learning has some problems have been experienced these five NTS when they study through online learning. Therefore, instructors should develop innovative and effective methods by advanced technologies (Kilby, 2001). Despite tools problems are not the issue of pedagogical in online learning, tools problem indeed can be a barrier. Their tools such as laptop, gadget or their smartphone occasionally have problem when they study. In addition, internet connection problem also can ruin their learning experience, because many students are not provided with the high bandwidth or the strong internet connection that online learning require.

### 5. Conclusions

Universities now have the ability to provide distance learning opportunities through online classes. This study showed NTS’ experience in online learning. We surely that online learning is a good alternative for those who are NTS along with the increasing of technology in education. In addition, there are also the advantages of online learning. We highlight the importance of online learning for NTS students is very efficient due to their status as a worker. Therefore, online learning can support NTS subsequent career In this study, those NTS expecting that online learning can be have meaningful interaction, so that their learning experience toward online learning. Due to the limitation of online learning such as lack of social presence as well as tool problems, therefore instructors should be able to design online learning classroom effectively through interactive online classes. Instructors can provide video, audio, and text to the students, depending on the nature of the subject. They should be more observant in providing feedback to the students, based on students’ need.
References


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**The Concept of Learning Organizations in a Management System Implementation: A Case Study in a Brazilian Petrochemical Plant**

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**Abstract**

Most CMMS (Computerized Maintenance Management Systems) do not work as a management system or have limited management capacity after implementation. According to Wireman (1998), another important fact is that approximately 50% of the CMMS implemented are predestined to fail in less than two years of operation. So what can we do about it? The author uses Peter Senge’s concept of learning organizations as a new way to implement and use a CMMS. This paper examines how
this methodology was successfully used at the Rio de Janeiro Gas-Chemical Complex to guarantee the full usage of its computerized maintenance management system.

**Keywords:** Maintenance, Management, Fifth discipline, Corporative education

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1. **Introduction**

1.1 **The Company**

Using clean technology, the Riopol Project (the largest gas-chemical plant in Latin America, now Braskem Rio de Janeiro) produces resins from the ethane and propane fractions of natural gas. Braskem Rio de Janeiro has an annual production of approximately 520,000 tons of ethylene, 75,000 tons of propylene and 540,000 tons of polyethylene resins. The production plant is adjacent to the refinery owned by Petrobras, one of the project's sponsors.

1.2 **The Present Situation**

The implementation of a CMMS can be split into 4 phases:

Phase 1: Selection/acquisition of the system

Phase 2: Installation/implantation

Phase 3: Start of production (observed production)

Phase 4: Normal production

The company “A” was hired to carry out phase 1, which included market research and the indication of which CMMS would best serve Braskem. The chosen system was the MAXIMO version 5.2, by IBM. For phase 2, “B” was the company responsible for the planning of the implantation of the system, as well as for technical
support, training of the implantation team, preparation and design of the maintenance and support processes and the system operational procedures and routines.

This case study takes place when the implementation was at the end of phase 2 (making adjustments to the spare parts register and typing the Maintenance Plans) and the start of phase 3 (operational test of Work Orders and beginning training of system end users).

1.3 Objective of the Project

To guarantee full use of the CMMS MAXIMO at the Rio de Janeiro Gas-Chemical Complex.

2. Why do Some CMMS Implementations Fail?

Based on prior experience and existent literature in the field, the 10 principal causes for implementation failure can be identified as follows:

1. Lack of planning: The implementation of a CMMS should be approached as a large-scale project.
2. Lack of resources: Limited human or financial resources occur due to bad planning.
3. Lack of communication: The staff involved should be constantly informed about the progress of the implementation as regards the schedule.
4. Lack of knowledge: The implementation team should be composed of people who between them have knowledge of the system, of maintenance control and planning, as well as specific technical knowledge of the plant in question.
5. Lack of training: Regardless of how user-friendly the CMMS seems, training should cover all levels of users, especially the maintenance personnel.
6. Expectations: The simple fact of installing a CMMS will not immediately improve maintenance results. Another danger is to assume that everyone involved in the implementation will accept this idea and change their own work routines in order for the system to operate effectively. Without a change in the culture at the workplace, the CMMS will not generate the expected benefits.
7. Resistances: It is necessary to first understand the cause behind them.
8. Non-treatment of information: So nobody sees the importance in providing information and the system breaks down.
9. Poor information: In order to analyse data, information fed to the system must be accurate. Otherwise managerial decisions cannot be made based on the system information and the system once again breaks down.
10. Poor or incomplete implementation: The arch enemy. According to Cato (1999), it’s estimated that, on average, only 30% of the modules of a CMMS are used and of these, only 30% of their capacity is utilised. This results in the use of only 9% of the full system capacity.
Conclusion 1: None of the causes are related to software or even hardware, but actually PEOPLEWARE. The success of the CMMS is dependent on the commitment of the users, the compliance to the defined routines, and on knowing how to use the information provided by the system.

Conclusion 2: PEOPLEWARE is in fact the USERS who work by following the PROCEDURES.

3. Procedures Versus Users

As shown in figure 1a, if we represent in graphic form the relationship between the influence of procedures and of final users throughout the 4 phases of the CMMS implementation, we can see that:

a. During phase 1 the procedures and the final users both have a low influence, as the procedures have not yet been created and the final users are not involved in the system selection process.

b. During phase 2 the procedures have a high influence while the final users a low influence, as the procedures are being created but the final users are not involved in the installation process.

c. During phase 3 both the procedures and the final users have a high influence, as the procedures are being taught in training and the final users begin to use the system.

d. During phase 4 the procedures have a low influence while the final users have a high influence, as the procedures have already been taught in training and the final users are already using the system routinely.

Figure 1a and 1b - Relationship between the influence of procedures and of final users.

If we now apply the 10 causes of implementation failure to the 4 phases, as in figure 1b, we can see that:
a. Lack of training, lack of communication and lack of knowledge are common to all phases.
b. In phase 3, as well as the 3 aforementioned causes we also have expectations, resistance, non-treatment of information and poor information.

Conclusion 3: In phase 3 the final users begin their system operations training, following the documented procedures. 7 of the 10 causes of failure are also concentrated in this phase.

4. Peter Senge’s Five Disciplines and the Work Model

The Learning Organization remains one of the most talked-of management concepts in today's business world. The main thesis of Senge (1990) is that for an organization to become a Learning organization, it must embrace five disciplines:

a. PERSONAL MASTERY is the individual's motivation to learn and become better.
b. MENTAL MODELS are a technique that can be used to foster creativity as well as readiness and openness to change and the unexpected.
c. Building SHARED VISION so that the organization may build a common commitment to long term results and achievement.
d. TEAM LEARNING is needed so that the learning is passed on from the individuals to teams.
e. The fifth discipline is that of SYSTEMS THINKING which allows to see a holistic systemic view of the organization as a function of its environment.

This study proposes to use Senge’s 5-discipline model as a foundation for dealing with the 7 causes of implementation failure which occur in phase 3. For the case in question we consider that lack of training and lack of knowledge can be interpreted as a single cause named LACK OF LEARNING. Figure 2 presents the structure of the work. The final user and the procedures are the central figures, where:

a. Learning and Communication are the basis of this phase. A lack of either of them impedes progress to phase 4.
b. Expectations and resistance are human reactions to change.
c. The non-treatment of information and the provision of poor information characterize a failure to follow procedures, as it is the procedures that establish the rules for system operation.
4.1 Personal Mastery

Before beginning phase 3, talk with some of the craftsmen about their expectations as regards the system. Here are 3 typical situations:

a. Electrician X says he is disillusioned with the company because he is always available for overtime on weekends, always solving the worst problems. But whenever there is any training program someone else is always selected, and they do not pass on what they learned to him.
b. Pipe fitter Y, after discovering that there will be a user training course asks if he, as a subcontractor, will be trained too.
c. Mechanic Z says that at his old employers, XPTO, he already worked with a computer system for consultation and decides to make some suggestions.

By consulting the Maslow’s hierarchy of needs (UMEDA, 1998), we can see that the three aforementioned topics fit into the columns for human relations and work. Electrician X wants to be recognised (need for recognition); pipe fitter Y does not want to be treated differently to other employees (social need); and mechanic Z wants to contribute with his own experience (need for self-fulfilment).

- Action 1: Include all the operators and craftsmen in the training courses. Although we know that they will not all use the system, by involving them all we will be meeting each one’s need for recognition equally.
- Action 2: Include the subcontractors, as they are part of the same team in order to meet their social need.
- Action 3: Involve the operators and craftsmen in putting the system into operation, listening to their opinions and suggestions. Discuss all the decisions with the group before putting them into effect. That way we meet their need for self-fulfilment.

4.2 Mental models

Changes are constant in companies today, yet many employees refuse to accept this due to one reason: they are afraid. Resistance to change is natural and
predictable. In fact, the most positive and successful people are the most resistant at first, as they are in a privileged position and are afraid of losing what they have achieved.

- Action 4: Show the film “Paradigms principles” by Joel Barker to the supervisors and planners groups.
- Action 5: Show the film “Mindwalk”, based on the book "The Turning Point" by the physicist Fritjof. Capra (for the engineering team to watch at home, due to the 120-minute duration).
- Action 6: Present/discuss/revise the process flows and the operational procedures of the system.

4.3 Shared Vision

At this stage, communication is no longer restricted to the progress of the implementation schedule. Communication begins with the operator’s work request, includes the specification of materials, arrangement of release dates for equipment and ends with the record made in the service history by the craftsman. At this stage we are already dealing with information which should be clear and reliable, this is vital for a successful implementation.

According to Senge (1990), development of a Shared Vision is part of a wider activity. The four components of a Shared Vision are: Mission, Values, Objectives and Vision. These four components should be discussed with the groups throughout the training programs and consolidated by the project coordinator (system implementation – 4 phases). Keep in mind that, for this work, the focus of the vision is not the company’s business interests, but rather the use of the CMMS.

- Action 7: Develop and divulge the vision, with the focus on the CMMS.
- Action 8: Show the film “Halley’s comet” (8-minute duration), about communication problems, to all the groups.

4.4 Team Learning

This stage begins with the preparation of the training process (Wankel, 2008), as presented in figure 3a. The first phase of this process – survey the necessity for training – is only applicable to maintenance craftsmen staff, in order to determine their level before training. The training plan, item 4 in the training process, is prepared for each group of users (production operators and supervisors, maintenance engineers, suppliers, planners and maintenance craftsmen and supervisors). Figure 3b shows an example for one group of users. After the training period (3 months), divulging the knowledge should be ensured by means of e-learning resources and special forums.

- Action 9: Develop the e-learning process.
• Action 10: Create SF’s (Study Forums). In such a forum the mediator proposes the theme of study in advance and prepares a presentation.
• Action 11: Create DF’s (Discussion Forums) – The theme is proposed by the user, who raises his doubts and discusses them with the group.
• Action 12: Create UF’s (Users’ Forums) – Carried out with users from other companies, every 6 months, in the form of a symposium.
• Action 13: Create a monthly internal journal, to divulge tips and improvements resulting from the forums.

![Figure 3a and 3b – The training process - adapted from Umeda (1998) - and an example of training plan, item 4 in the training process, for the group of operation users.]

4.5 Systems Thinking

As previously stated, the non-treatment of information and the provision of poor information characterize a failure to comply to procedure, as the procedures set the rules for system operation (Argenti, 2013). Awareness of this is more effective when one knows how and where one’s part affects the whole. To develop this discipline the relationships between day-to-day tasks should be described and explained throughout training, SF’s and DF’s.

Conclusion 4: All the users should know where their tasks affect the maintenance management process.

5. Conclusion

This work is done by people, therefore involving everyone is the primary factor for success, ensuring a smooth transition to the next phase. To achieve this we must:

• Seek consensus, by means of negotiating and making use of one’s moral integrity and technical competence;
• Listen to different points of view and understand the distinct perspectives;
• Achieve support;
• Assume that people are interested in finding themselves in new situations, since their past experience will help them explore the new circumstances in some way;
• Always educate and train.

By phase 4 the system was already running automatically, the procedures were already ingrained on the users and they really know their own importance to the system, and above all, the importance the system has for them.

Bibliography


Communication for Development in the University Curriculum

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Abstract

The emergence of a new generation of information and communication technologies (ICT) has prompted widespread international attention to a larger role for communication in development initiatives. Computers, mobile phones (especially smart phones), and the internet have become accessible by many even in developing nations. A major thrust toward recognizing the great potential of ICTs came from the eight major industrial nations (the G8) who, in the year 2000, asserted that information and communication technologies can be one of the most potent forces in
shaping the 21st century. The G8 noted that the revolutionary impact of ICTs affects the way people live, learn and work, and the way government interacts with civil society. In 2003 and 2005, the World Summit on the Information Society (WSIS) persuaded many nations and international organizations to undertake ICT projects to help meet the 2015 targets for the Millennium Development Goals. Now the focus is on strategically using these tools to address the Sustainable Development Goals (SDGs) drafted by the United Nations in 2015 and targeted for the year 2030. In this paper we explore a strategy for action that involves community learning centres, universities, and the application of communication for development.

**Keywords**: ICTD, Community learning centres, Communication for development, Engaged learning

1. Introduction

**Education and community centres.** One of the keys to development in many nations is the creation of various kinds of community centres that provide access to lifelong education for poor and marginalized people. UNESCO, for example, has been active for many years in the establishment of community learning centres which it considers to be "vibrant centres of learning." The surge in the past decade has resulted, in part, from UNESCO's programme called APPEAL. However such local centres have a long history. The case of Nepal is a good example. The idea of creating these centres in Nepal goes back to the 1980s when about 154 village reading centres were established across the country to provide community-based post-literacy and continuing education training programmes. The reading centre concept was later refined, revitalised and further broadened from a ‘reading’ centre to a ‘community learning’ centre. The Community Learning Centre (CLC) programme in Nepal targets out-of-school children, youth, and adults from marginalized rural and urban communities. Through various government processes and international funding, Nepal established more than 800 CLCs and had the ambitious goal of establishing one in every village. As in other countries, nearly all CLCs in Nepal were established and are being managed by the local people. The Community Learning Centre Project launched by UNESCO/Bangkok has been operational since 1998. Since then nations throughout Asia have created community learning centres. They exist in 24 countries throughout the Asia-Pacific region and 10 countries in the Arabic speaking world. There may be as many as 170,000 CLCs in the Asia-Pacific Region, some established
by governments, some by non-governmental organizations, and most operated by local communities. On a much smaller scale, in Africa, since 2007, Maarifa Community Knowledge Centres have been established in Kenya, Tanzania and Uganda. There is now an effort by UNESCO to promote the connectivity of the Asian learning centres, that is, have CLCs connected to the digital world, thereby reducing the world's digital divide. In the African situation, there is an explicit effort to use multi-media tools to enhance learning for increasing socio-economic empowerment. The existence and expansion of the CLC movement is important to our discussion because, as we shall see, they could be partners in the education of university students in courses related to communication and development such as education, computer science, social sciences, and other disciplines.

**Communication and development.** Communication as a tool in development has a long history. Agricultural extension services have used publications and radio for many decades. However, the emergence of computers, the internet, and social media have added a dramatic new chapter. Here are some examples. Today there are about 3.5 billion internet users (3,500,000,000), or almost half (46%) of the world's population. The figure for Asia is about 40%. There are almost seven billion mobile phones in use. Obviously not all are for development. However we do see professional papers with titles such as "Mobilizing Myanmar: A Smartphone Revolution Connects The Poor with Economic Opportunity" and "Crowdsources Citizen Feedback" — both drawn from The Digital and Development Network. (See: [http://www.comminit.com/ict-4-development/content/crowdsourcing-citizen-feedback-district-development-ghana-using-interactive-voice-respon](http://www.comminit.com/ict-4-development/content/crowdsourcing-citizen-feedback-district-development-ghana-using-interactive-voice-respon).) There are probably around 95,000 village radio sets in use. And there are now approximately 160 countries with strategies to promote use of ICTs for development. Those are impressive data, but we need to take a look at the personal impact of the ICT movement.

Varshaben Luva is one of a growing number of women in India breaking through traditional gender roles by starting her own business. Although a farmer, she attended the Self Employed Women's Association (SEWA) in India that has trained some five thousand women workers from rural areas in core computer skills to help them find jobs, become self-reliant, and overcome traditional gender-associated constraints. Luva's story begins on a dusty road in India. Luva dreaded the 100-mile drives on that dusty road to the marketplace to sell her crop. The long trips were not only exhausting but often resulted in a financial loss when she could not sell her crop in the market. Other farmers experienced the same difficulty and frustrations – and losses. After attending SEWA's computer training session, Luva was able to combine her new information technology skills with her background in agriculture to start her own text messaging business for farmers. Luva now goes to SEWA on a daily basis to do online research of markets and prices of commodities. Then she sends daily text messages about current market prices to farmers who pay her 50 rupees (approximately US$1) a month for her service. There was not an obvious need for her ICT market information business, but apparently her training in the community learning centre inspired the innovation. It is a scenario and outcome that could be duplicated around Asia and elsewhere with the involvement, skills, guidance and inspiration of university students.
Universities as CLC partners. A recent project in northeast Thailand illustrates the potential of involving university students with communication skills in the real life laboratory of community development. It took place in the framework of the academic strategy called "engaged learning" (also referred to as service-learning). Engaged learning emphasizes students taking their credit-based university learning into the practical world outside the university to help local people meet some of their development needs. The students then reflect (learn) from the intersection of community and university. Here is an example: a new museum in the Ku Santarat area of northeast Thailand took advantage of regular visits of Mahasarakham University’s Faculty of Informatics staff to express a need for help in making the museum’s collection available “virtually” to visitors, and for creating within the museum a community learning centre. In addition the community wanted the museum to attract tourists’ attention and have them visit some of the culturally significant tourist attractions in the area. Discussions with the community led to the idea of having a data base and museum website as a part of the museum’s development and its future resources.

Students and faculty at Mahasarakham University (MSU) were mentally prepared to engage in such a project because the university has a set of policies for all faculties and units that requires that they engage communities through a programme called One Program, One Community. Confronted with the museum engagement activity, the students believed that they would learn more and do more by becoming centrally involved in a project outside the classroom but that drew on the classroom experience.

Engagement in the Thai museum project involved a variety of community partners including museum officers, local community officials and villagers, and local teachers and schools. Approximately 100 students and 10 faculty members from the Faculty of Informatics participated in teams to collect, organize, and manage data related to the history, antiquities, and other features of the surrounding cultural sites. The overall process included collecting ideas and data from the partners, deciding what needed to be included in the on-going communication (the website) with visitors to the museum, and how to present it. The pilot project concentrated on developing the data base and the webpage for the project and teaching local people how to manage them.

Although there are no statistical data showing the results of the engagement, there are generalizations about engaged learning in a university's academic programme that invite your attention. One is that engaged learning demands more active participation by all parties than is often evident in traditional courses where students are fed knowledge by an instructor. In engaged learning, students are active and they gain a sense of civic responsibility in their engagement with communities.

The Thai project also demonstrated that university students can assist people in the community in a variety of ways to help people make constructive use of ICTs and digital connectivity. These range from showing them how to access development-related web pages to using various lifelong learning resources, sending emails, and collecting and storing local history.
Another generalization is that the process can excite faculty, students and members of the community through the building of partnerships and teams. In Thailand, for example, this was the first engaged learning experience for third year computer science students at MSU, and subsequently they planned another community project named “C4C-Computer for Community” that would focus on teaching computer technology to villagers.

There is further evidence that university young people can be effective agents of ICT in development. In 2013, approximately 100 Hong Kong Polytechnic University students participated in four ICT-related overseas service-learning trips to Cambodia, Rwanda, Indonesia and Vietnam. Themed "Technology without boundary", PolyU students taught local primary school children and orphans in Cambodia and Rwanda how to use software for digital storytelling, animation programming and making robotic cars. The PolyU students also set up computer labs and an intranet system in a non-governmental organization (NGO), and provided training for its staff to make use of social media for publicity purposes. Some students developed solar panels to provide electric power to facilitate children's learning at nighttime. In addition, a team of students conducted a survey in slum villages of Cambodia, and the data collected were expected to be used by an NGO for identifying the needs of the villagers.

Additional evidence of engaging university students in community development is the successful running of the Each One Enable One programme of the Department of Development Communication and Extension at Lady Irwin College (University of Delhi, India) during the last 25 years. Each year more than 200 undergraduate students and faculty work on a one-to-one basis with a person from a less privileged background imparting functional literacy skills and life skills. Post graduate students of the same department have been closely associated with local NGOs working in the area of mental health, substance abuse recovery, health and nutrition, sanitation, life skills, and gender empowerment. Students have been providing need-based communication media and strategies to conduct awareness campaigns, mobilise communities and other stakeholders, provide training and capacity building of frontline staff, along with monitoring and evaluation support. This is a mutually beneficial process for the university, students, and NGOs. However, the process is very time and energy intensive for the faculty and requires deft management to achieve the objectives within the framework of a curriculum and a university calendar.

Steps in Asia to involve universities with communication for development (C4D). There have been major advances during the past five years in Asia and the Pacific region in getting universities to offer courses related to C4D. Their emphasis has been on using ICTs for development. The UN's Asia and Pacific Training Centre for Information and Communication Technology for Development (APCICT/ESCAP) provided a major start. Initially it set up various training resources to help a nation's leaders apply ICTs to development. It created various online resources including distance learning and training modules that link ICT essentials to development. However, the organization perceived that to achieve the development goals of the coming decades, the future leaders and workforce of the Asia-Pacific region needed to have ICT knowledge and skills associated with a variety of development challenges. This led to APCICT's "Turning Today’s Youth into Tomorrow’s Leaders" programme
which seeks to create a cadre of future leaders equipped with the capacity to use ICTs for achieving development goals. Its approach has been to produce materials that universities can use to incorporate ICT in undergraduate and graduate programmes at universities in the Asia-Pacific region. Its Primer Series of publications aimed at university students has been rolled out in 14 countries in the Asia-Pacific region. (See: http://www.unapcict.org/pr.)

However the C4D approach is broader in scope than the emphasis on ICT for development. C4D includes a greater emphasis on social science aspects of a communication intervention including, for example, theory and principles, intervention and behavioral research, audience analysis, message design, and strategic planning. ICTD projects are inevitably part of a larger communication intervention, and the nature of that intervention influences and determines the characteristics and direction of ICTD projects. (We discuss this in greater detail in APCICT's Primer Number 2: Project Management and ICTD, Annex 2: A Communication Framework for ICTD Projects at

file:///C:/Users/Royal/AppData/Local/Temp/Primer%202_Project%20Management%20and%20ICTD-2.pdf.

An early form of C4D in Asia was the introduction of the Department of Development Communication and Extension at Lady Irwin College which was established in 1964 as Rural Community Extension under the aegis of the Ministry of Food and Agriculture, Government of India. The curriculum offered by the Department trains women students to understand contemporary development issues and perspectives of the family and community. Teaching, research and extension are an integral part of the pedagogy. The course orients students to various dimensions of development and sustainable social change. It provides strong theoretical foundations and experiential learning to meet the existing market demands for trained professionals in participatory development processes, communication research and programme management. The course curriculum has a strong multidisciplinary foundation in applied and social sciences. The course offers degree programmes at undergraduate (Bachelors of Science), post graduate (Masters of Science) and a PhD in Development Communication and Extension (see: www.ladyirwin.edu.in). Using a participatory approach, the course trains students to develop expertise in theory, extension, research and advocacy for sustainable social change with gender sensitivity. Other important areas of study are behaviour change communication, training and capacity building, media management, audience segmentation, new media technologies, and monitoring and evaluation of national programmes. Students are oriented to take up independent empirical research and write research projects. Enhancing the capacities of the students in participatory methods and innovative research techniques is at the core of the curriculum. Internships and field experiences are an essential part of the teaching-learning process and help students to acquire appropriate skill sets. The course prepares students to take up positions in development organisations, media houses, corporate social responsibility initiatives, market research agencies, and teaching and administrative positions in educational institutions. Students are encouraged to work as independent consultants and social entrepreneurs in the development sector.
Since 1999-2000, the Department of Development Communication and Extension has been organizing an annual lecture and symposium on contemporary development and communication issues. Eminent speakers of national and international repute have been invited for the lectures which are attended by students, faculty, development practitioners, activists, and government representatives. The lecture series also receives participation from other universities.

In the context of the Indian job market this is a good time to give impetus to the C4D courses as the new Companies Act 2013 has created a situation conducive to promoting development of grassroots communities through mandatory Corporate Social Responsibility initiatives. The Act has created several opportunities for young C4D professionals to move out of the usually less lucrative jobs in the NGO sector to better paying corporate C4D jobs.

Realising the need for strengthening the C4D component in India in 2010-11 UNICEF/India launched a mapping exercise to identify institutions offering courses in C4D or institutions having the capacity to offer or explore interest in launching courses in C4D. This exercise identified 10 institutions situated across the length and breadth of India. UNICEF brought them all together to share experiences and agree to hold hands with each other to further their capacity to offer C4D in their curricula. One of the authors of this paper was part of this process as a contributor. In 2013 this exercise culminated in the publishing of UNICEF’s Communication for Social and Behaviour Change (CSBC) learning modules for academic and training institutions in India. These are nine modules that provide a framework to educate students and adult learners to work as professionals in the domain of communication for social and behavior change. The modules can be used as a whole, or specific modules can be offered either as select units or individually or in combination based on the specific needs of a group. Institutions can use the modules to strengthen courses offered by them currently, offer short term certificate courses, one year diplomas, and two year degree programmes in C4D. It is envisaged that by suitable adaptations the modules may be useful in designing C4D courses globally. These modules are available on the UNICEF IEC eWarehouse, a repository of communication materials (www.unicefiec.org). In the following three years, some institutions did launch courses in C4D but the courses have not been very popular with students as important issues like availability of jobs, pay packages, accreditation, recognition, training and capacity building of academic institutions (faculty, infrastructure and training materials) leave much to be desired.

More recently, in 2017 UNICEF/India set up Tarang, a Social and Behaviour Change Communication Capacity Building Hub, with an online e-training centre offering paid training programmes in partnership with a nongovernment organisation based in New Delhi. The outcome and popularity of these SBCC online training programmes will be studied with interest by all stakeholders, especially the C4D academic fraternity. The issues that need to be addressed remain as with the SBCC initiative — along with issues of internet connectivity and access to suitable technology interface, official recognition of the course, certification and accreditation. These are extremely vital issues that need to be addressed. In 2017 UNICEF/India also initiated Dhara, a SBCC seminar series which focuses on various themes and shares data, evidence and experiences from projects supported by UNICEF in India.
Moving forward with C4D in universities. ICTD in university curricula has moved ahead more rapidly than courses in C4D. To some extent, courses in health communication, agricultural extension, and other academic disciplines may have drained opportunities for C4D instruction in universities. A recent online discussion explored the state of C4D in universities. The discussions took place during March to May in 2017 on the internet's Communication Initiative Network platform. (See https://www.comminit.com/content/lack-c4d-modules-university-courses). The discussants included practitioners and academics who work in the area of communication, media development, and social and behavior change. We observed that 28 members from 16 countries (representing all continents) actively participated in the discussion with more than 60 contributions. A majority of the discussants (70%) were from the developed countries. Almost half of the discussants (46%) were academicians and the remaining were independent consultants (32%) or working with nongovernment organisations (18%). One discussant was associated with the government.

The discussion was initiated when a member from Zimbabwe posted her views regarding the lack of C4D modules in university courses. Nearly all the discussants expressed a need to reach out to academia as they are responsible for developing the human resources for implementing C4D. It was pointed out that not many universities offer degree courses in C4D. However, several universities offer graduate courses in journalism, public relations and marketing, and many of their graduates are employed as C4D experts by UN and national and international nongovernment organisations. It was suggested that these graduates are often found to lack theoretical knowledge and application of C4D strategies. Discussants also perceived a gap between the academics and the field reality. This gap resulted in communication experts focusing on public relations, advertising, and marketing of development projects, programmes and services to influence donors and decision makers instead of working towards changing behaviours and promoting development agendas. Such communication experts were also found to focus on promoting information and knowledge in grassroots communities rather than changing behaviours and practices. All the discussants agreed that well-trained and qualified C4D professionals were urgently needed to mainstream C4D in the development agenda from the stage of proposal making and budgeting of projects, instead of being an afterthought once programmes have been rolled out. At the same time a few discussants wanted that the advocates of C4D should make the field very competitive and prepared to meet the challenges offered by other disciplines by better funding and marketing of C4D.

Discussants also suggested that interactions with academics should focus on developing C4D training modules, organising conferences, forging research partnerships, mentorships and field exposures to familiarise themselves with ground realities. The idea of developing and introducing C4D training modules was welcomed by most of the discussants from the developing countries. Discussants from the developed countries shared that their universities were offering courses in C4D and allied domains, which could be adapted suitably to offer in the online mode as Massive Open Online Courses (MOOC). However, C4D practitioners amongst the discussants did not agree to the MOOC format because in their view C4D training needed face-to-face interaction and hands-on experience. Discussants from Africa, Asia and South-East Asia were also concerned about the availability of internet
connectivity, the prevalence of employers’ unfavourable attitudes towards online courses, issues of accreditation and certification, recognition of C4D as a professional course, as well as financial viability of MOOC courses for the students and universities. Another apprehension voiced was that C4D courses often end up as health communication courses or some other discipline. This is not in the larger interest of the C4D domain. The group concluded that academically-based C4D training needs strengthening globally. Lack of substantial awareness about existing C4D courses amongst the discussants suggested that a database of C4D courses and universities should be prepared by region and shared widely.

The idea of a C4D course adopted by a university and offered within a residency block found favour with nearly all the discussants from the developing countries. Education in these countries is an expensive investment that needs to be made on firm credentials of the institution offering a C4D course. This implies that the degree should be recognized by national education boards and international bodies for employment. Further, the institution conducting the course should be able to justify to the students and their parents that investing their time, energy, and money in a C4D course is a safe decision and a smart move toward a well-established professional career. This is especially relevant in the context of developing countries where there is severe resource constraint and competing needs and priorities in families. A few discussants pointed out the need to motivate UN organisations like UNICEF to take the lead and introduce C4D training courses. It was evident that discussants were not aware of the C4D/CSBC training modules launched by UNICEF/India in 2013 or the more recent paid online course in SBCC. Experience indicates that any course is likely to face challenges if it is not backed by a university, nor recognized by the government, is not endorsed by an accreditation body, and is offered in an online mode where a majority of the population is not used to studying online courses.

From the discussions on the CI network, it emerged that C4D needed not only courses and training, but also research and advocacy to earn its rightful place as a profession with a clear job market and professional trajectory. This would improve the uptake of C4D courses by students and make these courses competitive in comparison to courses in mass communication, journalism, advertising, public relations, development studies, sociology and anthropology. The academics amongst the discussants offered to form a group focused on advancing C4D in academic institutions by analyzing relevant issues and taking collective action to resolve those issues and challenges. By the end of May 2017 a group of 54 C4D academicians and practitioners volunteered to carry forward the discussion. As a result, a new group entitled Advancing C4D in Academic Institutions was formed on the Communication Initiative Network.

**Conclusion.**

As most of the nations of the world subscribe to the Sustainable Development Goals and their 2030 targets, it becomes increasingly important that the potential of using communication knowledge, skills, ethics, and technology intelligently and strategically be made more prominent in the academic world. We need to push further to link university studies in communication to the real life laboratories of such local institutions as community learning centres. We have seen the negative consequences
of unbridled use of the new digital technologies — from school children’s bullying to international terrorism. We can support a more constructive scenario. In partnership with those like you in education, psychology and the social sciences at this international conference, universities can support the inclusion of communication for development in their curricula to reach positive social outcomes such as SDGs 1-No Poverty, 2-Zero Hunger, 3-Good Health and Well-being, 4-Quality Education for All, and 5-Gender Equality. Whether C4D appears in curricula as part of a traditional course in the social sciences, in computer science or agriculture, or as a stand-alone course, C4D needs to be part of many universities' support of these and others in the SDGs.
Abstract

This study focuses on using dance education as an approach to promote vocabulary development among English as a foreign language (EFL) learners in Laos. The participants were 25 Laotian students aged between 11 to 12 years old, one choreographer (English teacher) and three English teachers. Modeling was provided by the teacher in conducting the dance class and students were subsequently asked to conduct their own dance sessions. Observations and discussions were employed to collect data while a semi-structured interview was also conducted to obtain feedback (Jackson, 2011 & Creswell, 2014). Bachman and Palmer’s (1996) theory of language competence-vocabulary was used as analysis framework. Findings indicate that the EFL learners were able to comprehend and use the ‘dancing vocabulary’ without any reference to the dictionary in their subsequent dance activities after they had been exposed to the teacher’s modeling sessions. Their confidence is also seen in their ability to conduct a fresh dancing class for others using the same vocabulary. The outcome of this study supports Chacon’s (2005) view that learning vocabulary through dancing is fun and effective. Hence, it should be incorporated into language programs.

Keywords: Vocabulary development, L2, Dance education, Upper level

Introduction

This study focuses on a different approach of promoting vocabulary development among L2 learners in Vientiane, Laos. The primary objective is study to analyse how dancing and music promotes the vocabulary development in a fun environment.
Paper Title
Promoting Vocabulary Development Through Dance Education

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Introduction

Vocabulary is an important component in any language and using the right vocabulary in one’s interaction with others can make a difference to the communication, especially when using a language that is unfamiliar or different from one’s native tongue or first language (L1). This is because EFL learners need to have a list of vocabulary in their linguistic repertoire which can be used to enhance their communication with other. An effective communication requires clear, concise, precise and coherence. Interactors involved must be able to use the right vocabulary to convey what they mean with clarity and accuracy henceforth, avoiding misunderstandings and miscommunications.

To be able to use the correct vocabulary, learners must therefore, learn about them, acquire them through the right amount of exposure and then be able to remember them and apply them appropriately, as the theory of learning suggests. Language learning programs emphasise a lot on the four skills of reading, writing, listening and speaking and many language teachers also tend to pay more attention on grammar because this is important for writing. In that regard, focus on vocabulary development has been neglected hence, the reason why learners struggle with vocabulary development. This deficiency may be detrimental to their social life, their career advancement as well as their personal development because precise vocabulary is crucial for proper understanding and expression (Harmon, Wood & Keser, 2009; Linse, 2005).
Recent research (Berne & Blachowicz, 2008) indicate that teachers teaching vocabulary face various challenges. In particular, language teachers are uncertain about the different techniques of teaching vocabulary as school syllabus often advocate a set practice. Teachers, particularly those less experienced or have huge amount of administrative duties, may not be adventurous enough to try new techniques. Occasionally, teachers may find that exploring new techniques may not be beneficial to the learners and so it is seen as a waste of time. Teachers who are overburdened with extremely challenging students may have become discouraged thus, they become lost in the world of instructional emphasis for language learning (Berne & Blachowicz, 2008). Undeniably, the success of teaching and learning a foreign language is, very much, dependent on vocabulary learning (Gass & Selinker, 2008). In their emphasis, Oxford and Crookall (1990) note that vocabulary has been given less emphasis by language programmes as compared to reading, writing, grammar, speaking and listening. This has also been reiterated by Arnaud and Bejoint (1992) hence, this study aims to explore if the technique of using dance education can be effectively applied in teaching vocabulary to learners of English as a foreign language.

Literature Review

The goal of many learners studying English as a second/foreign language (L2, FL) adopt the attitude that it is useful because it is an international language, therefore useful for communication whether intercultural or cross cultural. Learning a language, in particular, the English language, requires learners to master the four skills of reading, writing, speaking and listening because they are assessed in these four skills at the end of the language program. However, without vocabulary, learners would be at a disadvantage. They need to acquire more vocabulary to assist them in these four skills. To master vocabulary, learners need to be exposed to a number of activities: they must know that these words exist, they must know what these words mean; they must know how to pronounce these words and learn how to spell these words before they are ready to use these words in the right context, in other words, appropriately. This competence needs to be honed and encouraged over time. In particular, the English language is one that is peculiar because its language system is such that the pronunciation of its words and the spelling system of its words are not systematic or regular. Words in English are not pronounced the way the look in orthography; some words carry the same sound but have different meanings for example, ‘pen’ and ‘pan’ while other words look the same in every way but they are pronounced differently, for example, ‘lead’ and ‘lead’. These issues can be problematic to EFL learners.

Wilkins (1972) states that communication without grammar can still convey some aspect of meaning because one can still try to understand the key words. However, without vocabulary, nothing can be conveyed. Schmitt (2010) points out that this is clearly a fearful aspect of learning. His observations note that this may explain why some learners carry dictionaries with them rather than grammar books. A strong vocabulary allows one to have an edge over others because he/she has an expansive understanding of meanings and the list of words he/she has at his/her disposal can
create an impressive image on others. Often, the one with more vocabulary can shift and adjust how a sentence is constructed but those without sufficient vocabulary are limited in what they want to say and how they say it. This shows how vocabulary has a direct and positive impact on language building (Wilkins, 1972).

Paul (1994) states that there is no end in vocabulary learning because there are so many words to learn. Being rich in vocabulary can lead to better listening, reading, speaking and writing competence (Paul, 1994) however, the mastery of vocabulary can only be achieved through a conscious and focused effort although the indirect manner of listening and reading may also enhance vocabulary learning. Students who aspire to learn new words must do so continuously. Folse (2004) and Nation (2001) explain that the correlation between language and vocabulary is complementary; good vocabulary leads to high language proficiency and, conversely, high language proficiency leads to an increase in vocabulary usage. Harmer (2001) points out that there are two primary reasons which cause students to forget their learning, thus, vocabulary. One is the interference from the subsequent learning and the other is the lack of re-visiting the former aspect of learning. It was suggested that forgetting due to the interference of subsequent learning is caused by teacher overload. The teacher tends to feed knowledge as much possible or as much as the time allows. This can cause students to become confused or forget because they do not have sufficient time to digest their learning. In the second, a lack of revisiting can cause students to forget easily because the brain needs time to comprehend the learning (Critien & Ollis, 2006) Frequent emphasis on the learning can enhance the brain capacity to hold information for longer periods, thus remembering.

Despite the many helpful materials teachers and learners are provided with for vocabulary learning, it has been proclaimed that vocabulary acquisition still remains the neglected aspect in language mastery (Meara, 1980).

Nunan (1991) asserts that having good vocabulary is crucial for the success of the language learner because vocabulary is important for spoken and written competence. Wallace (1982) highlights that the disadvantage of not mastering vocabulary is the inability to express oneself and this can be a frustrating experience. Sullivan (1997) also points out that students are deprived of vocabulary acquisition because of their narrowed syllabus. It is believed that using other more entertaining forms of teaching can enhance vocabulary acquisition. Studies have used songs, plays, movies, and games to enhance vocabulary learning but thus far, few have discussed how using dance education as a way of teaching vocabulary is possible. In a rare study, Sullivan (1997) noted that dance can benefit learners in many ways such as: help them to have better memory retention, promote learner creativity, and fortifies their problem solving skills. This study thus aims to expand on Sullivan’s (1997) work by attempting to explore how dance education can be used in the classroom to promote vocabulary development.

Dance Education

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Dance is a form of recreation. Dance provides relaxation to some and creativity to others. Dance may also encourage confidence because it serves as a platform for the learner to know the steps, practise the steps and then use those steps to express themselves. Knowing how to express oneself is very important for communication. In the context of dance, steps and words are used simultaneously to indicate how these dance steps are initiated and proceeded throughout the dance.

Many parties have raised their concerns about how dance education can accommodate students’ learning within the school curriculum and syllabus. Some also wonder what advantages can be reaped from dance education. As one aspect of education, dance lessons have been given less focus, probably due to a lack of resources as well as research on its importance. Moreover, many teachers also overlook the idea of incorporating dance into their classrooms because most teachers cannot dance and most teachers who can may not want to incorporate this activity because they do not want to be labelled as unconventional as labelling from outsiders can bring about negative repercussions in the school environment (Sanaoui, 1992 & Oxford, 1990).

Structured and Unstructured approaches

Sanaoui (1992) noted that some approaches used by L2 learners for vocabulary learning tend to be very focused and students have mentioned that this can be difficult for them to follow. It was also observed that between “structured" and "unstructured" approaches, students given the former are exposed to organized and systematic methods in their learning. Thus, reviewing vocabulary that is acquired from inside and outside the lesson, can be complicated. In the latter approach, learners are given opportunities to learn and practice their L2/EFL vocabulary while spending quality time in their vocabulary reviewing. The outcome of the study (see Sanaoui, 1992) suggests that a structured approach in vocabulary learning has some important implications to lexical item learning (Sanaoui, 1992). One of these is that structured language classes are important element for vocabulary building. This notion is supported by Oxford and Scarcella (1994) who state that “learners in most occasions are required to pick up vocabulary without much guidance, on their own accord". Thus, it would be up to the instructors to introduce the various language learning strategies in assisting their learners to understand their individual approaches towards vocabulary learning (Oxford, 1990).

Concept of Engagement

A pioneer of humanistic psychology, Abraham Maslow (1964) established a concept called the peak experience. This concept requires people to ponder on their most extraordinary moments in their lives. In this context, students are asked what can really cause something to become more engaging. Through their attainment of the
sense of engagement, students learn how dance education can provide a positive impact on learning. This idea of engagement is important in the context of dance. This is because to be engaged means to give something one’s complete attention. Stinson (1997) queried what factors can enhance engagement and non-engagement. This was expanded by Bond (2001, 2007) who tried to understand how teenagers experience language in dance engagement.

Studies indicate that there are many approaches to discover the degree and nature of learning which involves teacher-evaluated learning or through action research but in introducing dance education, evaluation focusses on how the dance is conducted through the steps which are expressed through vocabulary (Stinson, 1997; Bond & Stinson, 2001; Bond & Stinson, 2007; Critien & Ollis, 2006). Unlike other techniques, dance education can create exciting and provocative discoveries, depending on teacher creativity.

Creative teachers use dance as a tool to promote learning and its retention (Gardner, 1989). Here, teachers find various ideas to design learning activities which can help to raise students’ learning capacity. With the use of creative dance, students, particularly, children, can utilize their body as a tool for exploration and expression. In this way, the body acts as a learning tool through kinesthetic intelligence. Dance also allows students to learn other subjects such as reading, science, social studies or mathematics. Since dance is about space and movement, Gardner’s (1989) ensorimotor exploration is a very fundamental requirement in learning. Children and youths, generally like to move in a spatial direction such as side to side, up and down and front and back (Gilbert, 2008). Development in these areas enhances their cognitive skills and help them to form concrete thoughts. Thus, when dance movements are focused and concise, the activity helps the learners in various ways through social interactions and friendship building. This can elevate self-awareness and confidence (Gilbert, 2008) which can also contribute to learning.

Studies have shown that pre-schoolers enrolled in a dance program benefit in terms of the shared opportunity to explore as noted in the collaborated design unit called the Octopus Project (Bond 1997). Sharing their experience, Fouconnier, Gilles and Turner, Mark (2002) and Finkelstein (2005) explain why basic dancing skills need to be introduced to children at an early age. They mention that dances should be repeated as often as possible in class. They believe that dances promote motor skills such as jumps, foot articulation hops, bends and stretches. All of these will eventually reinforce the neuro-pathways of the body while also strengthening the children’s cognitive processing skills.

**Vocabulary retention**

Focusing on vocabulary, Hashemzadeh (2012) examined whether L2 learners’ vocabulary retention varied significantly through an immediate and delayed vocabulary test. He found that vocabulary retention varied considerably, depending on
the type of exercises given. It appears that “fill in the blanks” was the most effective exercise for vocabulary retention.

In another related study, Manley and Wilson (1980) observed the effects of dance composition on students’ learning. They found that dance students showed more creativity in their daily learning than their non-dance peers. This was measured with the total time spent on the work of compositions and their value. They used Welsh Figure Preference Test to measure creative potentials. They also found that three behaviours contributed to the composition processes with dance students taking more time on improvisations. Their essays were shorter than non-dance students mainly because they were able to efficiently and effectively articulate their conceptual ideas.

Focusing on learning enhancement, Chappell (2007) found that through dance, teachers are better at balancing freedom and constraints on students. Freedom was given to students who showed motivation, experience and passion in their dance endeavours while constraint was administered on those who were less experienced. It was also found that students progressed gradually and gained confidence through the dance education. Based on Chappell’s (2007) work, Chen and Cone (2003) came to the conclusion that teachers should use their learning experience to allow students to develop their own dance sequences thereby, developing their creativity and organisational and coordinating skills into meaningful sequences.

Dance education provides flexibility, promotes awareness, creativity, critical thinking and it also encourages student autonomy (Giguere, 2005). It is the combination of social, emotional, physical, cultural and historical experiences. If a student is able to explore all these elements from dance, the student can eventually become enlightened with multidisciplinary engagements (Giguere, 2005).

Methodology

This study focuses on dance education. The primary objective is to show that dance can promote vocabulary development and the environment can also be used to create awareness of vocabulary usage and language learning. This study is qualitative in nature (Creswell, 2014). It is an experiment based on case study. Creswell (1994) says that an experiment is a highly controlled method but this case study is not rigorous in that sense. Data were extracted based on observations (Jackson, 2011) of the dance practices conducted in the research site. Discussions were also held with participants as a means of exposing them to the vocabulary. This is then followed by a semi-structured interview (Creswell, 2014). For this purpose, a dance project was initiated. Participants comprise 25 students-experimental between 11-12 years old (Jackson, 2011). They were pretested with the reading comprehension and vocabulary of two stories. Bachman and Palmer’s (1996) theory of language competence-vocabulary was applied as the analytical framework. The research site is one of the private schools located in Vientiane, Laos. Consent to conduct the study was obtained.
from the school, teachers as well as students. A total of 25 students, one
choreographer (English teacher) and three English teachers participated. Figure 1
shows the procedure in 10 steps for the present study, which are in seven steps.

Figure 1: The Procedures in 10 steps

Prior to starting the related dance steps, some skills were shared with the
students for their dance creation such as general and personal space, freezing and
moving, opening and closing, levels and lastly, fast and slow tempo. Throughout the
lessons, the students were monitored in their vocabulary mastery. Upon demo by
choreographer, the students were able to listen carefully and able to pronounce clearly.
During the last lessons, all students were requested to perform dances by dividing
them into groups of 4. They were also given a set exercise “fill in the blanks” while
listening to the audio (see Appendix A) to evaluate to what extent the student could
capture those vocabulary and fill in the answers correctly.
Findings and Discussion

The findings showed that experimental group were able to learn vocabulary. They also managed to retain the vocabulary with better sustainability. This finding was proven from the results obtained by the experimental group student. From the exercise disclosed that the students have improved their proficiency in vocabulary learning and they had also developed their problem-solving skills through the utilization of creative dance.

With that, it was evident that each lesson enhances the students’ vocabulary development. Through the lessons, it was also observed that students displayed problem-solving abilities. It was also noted that students had improved their language proficiency through the way they responded to others during their own dance process. It was also noted that the students did not do well in their exercise. This will can be resolved through further practices where students can learn to gradually acquire the words used by following the videos.

The current findings, it was noted that more risk-taking elements were involved in the movement as the lessons advanced. Beetlestone (1998) classified risk taking as part of a creative series. In the current study, it was observed that many students had displayed the trait of ownership over the repeated creative movements. Taking ownership is one of the elements in a creative process which develops the sense of motivation within the learner (Beetlestone, 1998). In addition, it was also observed that experimental group students placed a vast amount of energy and focus into their learning. This situation was compared to Torrance (1995) who observed that welfare and pleasure were induced in their participants thus, their creativity became apparent. Although the students were exposed to common structures and skill acquisition, they incorporated creativity into areas of their own preference.

As a consequence of this project, it was found that at the end of this exercise promoting vocabulary through dance, two students were able to lead the dance in a group lesson by merely using the video. Without memorising the steps, they could dance and utter the vocabulary taught at the same time without any problem. At the end of the project, all the students were asked to do an exercise for the purpose of evaluation. The overall exercise was between 20 to 30 minutes. The outcome of the vocabulary evaluation was done by using a set of exercise which was the “fill in the blanks”. The vocabulary already taught to the students were used and students were expected to know how to fill them in. Results indicate that 25 students had scored 15/21. 8 students performed slightly poor in answering the correct answers thus it contributed to the minor spelling errors made. It could be due to their poor listening skills.

A dialogue session between the teacher and the students was also initiated so as to note their comments and satisfaction with the overall structure of the dance program. Some points highlighted pertain what they think can be used to enhance
their vocabulary: newspapers, magazines, radio listening, and the viewing of specific English programs. It was also mentioned that students need to create a habit of journaling where they can keep written records of what they had learnt; they were also advised to continue incorporating the dance vocabulary lesson in their future classes; they were also advised to discover other strategies which may be beneficial for their own. The students also admitted that the exercise was a challenge but it motivated and encouraged them in the vocabulary learning.

Based on the overall findings, it is deduced that a conducive environment and a structured curriculum that is supported by knowledgeable teachers can enable students to enhance their vocabulary development. Moreover, it can also be said that the dance education approach can also enable students to develop problem-solving skills besides promoting their creativity which can be achieved during their formation of the body sculpture, through individual movement patterns, and the innovative pathway with dance compositions. When the findings are compared with previous studies (see Gardner, 1989), it can be said that creative dance fuels multiple intelligence specifically kinaesthetic intelligence.

**Conclusion and Recommendation**

The aim of this study was to highlight the use of dance education to promote vocabulary development amongst students in Vientiane, Laos learning English as a foreign language. This study also incorporated observations and discussions to validate findings. It was observed that the students participating in this study were able to enhance their vocabulary development through the dance education that was initiated, structured and applied for use from the beginning until the end of this study. It was found that students’ vocabulary development was enhanced.

This study indicates that incorporating dance and vocabulary development can be an effective teaching method. Through dance, the retention level of the learned words was preserved and this enabled the students to be able to use the relevant vocabulary when they conducted their own dance processes. This was also assessed through their fill in the blanks exercises which also verified that their vocabulary was enhanced as a result of the dance sessions. It seems that the vocabulary learnt were stored in their long-term memory hence the recall was much easier. It is hoped that the result of this study can be used as the guide for the implementation of future language programs.

With this outcome, it is thus stressed that dance education can be an effective way to promote vocabulary development. Schmitt and McCarthy (1997) had also recommended a few other strategies such as (1) using flash cards, (2) guessing from the context and (3) using word parts and mnemonic technique to memorise words which was supported by Murcia (2001) who proposed that the use of vocabulary notebook can also act as a memory aid for independent learning. Stahl (2005) and
Craik and Tulving (1975) also suggest that students refresh the learned words more than once so that the words can be transferred from their working memory to their long-term memory. Dance education is just one approach and it seems to work well in this study because dance is melodic and rhythmic and the songs or music used to accompany dance is also melodic, hence, making learning and retaining of vocabulary easier because words are remembered in chunks. Dance is also a creative movement using space or kinaesthetic movements which enable the learners to learn to express themselves.

Future studies may want to consider other techniques and strategies of learning and enhancing vocabulary development through reading of newspapers, literary works, novels or magazines. Games such as word jumble, crossword puzzles, boggle or scrabbles may also be applicable while the idea of being engaged in a conversation should not be overlooked as this technique also helps learners to acquire from other’s input in terms of nuances, expressions and idioms.

The limitation of this study lies in a number of areas thus improvements can be applied. It is suggested that teachers take the responsibility of delivering their knowledge to students seriously. The methods and the techniques they choose to deploy their task can impact heavily on the student’s performance. Students learn better under less stressful learning environment hence teachers need to be proactive in finding ways to alleviate student anxiety. The school also plays an important role in reshaping the students learning thus such institutions must constantly motivate their teachers to work professionally and raise their awareness that they play a huge role in their students’ learning. Such institutions should also ensure that the adequate facilities are provided to accommodate the teaching and learning process.

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Comparative study of elementary education in prominent countries.

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Abstract

In the present scientific age, various countries of the world are interdependent on each other. The educational system of one country influence the education of the other countries. The entire world has become interwoven. The development of comparative education is marked by the following reasons. Firstly, it began with the traveler’s tales based on simple curiosity to know other people and what they did. Secondly, it was prompted by the desire to learn useful lesson from foreign practices and borrow ideas for use at home. Thirdly, it saw international co-operation for the cause of world harmony and mutual improvement among nations. Fourthly, it was a search for the forces and factors shaped national education system. Fifthly, it may defined as the stage of social science explanation that is the relationship between education and society.

Keywords: Comparative study, Elementary education, Prominent countries.
Constitutional Provisions

In most countries of the world, there is widespread acceptance of the principles that education is a fundamental right. Education as a basic human need, therefore, opens unlimited possibilities calling for responses that are constructive, creative and challenging. Article 26 of the Universal Declaration of Human Rights proclaimed by the General Assembly of the United Nations in 1948, states in its opening paragraph’s ‘everyone has the right to education, Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be free and compulsory’.

In India Article 21A : mentioned “Right to Education” – “The state shall provide free and compulsory education to all children of the age of 6-14 in such manner as the state may be law determine”.

In USA, education is universal and free education for all citizens. Article X confers upon the states powers to those areas which are not specifically denied to the states. Powers over education and legal responsibilities for maintenance of educational system from elementary to university, therefore, rest in each fifty states.

In UK, the Constitutional Provisions on education rest on education Act 1944. It denounced elementary education into Primary Education. Section 6 of Education Act 1944 authorized local education authorities to provide free and suitable full-time education to children of the age upto 12 years of age i.e. Primary education.

In USSR, the Constitutional Provisions on education in USSR rest upon newly constituted State Law of Education, 1992. It provide on Principles of State Policy in Education, in which Freedom in Education, Humanistic nature in education and general availability of education for children was included. The principles provided free and compulsory education to children of elementary stages.

Educational Structure

In India, the structure of Elementary Education is divided into two stages, i.e., Primary (5-10 yrs.), Middle School (10-14 yrs.)

In UK, the structure of elementary education covered three layers, i.e., Nursery School (0-5). Kindergarten School (5-8), which is the stage to prepare for elementary education. The elementary education comprises of 8-14 yrs. of age.

In USA, the elementary education patterns are Nursery or Pre-Primary School (0-5), Kindergarten School (5-8), which is the stage to prepare for elementary education. The elementary education comprises of 8-14 yrs. of age.
In USSR, the elementary education is divided into two stages, i.e., Pre-school education (Nursery 0-3) and Kindergarten (3-7). After that Primary education begins from 7-10 yrs. which covered Grade I-IV.

Curriculum

In India, the curriculum right from Primary School started with 3 Rs and languages (Regional languages). At Middle School, national language Hindi, English Arithmetic, Science are included.

In UK, under the provisions of Educational Act 1986 (No. 2) the head teachers of the schools in England and Wales are responsible for framing curriculum for elementary education. The subject introduced at this stage are - Languages (English/Wales), Music, Arts, Physical education.

In USA, local school teachers and community leaders are responsible for curriculum development for elementary education. Every state have their own ladder and non-grade system. The 3 Rs is introduced only from Primary School.

In USSR, the curriculum at elementary stage are: language (Russian), Arithmetic, Pictorial Arts, Singing, Music, Physical culture and Labour training.

Methods of Teaching and Evaluation system

In India, oral teaching is the method adopted right from the beginning of elementary education. Demonstration and physical education are also introduced. For evaluation written examination is introduced from primary stage.

In UK, less stress on 3 Rs at this stage. They were rather taught manner on sitting, eating, singing and the life of co-operation. For evaluation observation is the main technique used in this stage.

In USA, there is no formal method of teaching at Nursery and Kindergarten School. It is only child care centre. At elementary school, simple reading and writing are implemented a part from daily activities like games, singing, dancing and teaching of good manners. For evaluation, observation is the only method applied.

In USSR, guidance and demonstration are the method of teaching adopted at this stage. For evaluation no formal examination is conducted rather observation of children’s activities like : Labour, Sports, Music, Arts, Dancing are practiced. Formal examination is conducted only at the conclusion of Grade IV.

Conclusion
In almost all developed and developing countries of the world, elementary education have been made in a right position to bring up economic and cultural development and bear a fruitful result to the nation. This table presents the comparative study of elementary education in four prominent countries of the world.

<table>
<thead>
<tr>
<th>Country</th>
<th>Constitutional Provisions</th>
<th>Structure</th>
<th>Curriculum</th>
<th>Methods of Teaching</th>
<th>Evaluation System</th>
</tr>
</thead>
</table>
| INDIA   | Free and Compulsory Education | Primary School, Middle School | - 3 Rs  
- Languages, Science | Classroom teaching | Written Examination |
| UK      | Free and Fulltime Education | Nursery & Primary, Middle | - Languages  
- Music, Arts, Physical Education | Guidance and Demonstration | Observation & Oral |
| USA     | Free Education | Pre-Primary, KG, Primary | - Plays, Singing  
- 3 Rs | Guidance and Demonstration | Observation & Oral |
| USSR    | Free and Compulsory Education | Pre-School, Primary | - Languages  
- Arts, Singing, Labour training | Guidance and Demonstration | Observation & Oral |

It was found that all the countries provided free education to children at elementary stages. No formal lessons are introduced at lower section (Nursery, KG and Pre-School) in UK, USA and USSR except India. Reading, writing and Arithmetic (3Rs) is introduced from Middle School or Primary School. Guidance and demonstration are the methods of teaching adopted in UK, USA and USSR while classroom teaching is practiced in India. In evaluation system, written examination is practiced in India, but observation and oral are used in UK, USA and USSR.

To conclude the study, it may be mentioned that for the development of the Nations, provision of the right system of education at the elementary stage is extremely important. For which, full freedom of life (children) at an early age is needed, because education must serve to provide an all round development of physical, mental and spiritual. The development of nations is depends upon how much we develop the children of the country.

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Study habits and Academic Achievements of Students and their Mothers’ Working Status

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Abstract

A learner’s habits of study differ depending on a number of factors among which may be the influence of the home, especially the mother. An individual’s academic achievement also depends on the study habits of the individual. Some people think that a good mother is one who gives up her employment to stay at home with her children. However, there is no scientific evidence that says children are harmed when their mothers work. In fact, the working women even while holding very responsible job continue to perform their duties and obligations at home thereby influencing their children's study habit and academic achievement. The present study belongs to the category of ‘Descriptive Research’ with features of inter-group comparison. The samples of the study consist of 948 high school students with 482 males and 466 females. Samples are selected using stratified cluster random sampling technique. The present study aims to find out the level of study habits and academic achievements of students studying in high schools of Mizoram, which is one of the North Eastern states in India. The present research also aims to find out if there are any significant difference in the study habits and academic achievements of students with reference to their mother's working status. It also aims to find if there are any significant differences in the study habits and academic achievements of students whose mothers are working, with reference to their gender and locale. It also aims to find if there are any significant correlation between study habits of students and their academic achievement. Findings of the present study shows that a large percentage of students have average study habits and academic achievements. The present study also shows that students with working mothers have better academic achievement than students whose mothers are not working. Among students whose mothers are working, it was found that urban students have better academic achievement than rural students. Among students whose mothers are not working, it was found that urban students have better academic achievement as compared to the rural students. With respect to academic achievement and study habit, it was found that there was significant positive correlation at .01 level between these two variables. It is hoped that the present study will make a significant contribution in improving the academic achievements of students especially those residing in rural areas. Once the important role mothers play in the education of their children is understood, schools can organize parent-teacher
contact programme so as to further improve the study habits and academic achievements of the students.

**Keywords:** Study habit, Academic achievement, High school students, Working and non-working mothers, Mizoram

**Introduction**

Study habit means the study pattern formed by the students in order to understand academic subjects. Azikiwe (1998) describes study habit as 'the adopted way and manner a student plans his private readings, after classroom learning so as to attain mastery of the subject. One can develop good as well as bad study habit. Good study habits may include budgeting time, making good notes, reading textbook, listening in class, writing home assignments etc. The success of an individual depends on his study habits. (Lawrence 2014)

Academic achievement represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college and university. (Steinmayr et al 2015). Academic achievement has become an important indicator in determining a student's future. The world is becoming more competitive, and the quality of performance has become the key factors for personal success. A lot of pressure is placed on the students, the schools and the general education system because of a desire for a high level of achievement. In fact, it looks as if the whole system of education revolves around the academic achievement of students.

Academic achievement is the manifestation of a student's habit of study. The general belief is that students who exercise good study habits are likely to excel in their academic achievement than those with poor study habits. Sawar et al. (2009) found that high achievers had better study orientation, study attitude than the low achievers.

From time immemorial, mother's are looked upon as the provider, counselor, developer and an equal partaker of all the joys and sorrows of a family life. People have began to assess the trend in women's employment, specially its impact on their children's study habit and academic achievement. In this day and age, more and more women have been moving into the workforce not only for career satisfaction, but because their families need the income.

Mothers are mostly responsible for their children's education. According to Crage (2006) working mothers are more sensitive to their children. Mother's employment status is also found to be related with their child's educational achievement. Ruhm (2006) observed that the children of women who were employed during the child's first early years of life had significantly lower academic achievement than those children whose mothers stayed at home in the same period. Kovacs (1999) established that daughters of employed women have higher academic achievements than daughters of stay-at-home mothers although the opposite effects have been observed for boys.
Objective of the present study:

1. To find out the level of study habits and academic achievements among high school students of Mizoram.

2. To compare the study habits and academic achievements of high school students with reference to their mother's working status.

3. To compare the study habits of high school students with working mothers with reference to their gender, and locale

4. To compare the study habits of high school students with non-working mothers with reference to their gender and locale.

5. To compare the academic achievements of high school students with working mothers with reference to their gender and locale.

6. To compare the academic achievements of high school students with non-working mothers with reference to their gender and locale.

7. To find out the relation between study habits and academic achievements of high school students

Hypotheses:

1. There is no significant difference in the study habits and academic achievements of high school students with reference to their mother's working status.

2. There is no significant difference in the study habits of high school students with working mothers with reference to their gender and locale.

3. There is no significant difference in the study habits of high school students with non-working mothers with reference to their gender and locale.

4. There is no significant difference in the academic achievements of high school students with working mothers with reference to their gender and locale.

5. There is no significant difference in the academic achievements of high school students with non-working mothers with reference to their gender and locale.

6. There is no significant correlation between study habits and academic achievements of high school students
Population and sample:

The population of the present study consists of all students studying in the high schools of Mizoram, which is one of the North Eastern states in India. The sample consist of 948 students with 482 males and 466 females. Among these selected samples, there are 492 students whose mothers are working, and 456 students whose mothers are not working, 551 students hail from the urban areas, while 397 students hail from rural areas. Samples are selected using stratified cluster random sampling technique.

Tools used:

In order to collect data for the present study, the following tools were used:

For study habits, the investigator used "Palsane & Sharma study habits inventory" developed by M.N.Palsane & Anuradha Sharma

1. For academic achievements, the investigator used the results of High School Leaving Certificate (HSLC) examinations, Mizoram Board, which is a public examinations meant for class X students.

Analysis and interpretation:

I. Level of study habits and academic achievements among high school students: Students were classified into three groups as Good/High, Average and Poor/low in their study habits and academic achievements. This was done by finding out the P75 and P25 of their scores in study habits and academic achievements. Those scoring above P75 were categorized as Good/high, and those scoring below P25 were categorized as Poor/low and those scoring between P25 and P75 were categorized as Average. The following table -1 shows the classification of students in their study habits and Academic achievements.

Table 1: Level of study habits and academic achievements of high school students (N-948)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Good/High</th>
<th>Average</th>
<th>Poor/Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study habits</td>
<td>284 (29.96%)</td>
<td>455 (48.00%)</td>
<td>209 (22.04%)</td>
</tr>
<tr>
<td>Academic achievements</td>
<td>241 (25.42%)</td>
<td>471 (49.68%)</td>
<td>236 (24.90%)</td>
</tr>
</tbody>
</table>

As depicted in the above table 1, amongst all respondents, 29.96% had good study habits, 48.00% had average study habits, and 22.04%
students had bad study habits. At the same time 25.42% students had high academic achievements, 49.68% had average academic achievement and 24.90% students had low academic achievements. Therefore we can say that the greatest number of students have average study habits and academic achievements. It is not surprising that majority of respondents have average study habits and academic achievements because by and large, all human characteristics are normally distributed. Everything, not just intelligence, is a bell curve. If one knows about the statistical properties of a bell-curve one knows that most of us are average in most things.

II. Comparison on study habits and academic achievements of high school students with reference to their mother's working status: The study habits and academic achievements were of the students was compared with reference to their mother's working status. For this, the Mean and Standard Deviation of the scores were calculated. The mean differences were tested by applying 't' test and the details are presented in the following table.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mothers employment status</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study habits</td>
<td>Working mothers</td>
<td>492</td>
<td>48.83</td>
<td>8.167</td>
<td>1.472</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>Non-working mothers</td>
<td>456</td>
<td>48.08</td>
<td>7.475</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic achievements</td>
<td>Working mothers</td>
<td>492</td>
<td>258.25</td>
<td>62.951</td>
<td></td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Non-working mothers</td>
<td>456</td>
<td>247.38</td>
<td>60.329</td>
<td>2.714</td>
<td>**</td>
</tr>
</tbody>
</table>

NS- Not significant, **-Significant at .01 level

It is inferred from table -2 that there is no significant difference in the study habits between students with working and non-working mothers. Adityal & Ghosh (2014) also found no significant difference between students of working and non-working mothers in their study habits. The table also shows that there is significant difference in the academic achievements between students of working and non-working mothers. Students whose mothers are working have better academic achievements than students whose mothers are not working. Sridevi & Beena (2008), Goswami (2000) Budhdev (1999) also had similar findings. Since working mothers are mostly educated, perhaps they realize the importance of motivating their children to have good academic achievements, besides because working mothers are mostly educated, they have better prospect of helping their children in their studies. This could be one of the plausible reasons why students whose mothers are working have higher academic achievements than students whose mothers are not working.
III Comparison on study habits of high school students with working mothers with reference to their gender and locale: Study habits of students whose mothers were working were compared with reference to their gender and locale. Details of 't' test are presented in the following table.

Table -3: Comparison on study habits of high school students with working mothers with reference to their gender and locale

<table>
<thead>
<tr>
<th>Groups</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>241</td>
<td>48.50</td>
<td>8.510</td>
<td>.874</td>
<td>NS</td>
</tr>
<tr>
<td>Female</td>
<td>251</td>
<td>49.15</td>
<td>7.828</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>283</td>
<td>49.42</td>
<td>8.074</td>
<td>1.850</td>
<td>NS</td>
</tr>
<tr>
<td>Rural</td>
<td>209</td>
<td>48.04</td>
<td>8.244</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NS- Not significant

It is inferred from table -3 that there is no significant difference in the study habits between male and female students of working mothers. It is also inferred that there is no significant difference in the study habits between urban and rural students whose mothers are working.

IV Comparison on study habits of high school students with non-working mothers with reference to their gender and locale: Study habits of students whose mothers were not working were compared with reference to their gender and locale. Details of 't' test are presented in the following table.

Table -4: Comparison on study habits of high school students with non-working mothers with reference to their gender and locale

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>241</td>
<td>48.29</td>
<td>7.836</td>
<td>.630</td>
<td>NS</td>
</tr>
<tr>
<td>Female</td>
<td>215</td>
<td>47.85</td>
<td>7.060</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>286</td>
<td>47.89</td>
<td>7.384</td>
<td>.662</td>
<td>NS</td>
</tr>
<tr>
<td>Rural</td>
<td>188</td>
<td>48.36</td>
<td>7.614</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NS-Not significant

It is inferred from table -4 that there is no significant difference in the study habits between male and female students of non-working mothers. It is also inferred
from the above table that there is no significant difference in the study habits between urban and rural students whose mothers are not working.

V Comparison on Academic achievements of high school students with working mothers with reference to their gender and locale: Academic achievements of students whose mothers were working were compared with reference to their gender and locale. Details of 't' test are presented in the following table.

Table - 5: Comparison on academic achievements of high school students with working mothers with reference to their gender and locale

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>241</td>
<td>263.39</td>
<td>61.658</td>
<td>1.783</td>
<td>NS</td>
</tr>
<tr>
<td>Female</td>
<td>251</td>
<td>253.30</td>
<td>63.900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>283</td>
<td>279.36</td>
<td>62.797</td>
<td>9.694</td>
<td>**</td>
</tr>
<tr>
<td>Rural</td>
<td>209</td>
<td>229.66</td>
<td>50.800</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NS- Not significant, **-Significant at .01 level

It is inferred from table - 5 that there is no significant difference in the academic achievements between male and female students with working mothers. It is also inferred that there is a significant difference at .01 level in the academic achievements between urban and rural students whose mothers are working. The mean of the urban students are higher than that of the rural students indicating that urban students with working mothers have higher academic achievements than rural students with working mothers. One of the reasons why urban students have higher academic achievements than the rural students could be because urban schools have better facilities and resources and students are more exposed to the use of technology. Therefore, urban students have many advantages in their learning process. Family background could also be an important factor. Perhaps in rural areas, family expectation is not high, so students may have felt less pressure to attain good performance.

VI Comparison on academic achievements of high school students with non-working mothers with reference to their gender and locale: Academic achievements of students whose mothers were not working were compared with reference to their gender and locale. Details of 't' test are presented in the following table.

Table - 6: Comparison on academic achievements of high school students with non-working mothers with reference to their gender and locale

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>241</td>
<td>263.39</td>
<td>61.658</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>251</td>
<td>253.30</td>
<td>63.900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>283</td>
<td>279.36</td>
<td>62.797</td>
<td>9.694</td>
<td>**</td>
</tr>
<tr>
<td>Rural</td>
<td>209</td>
<td>229.66</td>
<td>50.800</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NS- Not significant, **-Significant at .01 level
It is inferred from the above table that there is no significant gender difference in the academic achievements of students with non-working mothers, however, the study has found a significant locale difference in the academic achievements of students with non-working mothers. The mean of the urban students are higher than the mean of the rural students indicating that urban students with non-working mothers have higher academic achievements than the rural students with non-working mothers. Many students living in rural areas come from low income families. Their parents cannot afford to buy them sufficient resources like additional books for references etc. for improving their academic performance. This could be one reason why rural students have lower academic achievements as compared to urban students, even though both urban and rural students have mothers who are not working.

### VII Relation between study habits and academic achievements of high school students

Coefficient of correlation between study habits and academic achievements of all respondents were computed and is presented in the following table

<table>
<thead>
<tr>
<th>Study habits</th>
<th>Academic achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.238**</td>
</tr>
<tr>
<td>.238**</td>
<td>1</td>
</tr>
</tbody>
</table>

Evidently, that there is positive correlation $r = .238$ between study habits and academic achievements among all students as can be seen from the above table, and the relationship is significant at 0.01 level. The analysis denotes that there is positive correlation between study habits and academic achievements. This suggests that those students who have good study habits also have high academic achievements and vice versa. Similar findings have also been established by Raiz et al. (2002); Gakhar (2005); Lakshminarayanan et al. (2006)

### Conclusions
The study found that there is no significant difference in the study habits of students with working and non-working mothers; that students with working mothers had better academic achievements than students with non-working mothers. It also found that urban students had better academic achievements than rural students and that there is positive correlation between study habits and academic achievements.

Mothers' working status does not seem to have any bearing on their children's study habits, but it seems to have a considerable relevance in their children's academic achievements. Usually mothers with good academic background find good jobs, so working mothers may have consciously or unconsciously motivated their children to accomplish good academic achievements. This brings us to the importance of educating women because they seem to have greater influence in their children than the men.

Urban students, whether their mothers are working or not had immense advantage in resources as compared to the rural students such as better technology, richer library, qualified teachers etc. to facilitate their academic achievements. Rural students also need to be given such type of resources so as to improve their academic achievements.

One cannot have good academic achievements unless one maintains good study habits. These two variables are correlated. One needs to develop good study habits to obtain academic success. For this, teachers as well as parents had to join hands in the form of organizing parent-teacher meet so as to assist the students in developing good study habits and thereby helping them to achieve good academic records.


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ICEPS_0394

Quality Assessment at the Primary School Level in Mizoram on the Basis of Learning Outcome

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Abstract

Education with quality variation is the deprivation of the children’s right to equality of opportunity in matter of employment since the Indian Constitution Article 16 provides the right to ‘equality of opportunity in matter of public employment’ to all its citizens. Thus, the need for provision of equal conditions for success to all children irrespective of caste, creed, location or sex has become an imperative demand of the nation. The present study is an attempt to find out the learning outcomes or competency level of primary school children in Mizoram, one of the youngest states of India located at the remotest corner of eastern region bordering with Myanmar. It is a descriptive survey research on the basis of quantitative data. The study has been focussed on the four objectives: (i) to assess the performance and level of achievement; (ii) to compare the performance on the basis of management i.e. Govt and Private schools; (iii) to compare the performance on the basis of location i.e. rural and urban; (iv) to compare the performance on the basis of gender i.e. boys and girls. Four working hypotheses corresponding to these four objectives have also been formulated in the form of null hypothesis. Descriptive survey method of research has been adopted as the investigator had to describe the status of primary schools in Mizoram with regard to achievement in learning outcomes by class IV children. The population comprised of all class IV children of primary schools in Mizoram who had recently passed class III from such schools. Proportionately stratified purposive random sampling technique has been followed to draw the sample. Thus, the actual sample size came out to be 808. The required data were
collected by using the tools constructed by the investigator. Performances are analyzed with the help of measures of variability such as mean and standard deviation. ‘t’ calculated value has also been used to find out whether the differences between the performances of children are significant at 0.1 and 0.5 levels or not. Performances are also analyzed in terms of levels of achievement, that is, the ranges of percentage of marks obtained by the students, to know if the students have achieved mastery level of learning which refers to achievement of 80 per cent and above marks in an MLL based achievement test.

Major findings of the study are (i) the mean score of children in the test fell below 50% of the total mark which was far from satisfactory; (ii) Only 11.76% of children achieved mastery level of learning in Environmental Studies whereas no child (0%) could achieve this level in Mathematics; (iii) In EVS, the largest group of children (35.90%) derived a scoring which fell within the mark range of 45%-59%. (iv) In Mathematics, the biggest cluster of children (48%) was found within the mark range of 30%-44% which means one-fourth of the children failed to achieve even 30% of the total marks; (v) In EVS, the level of achievement of children was lowest in the area of geography and map reading; (vi) In Mathematics, geometry, fraction and reading calendar emerged as hard spot of learning for the children. (vii) Children from government primary schools were found significantly better than children of private primary schools in Environmental Studies; (viii) In Mathematics, children of private primary schools were significantly better than children of government primary schools; (ix) Girls were significantly better than boys in Mathematics (x) But no such significant difference was found between boys and girls in EVS. To improve the performance of the children, the following recommendations are given: (i) mastery learning approach must be emphasised especially in those private schools and learning through rote-memorization should be discarded as far as practicable; (ii) Competency-based activity-centred or learning outcome approach should be emphasised and followed as a teaching and learning approach right from the elementary level; (iii) Teachers are required to be trained and made acquainted with Mastery based learning approach; (iv) Practical mathematics should be introduced so that every child can enjoy the subject.

**Keywords:** Learning outcomes, Competency, Quality education.
1. Introduction

Education with quality variation is the deprivation of the children’s right to equality of opportunity in matter of employment since the Indian Constitution Article 16 provides the right to ‘equality of opportunity in matter of public employment’ to all its citizens. Moreover, free and compulsory elementary education for all children of the age group 7-14 has become the fundamental rights of every child under the Article 21(A) in India since 2010. In order to fulfil these Constitutional obligations in the true spirit, all children must not only be provided easy access to school but must be provided all the necessary facilities for success. In other words, we must provide quality education to all children irrespective of caste, creed, location or sex which adequately prepares them for success in their later life. UNESCO made a remark that ‘the young are not only the beneficiaries of development; they are the principal contributors to it if they are adequately prepared’\(^1\). Therefore, the present study is to see as to whether we provide quality education to all children at the primary school level for success in their later life.

The learning outcome or competency of children has been taken as an indicator of quality education. In other words, the basis of quality education for the present study is learning outcomes or competency of the learners. Learning outcomes are statements of what a learner is expected to know, understand and/or be able to demonstrate at the end of a period of learning. Recognizing the urgent needs for providing quality education, the National Policy on Education 1986 has entailed for laying down a Minimum Levels of Learning (MLL) for each stage of education. The MLL in India is not a new concept but the same concept as that of Outcome Based education (OBE) system in other countries of the world. OBE is a recurring education reform model which is a popular term in the United States during the 1980s and 1990s\(^2\). It is also called ‘mastery education’ or ‘performance-based education’ and other names. Mastery education implies mastering or achieving at least 80 per cent of those competencies or expected learning outcomes.

In fact, there was quality dilution in the elementary education due to the rapid expansion of elementary education in terms of enrolment and access in response to the
World Conference on Education for All (WCEA) held in March 1990, at Jomtien in Thailand. Thus, the need of the present study was strongly felt.

Mizoram is one of the youngest states of India located at the remotest corner of eastern region bordering with Myanmar. It is mountainous region which became the 23rd State of the Indian Union in February, 1987. It was one of the districts of Assam till 1972 when it became a Union Territory. The indigenous inhabitants are known as ‘Mizo’. Mizoram has a total of 722 Km boundary with Myanmar in the east and Bangladesh in the west. Mizoram was formerly divided into three districts, namely, Aizawl, Lunglei and Chhimtuipui which have been divided from 1999 into eight districts, viz., Aizawl, Champhai, Kolosib, Lunglei, Lawngtlai, Mamit, Saiha, Serchhip districts.

2. Objectives of the Study

The present study has been focussed on the four objectives: (i) to assess the performance and level of achievement in the two subjects i.e. Environmental Studies (EVS) and Mathematics; (ii) to compare the performance in the two subjects (EVS and Mathematics) on the basis of management i.e. Govt and Private schools; (iii) to compare the performance in the two subjects (EVS and Mathematics) on the basis of location i.e. rural and urban; (iv) to compare the performance in the two subjects (EVS and Mathematics) on the basis of gender i.e. boys and girls.

3. Hypothesis

The present study has been conducted with the following hypotheses:

1. Class IV children of primary schools in Mizoram do not achieve mastery level of MLL for Class III in EVS and Mathematics.

2. There is no significant difference between the performance (mean scores) of Class IV children of government and private primary schools in EVS and Mathematics in Mizoram.

3. There is no significant difference between the performance (mean scores) of Class IV children of rural and urban primary schools in EVS and Mathematics in Mizoram.

4. There is no significant difference between the performance (mean scores) of boys and girls of Class IV in primary schools in EVS and Mathematics in Mizoram.

4. Methodology of the Study
The present study is an evaluative study as it evaluates and assesses class IV children of primary schools in Mizoram based on competencies and skills prescribed for Minimum Levels of Learning (MLL) for class III children in the country. Descriptive method of research has been adopted as the investigator had to describe the status of primary schools in Mizoram with regard to achievement of MLL or learning outcomes by class IV children. The population under consideration in this study comprised of all class IV children of primary schools in Mizoram who had recently passed class III from such schools. After identifying primary schools from all the districts which would be able to represent government and private, and urban and rural schools, it was decided that Class IV Mizo children who would be present on the day of visit would constitute the sample. It was estimated that these children would constitute the required sample size which is about 380 for a population of about 40,000 as per the table for determining sample size for research activities given by R.V. Krejcie and D.W. Morgan (1970) in Educational and Psychological Measurement, 30, 607 – 610. Actual sample size, thus, was determined by the number of Class IV Mizo speaking children present in the schools at the time of administration of the tests which came out to be 808.

In order to collect the necessary data, the following tools were constructed – (i) Competency-based Achievement Test in Environmental Studies, (ii) Competency-based Achievement Test in Mathematics.

The student’s performance on Competency-based Achievement Tests was analyzed with the help of SPSS (11.5 version) and Microsoft Excel. Percentage and measures of variability such as mean and standard deviation were calculated. The ‘t’ test was used to determine the significance of differences in children’s performance with reference to the variables under study.

5. Analysis and Interpretation of Data

5.1 Overall Performance and Level of Achievement

| Table 5.1.1 Overall performance of Class IV children in Environmental Studies and Mathematics |
|--------------------------------------------------|-----------------|-----------------|
| Cases                                           | EVS  | Maths  |
| Mean                                            | 18.91| 13.88 |
| SD                                              | 6.26 | 4.83  |
The performance of class IV children in terms of mean scores and Standard Deviation (SD) in the two subjects presented in Table 5.1.1 has been supplemented by Table 5.1.2 which presents the percentage levels of achievement of the children. The facts reflected by the above two tables are as given below:

(i) In Environmental studies, the mean score is 18.91 which is equivalent to the average percentage of 47.27. Not less than 99% have failed to achieve mastery level.

(ii) Children are found very poor in Mathematics as the mean performance score is only 13.88 that is equivalent to the average percentage score of 34.67 only and no one has achieved mastery level. At the same time, the Standard Deviation 4.83 is observed in Mathematics subject which, implies that children are more homogenous with regard to their performance in this subject.

(iii) The largest number of children is found within the given range of 45%-59% and 30%-44% of marks in Environmental Studies and Mathematics respectively.

(iv) The above tables reflect that the performance and achievement levels of Class IV children are far from satisfactory.

### 5.2 District-wise Performance and Level of Achievement of Class IV Children.

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Aizawl</th>
<th>Champhai</th>
<th>Kolasib</th>
<th>Mamit</th>
<th>Lawngtlai</th>
<th>Lunglei</th>
<th>Saiha</th>
<th>Serchhip</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>N =</td>
<td>222</td>
<td>118</td>
<td>98</td>
<td>89</td>
<td>80</td>
<td>107</td>
<td>39</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>19.45</td>
<td>19.07</td>
<td>17.70</td>
<td>18.33</td>
<td>18.87</td>
<td>18.33</td>
<td>19.01</td>
<td>19.69</td>
<td>18.91</td>
</tr>
<tr>
<td>EVS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maths</td>
<td>15.48</td>
<td>14.52</td>
<td>12.66</td>
<td>14.92</td>
<td>13.35</td>
<td>5.09</td>
<td>3.16</td>
<td>4.68</td>
<td>13.87</td>
</tr>
</tbody>
</table>

The above table 5.2.1 shows the result of district-wise analysis of data. In Environmental Studies, the highest mean score (19.69) is found among children of Serchhip District and the lowest mean score (17.70) in Kolasib District. In Mathematics, the mean score is highest in Aizawl District (15.48) and lowest in Saiha District (11.09). It may be noted that Kolasib derives the lowest mean score in
Environmental Studies. At the same time, the Standard Deviation is also found lowest in Kolasib District in Environmental Studies. This reflects that lesser disparity of learning achievement in this particular subject is observed in Kolasib District when compared with the rest of the districts.

5.3 Competency-wise Performance and level of achievement of Class IV Children

Table 5.3.1:
Competency-wise performance in EVS.

<table>
<thead>
<tr>
<th></th>
<th>Civic Amenities</th>
<th>Geography</th>
<th>Reading Map</th>
<th>History of the Early Man</th>
<th>Population Education</th>
<th>Personal hygiene</th>
<th>Environment</th>
<th>Solar System</th>
<th>Air/Water Pollution</th>
<th>Overall Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>808</td>
<td>808</td>
<td>808</td>
<td>808</td>
<td>808</td>
<td>808</td>
<td>808</td>
<td>808</td>
<td>808</td>
<td>808</td>
</tr>
<tr>
<td>Mean</td>
<td>2.61</td>
<td>0.32</td>
<td>1.14</td>
<td>1.60</td>
<td>1.05</td>
<td>2.11</td>
<td>2.57</td>
<td>1.46</td>
<td>1.92</td>
<td>18.91</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.42</td>
<td>0.47</td>
<td>0.85</td>
<td>1.06</td>
<td>0.78</td>
<td>1.27</td>
<td>1.27</td>
<td>1.09</td>
<td>1.20</td>
<td>6.26</td>
</tr>
</tbody>
</table>

Table 5.3.1 depicts the performance of children in nine major areas into which the test items in Environmental Studies have been classified. The items pertaining to ‘civic amenities’ elicit the highest mean score of performance i.e. 2.61 whereas the lowest mean score of performance (i.e. 0.3) is found on the items pertaining to ‘geography’ which include questions/items relating to general physical feature of the State of Mizoram. The level of performance of children on the item ‘map reading’ which requires the children to locate their own State and District from given political maps of India and Mizoram State, is also found to be very low (at the mean score of 1.14). The overall mean score in this particular subject is only 18.91.

Table 5.3.2:
Competency-wise performance in Mathematics

<table>
<thead>
<tr>
<th></th>
<th>Number concept</th>
<th>Arithmetic Operations</th>
<th>Daily problem in life</th>
<th>Reading Clock</th>
<th>Reading Calendar</th>
<th>Fraction</th>
<th>Geometrical Shapes</th>
<th>Overall Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>808</td>
<td>808</td>
<td>808</td>
<td>808</td>
<td>808</td>
<td>808</td>
<td>808</td>
<td>808</td>
</tr>
<tr>
<td>Mean</td>
<td>3.19</td>
<td>2.26</td>
<td>5.9</td>
<td>1.04</td>
<td>0.52</td>
<td>0.578</td>
<td>0.4</td>
<td>13.87</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.66</td>
<td>1.34</td>
<td>2.41</td>
<td>0.91</td>
<td>0.51</td>
<td>0.857</td>
<td>0.54</td>
<td>4.828</td>
</tr>
</tbody>
</table>

Table 5.3.2 presents the data on competency-wise performance of Class IV children in Mathematics where the two lowest mean scores 0.4 and 0.52 are found against the MLL competency of geometrical shapes and reading calendar respectively. This implies that most children are weak in these two areas of Mathematics. The highest mean score is found against the area of ‘daily problem in life’ which involves
mathematical problem solution in real life situations. This indicates, more or less, that children are better in problem solving which requires divergent thinking whereas they are least developed in the areas like geometrical shapes and reading calendar which involves convergent thinking. Fraction is another area where children perform poorly.

5.4 Management-wise Comparison

<table>
<thead>
<tr>
<th>Managements</th>
<th>Environmental studies</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N  Mean   SD</td>
<td>N  Mean   SD</td>
</tr>
<tr>
<td>Govt.</td>
<td>384  19.62  6.29</td>
<td>384  13.04  4.85</td>
</tr>
<tr>
<td>Private</td>
<td>424  18.26  6.17</td>
<td>424  14.62  4.68</td>
</tr>
<tr>
<td>Total</td>
<td>808  18.91  6.26</td>
<td>808  13.87  4.83</td>
</tr>
<tr>
<td>t'</td>
<td>6.45     -7.52</td>
<td></td>
</tr>
<tr>
<td>Df</td>
<td>806      806</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.4.1: Management-wise performances in EVS and Mathematics.

It is striking to note from Table 5.4.1 that when comparison of performance of children is made between government schools and Private schools, significant difference is established in the two subjects. In Environmental Studies, government schools are significantly better than Private schools wherein the ‘t’ calculated values are more than the Table value of ‘t’ both at .01 and .05 levels. This implies that the difference of the mean scores between government schools and Private schools in these two subjects can be said as real difference, which is not by chance and hence significant. In the case of Mathematics, Private schools are significantly better than government Schools as the ‘t’ calculated value is more than the table ‘t’ value at both .01 and .05 levels.

5.5 Location-wise Comparison

<table>
<thead>
<tr>
<th>Location-wise performance in EVS and Mathematics.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Studies</td>
</tr>
<tr>
<td>Rural</td>
</tr>
<tr>
<td>N  Mean   SD</td>
</tr>
<tr>
<td>305  18.23  6.53</td>
</tr>
<tr>
<td>t' value</td>
</tr>
<tr>
<td>Df</td>
</tr>
</tbody>
</table>

Table 5.5.1 depicts that in the two subjects, children belonging to urban schools significantly perform better than their counterpart in rural schools. It may be noted that the ‘t’ calculated value of -5.01 in Environmental studies is greater than the table ‘t’ values at .01 and .05 levels. However, the ‘t’ value of -1.48 between rural and urban schools in Mathematics is more than the table ‘t’ value only at .05 level.
Thus, urban children are found better than their counterpart in rural but significant only at .05 level.

5.6 Gender-wise Comparison

<table>
<thead>
<tr>
<th></th>
<th>Environmental Studies</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boy</td>
<td>Girl</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>383</td>
<td>425</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>18.93</td>
<td>18.89</td>
</tr>
<tr>
<td><strong>Std. Deviation</strong></td>
<td>6.54</td>
<td>6.00</td>
</tr>
<tr>
<td><strong>t’</strong></td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td><strong>Df</strong></td>
<td>806</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.6.1 depicts that in gender-wise comparison of the performances of sample Class IV children, girls are significantly better than boys in Mathematics. In other words, the ‘t’ calculated value in Mathematics at -3.65 is found greater than the table ‘t’ value at .01 and .05 levels. Hence, it can be assumed that the differences between mean scores of boys and girls in Mathematics is real difference and not by chance. Moreover, the ‘t’ calculated value of 0.21 in Environmental studies is less than the table ‘t’ value at .05 and .01 levels and as such, the difference between mean scores of boys and girls in this particular subject is minimal and cannot be assumed as real difference. In other words, the difference between mean scores of boys and girls in Environmental Studies can be by chance and hence statistically insignificant.

6. Major Findings of the Study

6.1 Overall Performance and Level of Achievement

1. The overall mean score of children in Environmental Studies and Mathematics was 18.91 and 13.88 respectively out of the total mark of 40 in each of the subject. Thus, the mean score of children in the two tests fell below 50% of the total mark which was far from satisfactory and also from the desired mastery level of 80% and above.

2. Of the two subjects, performance and level of achievement was found higher in EVS than in Mathematics. In Environmental Studies 11.76% of children achieved mastery level of learning whereas no child (0%) could achieve this level in Mathematics.

6.2 District-wise Performance and Level of Achievement
1. In EVS, Children belonging to Serchhip District were found strongest followed by that of Aizawl District whereas children from Kolosib District were found weakest.

2. In Mathematics, children of Aizawl District performed the best whereas children of Saiha District were poorest comparing with children in the rest of the seven districts.

6.3 Competency-wise Performance and Level of Achievement

1. Amongst the 9 different areas of MLL competency identified in EVS, the level of achievement of children was lowest in the area of geography.

2. Map reading was found to be one of the most difficult sub-items since nearly one-fifth of the children (20.54%) were unable to locate own state/district in a given political map of India/Mizoram.

3. Of the 7 different areas of MLL competency identified in Mathematics, three of them like geometry, fraction and reading calendar emerged as hard spot of learning for the children.

6.4 School Management-wise Performance and Level of Achievement

1. The performance of children from government primary schools were found significantly better than children of private primary schools in Environmental Studies. However, in Mathematics, children of private primary schools were significantly better than children of government primary schools.

6.5 School Location-wise Performance and Level of Achievement

1. Since children of primary schools located in urban areas were significantly better than children of primary schools located in rural areas in the two subjects, and the corresponding null hypothesis has been rejected.

6.6 Gender-wise Comparison of Performance and Level of Achievements

1. Since girls were significantly better than boys in Mathematics whereas no such significant difference was found between boys and girls in EVS, the corresponding null hypothesis has been partly rejected and partly accepted.

7. Recommendations and Suggestions
On the basis of the major findings given in the preceding para, following recommendations and suggestions are given:

1. It is essentially suggested that mastery learning approach must be emphasised especially in all the primary schools irrespective of managements.

2. The traditional concept of ‘30 per cent pass mark’ prevalent at the primary stage is, indeed, an impediment in creating the condition for success and raising the standard of learning. Hence, mastery based learning need to be emphasized right from the primary school stage.

3. Competency-based activity-centred or learning outcome approach should be emphasised and followed as a teaching and learning approach right from the Elementary levels

4. Teachers are required to train and made them acquainted with Mastery based learning approach. Hence, the syllabi of the DIET and B.Ed College should be re-examined and revised so as to cater adequately the required skills in mastery based learning method.

5. Almost all the Children are found very weak in mathematics right from the primary school which need immediate attention of the teachers and educational administrators of the state. Practical mathematics should be introduced so that every child can enjoy the subject.

6. More efforts are needed in order to integrate and facilitate the teaching and learning of basic knowledge, skills, values, behaviours as well as self-learning and critical-thinking habits right from elementary stage. All these efforts must be directed and guided by systematic and continuous learning outcome assessment.

7. The government should formulate desired or expected minimum learning facilities for all the primary schools irrespective of managements. Those schools failing to comply such minimum learning facilities should not be allowed to continue as a recognised school.

8. References


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ICEPS_0396

**Problems Faced by Teachers of Technical Courses in Mizoram: An Analytical Study**

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**Abstract**

Technical education lends dynamism to society. It changes things for better life and opens new frontiers of knowledge. It helps us in facing new challenges, overcoming
difficulties and increases human knowledge. For socio-economic development of the
country, the present need is to produce technically skilled manpower in adequate
number according to the needs, so as to place the nation on the road to growth, equity
and modernization. Development of skillful human resources takes place by two
different streams of education, technical education and non technical education i.e.
general education. General education generates human capital whereas technical
education generates skilled human capital. Technical education is the academic and
vocational preparation of students for jobs involving applied science and modern
technology. Mizoram, one of the states of India, is very high in literacy and is
growing progressively in general education, but far behind other states of India with
respect to technical education. The present study was an attempt to find out the
problems faced by teachers teaching the technical courses. There were 89 permanent
teachers with 52 contractual/guest faculties. Out of a population of 89 permanent
teachers, 50 teachers were selected as sample. Questionnaire prepared for the teachers
was used to find out their problems. The study found that the main problems faced by
the teachers were insufficient number of permanent/regular teachers, inadequate
provision of room for each faculty and Head of Department, lack of opportunity for
research and training, non functional equipments, non maintenance and outdated
equipments and limited fund. Certain measures for solving their problems are given
at the end.

**Key Words:** Technical education, Technical institutions, Teachers, Problems,
Technical courses

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**Introduction**

Technical education refers to learning of skills or some related skills by
studying technologies, applied sciences and other practical activities; it emphasizes
the understanding and practical application of basic principles of science and
mathematics, rather than the attainment of proficiency in manual skills. All India
Council for Technical Education (AICTE), a statutory authority for technical
education in the country defines technical education as, “Programmes of education,
research and training in engineering, technology, architecture, town planning,
management, pharmacy and applied arts and crafts and such other programmes or
areas as the Central Government may, in consultation with the Council, by
notification in the official Gazette, declare”.

Mizoram is one of the states of India, located in north east region of the
country and shares international borders with Myanmar and Bangladesh in the eastern
and southern part. The population according to 2011 census was 1091014 and is the
second least populous state in India. It is the fifth smallest state of India with
21,087 km² (8,142 sq mi). Mizoram is a land of rolling hills, the name is derived from
Mi (people), Zo (lofty place, such as a hill) and Ram (land), and thus Mizoram implies "land of the hill people". About 91% of the state is covered by forest.

Mizoram is very high in literacy and is growing progressively in general education, but far behind other states of India with respect to technical education. At present, there are only a few institutions offering a limited course for technical education. Only a few numbers of students can receive this technical education inside the state. General education that is provided among the masses is not enough for bringing development. The history of technical education in Mizoram could not be traced back very far as no proper record were maintained in the past and is still in its preliminary stage of development. Prior to 1989, there was no separate department for technical education; it was under the department of School Education. Before the trifurcation of School Education, School Education Department was responsible for all matters related to technical education.

In the year 1981, the Mizoram Government established the first Technical Institution, Mizoram Polytechnic at Lunglei, offering only one course, diploma in Civil Engineering with an intake capacity of 60 students (Chhuanvela, 2007). After 5 years in 1986, Diploma in Electrical Engineering was introduced in Mizoram Polytechnic, with an intake of 30 students and this became the second technical course introduced in Mizoram.

Based on the classification of technical courses mentioned in AICTE Process Approval Handbook 2013-2014, 16 courses were available in Mizoram in 7 institutions at the time of data collection. Out of the 16 courses of technical nature 10 of them were started after the year 2000. The courses which were started before 2000 are only diploma level courses offered in Polytechnics ie Mizoram Polytechnic, Lunglei (MPL) and Women’s Polytechnic, Aizawl (WPA). National Institute of Electronics and Information Technology (NIELIT) established in 2002 also offered diploma level and Master of Computer Application (MCA). The first Engineering course at bachelor degree level ie B.Tech (IT) was started only in 2007 by Mizoram University, a central university established in 2001. The state has been blessed by the setting up of National Institute of Technology (NIT) in 2010. Master of Business Administration (MBA) course is offered by Institute of Chartered Financial Analysts of India (ICFAI) University, Mizoram and Mizoram University (MZU). Bachelor of Pharmacy (B.Pharm) is another technical course available at Regional Institute of Para Medical and Nursing Sciences (RIPANS). Out of the 7 institutions offering technical courses, 2 are polytechnics run and managed by Government of Mizoram, 4 are under the management of Central Government and 1 is managed by a private body.

Table - 1: Technical Institutions and Courses in Mizoram

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Name of the Institution</th>
<th>Year of Establish ment</th>
<th>Courses Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mizoram Polytechnic Lunglei (MPL)</td>
<td>1981</td>
<td>Diploma in Civil Engineering</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Diploma in Electric Engineering</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Diploma in Mechanical Engineering</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Diploma in Computer Science &amp; Engineering</td>
</tr>
<tr>
<td></td>
<td>Institution</td>
<td>Year</td>
<td>Degrees Offered</td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------------------------------------</td>
<td>-------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2</td>
<td>Women’s Polytechnic Aizawl (WPA)</td>
<td>1998</td>
<td>Diploma in Modern Office Practice, Diploma in Electronic &amp; Telecommunication Engineering, Diploma in Garment technology, Diploma in Beauty Culture &amp; Cosmetics</td>
</tr>
<tr>
<td>3</td>
<td>National Institute of Electronics and Information Technology (NIELIT)</td>
<td>2002</td>
<td>Diploma in Electronic &amp; Telecommunication Engineering, Diploma in Computer Science Engineering, Master of Computer Application (MCA)</td>
</tr>
<tr>
<td>4</td>
<td>Mizoram University (MZU)</td>
<td>2001</td>
<td>B.Tech (IT), B.Tech (ECE), B.Tech (CSE), B.Tech (EE), Master of Business Administration (MBA)</td>
</tr>
<tr>
<td>5</td>
<td>National Institute of Technology (NIT)</td>
<td>2010</td>
<td>B.Tech (ECE), B.Tech (EEE), B.Tech (CSE)</td>
</tr>
<tr>
<td>6</td>
<td>Institute of Chartered Financial Analysts of India University, Mizoram (ICFAI)</td>
<td>2006</td>
<td>Master of Business Administration (MBA)</td>
</tr>
<tr>
<td>7</td>
<td>Regional Institute of Para Medical and Nursing Sciences (RIPANS)</td>
<td>1995</td>
<td>Bachelor of Pharmacy (B.Pharm)</td>
</tr>
</tbody>
</table>

From table 1 above, it is evident that with regard to technical education, Mizoram is still in its infancy stage and is far behind other states of India. A big challenge faced by the state is that being a developing state it has a long way to go to reach the same level of technical education as other states. The change in social and economic environment demands for more skilled-man power in various fields of work. Mizoram is lagging in this arena, and therefore promotion of technical education to meet the austerity is the need of the hour.

**Rationale of the Study**

In India, technical education plays a vital role in the social and economic development of the nation. Liberalization of Indian economy after 1991 demands well trained human resources having specific skills and knowledge. Due to the discoveries of new technology, society changes and this social change brings new challenges to
Mizoram, one of the states of India is far behind other states with respect to technical education. At present, only a few institutions offer courses for technical education and the courses offered are limited. As a result, the products of these institutions cannot meet the growing demand. Mizoram State Council for Technical Education (MSCTE) was established for efficiency improvement of technical education in Mizoram, there is a separate administrative unit of technical education under the Directorate of Higher and Technical Education to look after technical education solely. But till today, technical education is not popularly known and recognized among the general masses in Mizoram.

Since there has been no research conducted in the field of technical education in Mizoram till today, there are important questions the answers of which are not yet known. In view of this, a study aimed at finding out problems of teachers was undertaken. This will in return help the educational planners and the authority in framing and planning for the improvement of technical education in Mizoram.

**Objectives of the Study**

1. To find out problems of teachers teaching technical courses in Mizoram, India.
2. To suggest measures for solving the problems faced by teachers teaching technical courses in Mizoram, India

**Methodology of the Study**

The study involves fact-finding enquiries on problems faced by teachers therein. The facts or information collected have been analyzed to make a critical evaluation with a view to making suggestions for general improvement of the overall situation of technical education in Mizoram, India. The need for sample selection did not arise as the number of institutions offering technical courses was only seven. Hence, all the seven institutions along with all the technical courses offered have been covered in the study. Population of teachers comprises of all the teachers teaching technical courses in technical institutions. There were 89 permanent teachers with 52 contractual/guest faculties. Out of a population of 89 permanent teachers, 50 teachers were selected as sample as shown in Table 2. Since there are no ready-made tools, the investigators developed Questionnaire for teachers for studying teachers’ problems. To develop tools, the investigators consulted different types of documents related to the study, interviewed experts having knowledge of technical education and
teachers of technical institutions. Data regarding the problems faced by the teachers teaching technical courses were collected through questionnaire which was distributed among the teachers and collected personally. The data collected were properly classified accordingly. The usable data obtained after tabulation were analyzed qualitatively and quantitatively.

### Table - 2: Population and Sample of Teachers

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Institution</th>
<th>No of Technical Courses</th>
<th>Population of Teachers</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mizoram Polytechnic, Lunglei (MPL)</td>
<td>Engineering and Technology (Dip) : 4</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>
| 2     | Women’s Polytechnic, Aizawl (WPA) | Engineering and Technology (Dip) : 1 
Applied Arts and Craft (Dip): 2 
Management (Dip) : 1 | 9 | 4 |
| 3     | National Institute of Information and Technology (NIELIT) | Engineering and Technology (Dip) : 2 
MCA : 1 | 17 | 10 |
| 4     | Mizoram University (MZU) | Engineering & Technology (UG) : 4 
Management (PG) : 1 | 14 | 7 |
|       |             |                         | 7 | 4 |
| 5     | National Institute of Technology (NIT) | Engineering & Technology (UG) : 3 | 9 | 5 |
| 6     | Institute of Chartered Account and Financial Management of India (ICFAI) | Management (PG) : 1 | 18 | 10 |
| 7     | Regional Institute of Paramedical and Nursing Sciences (RIPANS) | Pharmacy (UG) : 1 | 5 | 5 |
|       |             |                         | Total | 89 | 50 |

**Findings of the Study**

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Problems faced by teachers of technical courses in the institutions offering technical courses in Mizoram, India are as follows:

1. The main problem of teachers in all institutions was insufficient number of permanent/regular teachers as 72% stated so. In some of the institutions, almost half of the teaching faculties were not regular employees. Due to inadequate number of teachers, the number of students in a group for practical and project were in excess. This posed a problem for the teachers in guiding and teaching. For some teachers ie 36%, the number of technical staff for practical was inadequate. 24% of the respondents also stated that the number of attendants available was inadequate. It was also found that absence of regular Principal due to dearth of qualified candidates created a problem for teachers as 20% mentioned so.

2. Problems related to infrastructural facilities were, absence of separate provisions of rooms for head of department and each faculty as mentioned by 60% and 68% respectively and absence of separate office for each department for 48% and inadequate provision of residential quarters for 42%. Few also stated that unsatisfactory service of cafeteria in the institutions creates a problem for the teachers.

3. 70%, 54%, 60% of the teachers felt that less opportunities were given for further studies, attending training and doing research respectively in the respective field. They felt that lack of opportunities in these respects stagnated the development of their profession. Further, due to less opportunity in these aspects, they faced problems in research publications and they had less opportunity for exposure in the respective fields. Besides, 24% and 18% also cited that they had trouble due to social obligations and lack of teaching skills respectively.

4. Teachers in some institutions faced problem, due to non functional equipments (30%). 24% further stated that due to inadequate fund, the available equipments could not be properly maintained and 16% of the respondents also stated that the equipments available were out-dated and procurement of new up to date equipments was impossible due to limited fund for equipments. Apart from these, teachers ie 30% and 10% also faced problems due to inadequate number of equipments and absence of essential equipments respectively.

5. Regarding accessibility, absence of bus exclusively for staff and faculty was a problem for 40% of teachers, far location of the institution for 32%, non availability of bus at frequent interval for 24% and inadequate number of bus for 42% of the teachers.

6. Related to library, 30% and 8% stated that the number of books and journal related to technical courses were limited and facilities provided for reading space were inadequate for 20%. 6% also stated that timing for library was too limited for academic staff like them who had to engage the whole day with teaching and other related works and did not have time for library during working hours as the libraries were closed on holidays and after working hours.
7. In connection with teaching and learning process, 30% of the respondents faced problems due to insufficient number of teaching aids and excess number of students in a group for practical/project. 24% had a problem because of the limited number of aids for demonstration, short duration of practical period and long duration of theory period. Some teachers i.e. 22% and 14% of the teachers also felt that students were insincere and inattentive while imparting lesson. Communication i.e. imparting lesson in English created a problems while teaching as some of the students were weak in English (22%). 10% and 6% of the respondents also mentioned that poor academic record of the students and poor SES respectively created a problem for the teachers in teaching and learning process. Some of the teachers i.e. 14% also felt that due to limited number of industries in the state, there was lack of interaction between the institutions with industry.

8. Lack of coordination between the competent authority and teachers was a problem for 44% of the teachers, and 24% also stated that less involvement of teachers in policymaking and planning created problems for them in implementation of the policy.

9. Inadequate provision of computer and printer was stated as a problem by 42% and 30% respectively of the respondents. Absence of internet facility and slow network in the campus posed a problem for 10% and 16% of the teachers respectively.

10. One of the significant problems of teachers was outdated syllabus. Few cited that non-involvement of teachers in syllabus making and revision created problem in their efforts to improve technical education.

Discussion

The study reveals that the shortage of faculty, dearth of qualified Principal and limited number of technical and supporting staff generates a serious problem for the teachers. The shortage of human resources inhibits the growth and development of technical education in the state of Mizoram, India. Kerre (1987) also stated that the most serious constraint faced by vocational and technical education in Kenya was the unavailability of vocational teachers and highlighted the need of new number of new teachers with a vocational and technical education background in Kenya. Kaur (2013) in the article “Scope of Vocational and Technical Education in India” also mentioned that training institutes in India lacked trained staff and teachers and most of the teachers were not well qualified. The development of human resources in the institution has a great potential for the growth of technical education. Boateng (2012) suggested for the restructuring of vocation technical education in Ghana, it requires good quality leaders who can exert influence, set goals, prioritize the course for action, create new ideas, visions and policies and provide direction to ensure that the reforms lead to effective delivery of viable vocational and technical education in Ghana. Therefore, it is right to say that the urgent need of the state of Mizoram is recruitment of qualified Principal, more number of well qualified teachers, technical and supporting staff to minimize the problems faced by teachers.
Regarding professional development of teachers, it was found that most of the teachers felt that less opportunities were given for further studies, attending training and doing research respectively in the respective field. They felt that lack of opportunities in this respects stagnated the development of their profession as they did not have opportunities for exposure outside the institutions. Similarly, Usman, Celement and Raihan (2013) found the same problem on their study on problems of development on technical and vocational education in Katsina State, Nigeria. They highlighted that lack of in-service programmes for technical teachers should be addressed by organizing seminar and workshops etc, so that the current technical teachers can update/upgrade their knowledge and skills to pace with current dynamic technology. Adassah(2011) analysed the problems and prospect of technical college teachers of Nigeria and found that lack of teacher motivation and lack of well-articulated in-service education programmes for technical teachers posed a problem and recommended that teachers should be encouraged to proceed on in-service training for updating on emergent issues and development in technical courses. Teachers teaching in technical courses in Mizoram also has to update themselves, attend in-service training to be in pace with the changing world.

It is also found that teachers faced problems due to non functional equipments, poor maintenance of the available equipments and inadequate equipments due to limited finance. The same result was reported by Usman, Celement, Raihan (2013) in “A Study of the Problems for Development of Technical and Vocational Education in Katsina State, Nigeria”. They reported that inadequate budget hampers the growth of TVE in Katsina State, Nigeria. From their findings, they suggested Government to increase the current allocated funds of technical and vocation schools/colleges and higher institutions for qualitative education, as most of the technical or vocational schools were reported to have inadequately equipped laboratories and workshops; they have outdated equipment and facilities to train their students, inadequate teaching materials, the shortages of school workshops, laboratories, and library and research facilities. The same recommendations of the stated study are the need to solve the problems faced by teachers teaching technical courses in Mizoram, India.

Some teachers faced problems due to outdated syllabi, simultaneously, a study on “Technical Education in North Eastern India: Problems and Prospects” by Pant (2008) found that Syllabus has not been updated for more than 10 years in most of the institutions in North East, only a very few new courses had been added by institutes to their initial programmes. Shah (2013) also reported that curriculum of technical course in Pakistan were outdated and did not meet the need of the industry on his study on structure of technical education training in Pakistan.

Connected to teaching and learning process, some of the teachers felt that due to limited number of industries in the state there was lack of interaction between the institutions with industry. The same was also noted by Pillai, S.S. and Srinivasan, R. (1989), on the study of the feasibility of polytechnic-industry collaboration through a survey from the principals of 42 polytechnics in the southern region who participated. The principal unanimously expressed the need for industry- institute ties and found that cooperation and low rapport between industry and institute were mainly due to, reluctance on the part of staff to make extra effort, lack of initiative from either side or non availability of appointed liaison officers in the polytechnic. Shah,I,H (2004), from the study on Problems and Prospects of Technical Education in Pakistan stated
lack of proper linkage between technical education and industry as one of the causes of the problems.

It was also noted that lack of coordination between the competent authority and teachers created difficulty in implementation of the programmes and policies. Shah, I.H. (2010) in his research on the structure of technical and vocational training in Pakistan, also found that, there was lack of effective and efficient planning, implementation and monitoring of the system.

**Conclusion and Suggestions**

It is evident from the findings that teachers faced problems due to dearth of qualified Principal in some institutions, inadequate number of permanent teachers in almost all institutions. It is also observed that lack of good coordination between the higher authority and those who are in the field are the factors that impede the growth of technical institutions in Mizoram, India. The study also reveals that curricula of almost all the courses were outdated, syllabus needs revision and inadequacy was paid to co-curricular activities. There is no proper linkage of the institutions with industry due to lack of industry in the state, resulting in less opportunity for the students to have firsthand experience and skills. Further, the study found that teachers lacked opportunity for further studies and research and due to inadequate number of teachers, they had less opportunity to attend training, seminar, workshop and other related programmes. These factors hindered the professional development of the teachers teaching technical courses. For the development of technical education, the state needs efficient educational planners with well knowledge of technical education, proper planning and policy and well funding for technical education.

The following measures are suggested for solution of the problems faced by teachers teaching technical courses in Mizoram.

1. Necessary steps should be taken for the recruitment of permanent principal and teachers to reduce the problems faced due to inadequate number of teachers and head of the institution. More number of technical and supporting staff should be appointed to minimize the problems faced by teachers in practical classes.

2. Emphasis should be given to the norms and standard laid down by AICTE. The infrastructure of the institution i.e. Instructional rooms, laboratory, rooms for faculty and head of department, residential quarters etc should be in line with the norms prescribed by the Council. Proper cafeteria in the campus should be made available.

3. Government should increase the allocated funds to maintain the already existing infrastructure and equipments. It is also recommended to make procurement for purchasing new equipments to solve the problems faced by teachers due to limited number of equipments in practical classes.

4. Teachers should be given opportunities for their professional development. Dearth of skilled teacher is one of the major factors for the low quality of institution. Therefore, more opportunities should be given to the teachers to attend training for their professional development, further studies, and research and attend programmes related to their profession to gain experience and exposure.
5. Transportation system should be improved by increasing the number of buses and setting of bus exclusively for the staff will solve the problem of teachers related to accessibility.

6. Books available in all the libraries are needed to be increased in title and volume. It is also recommended to maintain books available as prescribed in the standard by AICTE and update the journals subscribed by the library. Extra time is to be given to the teachers to have time for library by opening library after working hours and holiday.

7. Provision of ICT in the class room and use of it will help the teachers to make their teaching interesting and motivating for the students. It is also recommended that English subject should be included at the initial stage of the course so as to solve the problem in medium of teaching. The authorities must pay attention to this need. Proper linkage of institutions and the available industry nearby and outside the state is needed; necessary arrangement should be made to solve the problem faced by teachers related to practical.

8. A good negotiation is necessary between the authority and those who are in the field for the implementation of any programme for the betterment of technical education in Mizoram. A leader/director with good vision and policies is needed to have healthy environment between those who are in the centre and the field to make effective and efficient planning, implementing and monitoring. Teachers also should be included in planning, policy making and any other issues related to technical education.

9. Computer and printer should be made available for teachers in the institution. It is also recommended that efforts should be made to make the campuses Wi-Fi enabled to help the teachers in accessing information and data related to their professional development and in teaching and learning process.

10. Syllabus should be revised periodically according to the needs of the society and the country. It is also recommended to include teachers teaching technical courses and those working in the related field in making and revision of syllabus.

Reference


The Effect of Basic Vipassana Practice on Mindfulness Level

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*Corresponding Author
Abstract

This research was aimed at studying the effect of one-week basic vipassana practice on mindfulness level of attendances. Samples included 5 males and 42 females, who voluntarily registered to attend a one-week program on basic vipassana practice in Phitsanulook province under the supervision of Vipassana Chiangmai Foundation Center. The samples were asked to self-rate their mindfulness levels before and after having basic vipassana practice, using the 24-item, short form of the 5-facet mindfulness questionnaire (FFMQ – SF, Bohlmeijer, et al., 2011, Baer, et al., 2006). Differences between the 2 sets of mindfulness scores, collected before and after the basic vipassana practice, were analyzed. Results indicated that the 7-day basic vipassana practice significantly induced mindfulness as a whole and particularly on its 3 out of 5 facets: observing, acting with awareness and nonreactivity to inner experience. Mindfulness level, however, was decreased on the facet of nonjudging of inner experience and no difference on the facet of describing. Although the results as a whole supported the effect of basic vipassana practices on inducing mindfulness level, one part indicated opposite effect of the practice on the nonjudging from inner experience facet. Since this experimental research has its limitation on studying a small number of various types of people who volunteered to attend the vipassana practice, repeating study should be conducted with more participants under the control of demographic characteristics. Future studies should also clarify the objective of the basic vipassana practice if it overcomes the nonjudge of inner experience level of mindfulness but instead turn to judge with more understanding the reality and having equanimity.

Keywords: Basic vipassana practice, Mindfulness, 5-Facet mindfulness questionnaire

Introduction

For more than 20 years, mindfulness has received a substantial interest by many clinicians and contemporary psychologists. Many programs are created to use mindfulness practices as a tool to the benefits of medical and psychological treatment, psychological well-being (Kabat-Zinn, 1982; Teasdale et al., 2000; Segal et al., 2002; Grossman et al., 2004; Camody and Baer, 2007; Finkelstein et al., 2007; Brown and Ryan, 2003), and mindfulness-based stress reductions (Grossman et al., 2004). Generally, mindfulness practices are designed for ordinary people such as stress management (Chiesa & Serretti, 2009), relationship enhancement (Carson et al., 2004;
Barnes et al., 2007; Jones et al., 2011), and sport performance (Bernier et al., 2009). The practices are also used to cultivate skills such as skills in sustained attention to the current experience, skills in switching or bringing back attention to the breath, thoughts or feelings, and skills in learning to experience thoughts, feelings and emotions as mental events that pass by (Phattanta, 2011, Bishop et al., 2004). It is said that the practices help to enable one to respond to situations more reflectively, not reflexively because it produces alterations in brain and immune function in a positive ways (Bishop et al., 2004; Davidson et al., 2003). In other words, mindfulness practices directly help to induce mindfulness level. In Thailand, practicing vipassana at basic level have long been offered to grant similar benefits. It is a preliminary form of insight meditation that is based upon the Great Discourse on the Foundations of Maha Satipatthana Sutta or the four-fold satipatthana, the foundation and establishing of Sati (Buddhaghosa, 2011). The practice of the four-fold satipatthana or vipassana was highly praised by the Enlightened One: “This is the direct path for purification of beings, for the overcoming of sorrow and lamentation, for the extinguishing of suffering and grief, for the entering of the right path and the attainment of nibbana.” (Punyanubhab, 1996 : 336)

Mindfulness

The word, “mindfulness”, is an English translation of the Pali term, “Sati” (Pali was a spoken language of northern India in the time of Gautama Buddha). The first dictionary translation of “sati” into “mindfulness” dates to 1921 (Davids & Stede 1921, 2001 cited in Siegel et al., 2008) The description of mindfulness, which was defined by western physicians and psychologists, had studied from Buddhism – Maha Satipatthana Sutta (Bishop, 2002: 74; Goldin, 2001; Kabat-Zinn, 2003). For over 40 years, Buddhist traditions have taken root in the West to one degree or another. (Bachelor, 1994; Fields, 1992 cited in Kabat-Zinn, 2003). Mindfulness in the clinical applications has been initiated by Mindfulness-Based Stress Reductions (MBSR), a program originally developed by Dr. Jon Kabat-Zinn, the University of Massachusetts Medical Center. The MBSR program has its approach on decreasing the pain-related drug utilization and increasing activity levels and feelings of self-esteem for a majority of participants (Center for Mindfulness, 2014). Mindfulness in the contemporary psychological applications has been adopted and applied by many innovative therapists as an intervention for increasing awareness and responding skillfully to mental processes so as to reduce psychological symptoms and increase health and well-being. These mindfulness-based interventions include Mindfulness-Based Cognitive Therapy (MBCT; Segal, Williams & Teasdale, 2002), Dialectical Behavior Therapy (DBT; Linehan, 1996), Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999), relapse prevention therapy (Parks, Anderson & Marlatt, 2001) and other variations on these approaches. Although these interventions apply different techniques in cultivating mindfulness skills, most common methods and instructions are directed to mindfulness exercises. For example, MBSR and MBCT mainly practice through meditation while DBT and ACT mainly practice through a wide variety of shorter daily activities. (Baer et al., 2006).

In recent years, psychologists have gone through many attempts to conceptualize the definition of mindfulness but until now it has not been defined
operationally or finalized a clearly definition (Bishop et al, 2004; Chiesa, 2012). In contemporary psychology, however, mindfulness is usually involved with 3 constituents (Kabat-Zinn, 1998; Segal, Williams, & Teasdale, 2002 cited in Bishop et al., 2004, German 2005; Moss 2008; Bohlmeijer et al., 2011):

1. a sense of awareness / a self-regulation of attention

2. a sense of awareness to the ongoing experience / immediate experience

3. a sense of awareness to the ongoing experience in a nonelaborative, nonjudgmental, present-centered awareness in which each thought, feeling, or sensation that arises in the attention field is acknowledged and accepted as it is.

Baer and colleagues (2008) suggested that the constructs of mindfulness should consist of 5 skills or facets: observing, describing, acting with awareness, nonjudging of inner experience and nonreactivity to inner experience. Observing includes noticing or attending to internal and external experiences, such as sensations, cognitions, emotions, sights, sounds and smells; describing indicates the ability to explain or describe internal experiences with words; acting with awareness refers to a sense of awareness of the ongoing experience, which is contrasted with an automatic behavior. Nonjudging of inner experience refers to the nonassessment of our thoughts and feelings whether it is right or wrong and nonreactivity to inner experience is to let our thoughts and feelings come and go. These 5 skills or facets are the constructs of mindfulness this study aims to measuring.

**Basic Vipassana Practice**

As mentioned above, vipassana practice has been widely offered in Thailand. The vipassana practice follows the guidelines described in the Tipitaka (Buddha’s Teachings) under the topic of “Satipatthana Sutta - the four-fold of Satipatthana”, comprising of body (กาย), feeling (เวทนา) mind (จิต) and dhamma (ธรรม). By practicing “Sati” continuously, the practitioner will reach the ultimate benefits which are the purification of beings, the overcoming of sorrow and lamentation, the extinguishing of suffering and grief, the entering of the right path, and the attainment of nibbana (Punyanubhab, 1996). The guidelines described in the Tipitaka is available for each individual to apply into one’s own techniques that will match with the characteristics, value, social, culture, demographics, and the like of each individual. Currently, there are a huge number of vipassana practicing programs offered throughout the world, such as vipassana meditation as taught by S. N. Goenka in the tradition of Sayagyi U Ba Khin, Dhamma Dhara Vipassana Meditation Center in Massachusetts USA, Dhamma Vaddhana Vipassana Meditation Center in California USA, Dhamma Siri Vipassana Meditation Center in Texas USA, Vipassana Dhamma Sumeru in Switzerland, Dhamma Dipa Vipassana Meditation Centre in United Kingdom, Dhamma Dvara Vipassana Meditation Centre in Germany, Dhamma Neru Vipassana Meditation Centre in Spain, Ontario Vipassana Centre in
Canada, Vipassana Meditation Practice at Watmahathat in Thailand, Basic Vipassana Meditation by Khun Mae Dr. Siri Krinchai, etc.

There are many programs offered in Thailand. This study has its interest in studying the effect of Basic Vipassana Meditation course developed by Khun Mae Dr. Siri Krinchai. The course follows the Great Buddha’s Teaching of the Four-Fold, Satipatthana Practice, which was later carried on by many Venerable Myanmar monks until Venerable Bhaddanta Asabhamahathera Akkhamahakammathanachariya, the principle of Bhaddanta Asabharam Temple and Sommit-Pranee (Chonburi province) Vipassana Office. He was praised for the Master of Vipassana Practice in Thailand or Four-Fold Satipatthana - Rising and Falling (Phattanta, 2011).

One of the Thai famous disciples of Venerable Bhaddanta Asabhamahathera was Venerable MahaChodok Yannasiddhi who was the Vipassana teacher of Khun Mae Dr.Siri Krinchai. Firstly, Venerable MahaChodok had set a direction of training Basic Vipassana Practice as a 21-day course. Owing to the current living lifestyle, Khun Mae Dr.Siri intended to reduce from 21-day program to 7 nights & 8 days program by increasing the intense of regulation, such as the participants need to be more mindful in observing internal experience by not communicating to other participants in any form during the practice whether it is by word of mouth, eye contact or body gesture.

The essential or fundamental of practicing this Basic Vipassana Practice Program is mainly to practice through the sitting, walking gesture and daily activities.

(1) Sitting gesture: Physically, one learns to know the movement of rising and falling on the abdomen along the breathe; with mentally, the person learns to sustain the attention to the movement of the abdomen and brings back the attention if the mind wanders without worrying, judging of the thoughts, or feeling frustrated.

For example, the participants will be taught to sit in a comfortable manner, close eyes and try to keep the mind on the abdomen and feel the movement of rising and falling of it. If the movement is not clear, place the hands on the abdomen and feel the rising and falling again. Sometimes the feeling is lost, it’s alright, just bring back the attention to the rising and falling again. Participants don’t have to worry because the rising and falling is always present and there is no need to look for it. After a short practice, the feeling of the upward movement of inhalation may become clear, then make a mental note of rising for the upward movement, falling for the downward movement. Normally, participants are not concerned with the form of the abdomen but the sensation of the pressure caused by the heavy movement of the abdomen. They are taught to be aware only the movement of the rising and falling of the abdomen not the repeated words and try to avoid deep breath in order to make the rising and falling become clearer because they will be easily tired. Just be aware of the movement as it occurs.

(2) Walking gesture: Physically, one learns to walk with consciousness or progression with full consciousness, and mentally, he or she learns to sustain the attention to the movement while walking and bring back the attention if the mind wanders without worrying, judging of the thoughts, or feeling frustrated.
For example, while walking, the participants will have the consciousness of walking, and while standing, they will have the consciousness of standing as well as the action of turning around. Athakatha Visuddhimagga, which was composed by Phra Buddhaghosajara, has explained about “walking with consciousness” and divided it into 6 steps as follows:

Stage 1: Right foot is proceeding, left foot is proceeding (Vitiharana)

Stage 2: Lift the foot (Adiharana), step down (Vossajjara)

Stage 3: Lift the foot (Adiharana), move the foot (Vitiharana), step down (Vossajjara)

Stage 4: Lift the heel (Uddhrana), lift the foot (Adiharana), move the foot (Vitiharana), step down (Vossajjara)

Stage 5: Lift the heel (Uddhrana), lift the foot (Adiharana), move the foot (Vitiharana), lower the foot (Vossajjara), touch the ground (Sannikkhepna)

Stage 6: Lift the heel (Uddhrana), lift the foot (Adiharana), move the foot (Vitiharana), lower the foot (Vossajjara), touch the ground (Sannikkhepna), press the ground (Sannirumbhana)

In each stage, participants learn to make a mental note for each action. In stage 1, for example, participants make a mental note of “right foot is proceeding” while moving their right foot forward and “left foot is proceeding” while moving left foot forward, etc.

During practicing, ones need to be aware of other mental functions and feelings, such as thinking, imagining, wandering, reflecting, speaking, seeing, painful, sleepy, etc. They cannot be disregarded and must be made of each as it occurs.

(3) Daily Activities: The participants will also be taught to apply those techniques into their daily activities. For example while eating, they need to know the movement of the hands and mouth, etc. (physical aspect) and realize the feeling of hunger (mental aspect).
Basic Vipassana Practice and Mindfulness

Many studies have found the effect of mindfulness or meditation practice on increasing mindfulness and well-being (Montero-Marín, et al., 2016). As mentioned above, the practices have been mainly used to cultivate skills in switching or bringing back attention to the breath, thoughts or feelings, and skills in learning to experience thoughts, feelings and emotions as mental events that pass by (Píattanta, 2011, Bishop et al., 2004). This study has its focus on basic vipassana practice and would like to examine the effect of the basic vipassana practice on the 5-facet mindfulness. Therefore it can be hypothesized that the Basic Vipassana Practice helps to induce mindfulness as a whole, and on each facet of the mindfulness including observing, describing, acting with awareness, nonjudging of inner experience, and nonreactivity to inner experience.

Method

Participants:

This study collected data from participants at the meditation center in Phitsanulook province. At first, there were 73 persons sent their requests for the enrollment of the training course. Of these 73 persons, 57 persons actually showed up and registered for the course. The program was held at Poonsook Residence Hotel on April 18 – 25, 2015.

Measurement/Tools

Many Western educators have been developing questionnaires for measuring the quality and level of mindfulness. Examples of current utilizing questionnaires include: the Freiburg Mindfulness Inventory (FMI; Buchheld, Grossman, & Walach, 2001), the Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003), the Kentucky Inventory of Mindfulness Skills (KIMS; Baer et al., 2004), the Cognitive and Affective Mindfulness Scale (CAMS; Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2004), the Mindfulness Questionnaire (MQ; Chadwick, Hember, Mead, Lilley, & Dagnan, 2005) and the Five Facet Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). Among these instruments, FFMQ is considered as the most inclusive one, being developed by segregating mindfulness skills into 5 facets which include observing, describing, acting with awareness, nonjudging of inner experience and nonreactivity to inner experience (Baer et al., 2008). Up to now, FFMQ Questionnaire has been the most widely used to measure mindfulness quality (Hou et al., 2014).

The 5 Facet Mindfulness Questionnaire in this study is in short form (FFMQ-SF), which was developed and validated by Bohlmeijer and others (2011). Operational definitions of each facet of mindfulness and examples of the questionnaire items are shown in Table 1. There are 24 items from 39 which was originally developed and validated by Baer et al. (2006, 2008 – the 39-item Five Facet Mindfulness Questionnaire, FFMQ). The questionnaire used 5-point Likert rating
scale, ranging from never or very rarely true (1) to very often or always true (5). Higher scores represent higher level of mindfulness.

**Table 1** Example Questions of Mindfulness Questionnaire

<table>
<thead>
<tr>
<th>Facet</th>
<th>Example Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observing: noticing/attending to internal and external experiences, such as sensations, cognitions, emotions, sights, sounds and smells</td>
<td>I pay attention to physical experiences, such as the wind in my hair or sun on my face.</td>
</tr>
<tr>
<td>Describing: the ability to explain or describe internal experiences with words</td>
<td>I am good at finding words to describe my feelings.</td>
</tr>
<tr>
<td>Acting with awareness: a sense of awareness or consciousness of the ongoing experience</td>
<td>I find myself doing things without paying attention. (R)</td>
</tr>
<tr>
<td>Nonjudging of inner experience: the nonassessment of our thoughts and feelings whether it is right or wrong</td>
<td>I tell myself I shouldn’t be thinking the way I’m thinking. (R)</td>
</tr>
<tr>
<td>Nonreactivity to inner experience: to let our thoughts and feelings come and go</td>
<td>When I have distressing thoughts or images, I don’t let myself be carried away by them.</td>
</tr>
</tbody>
</table>

NOTE: R = reverse-scored question (higher scores represent lower levels of mindfulness)

**Data Collection**

Participants were asked to answer questionnaire before practicing the Basic Vipassana, as pretest and after 7-day practice, as post test.

Pre-test: The 5-Facet Mindfulness Questionnaire (FFMQ – SF) were handed out to all 57 participants, on April 18, 2015 at 08.00 - 09.00 am. All participants received the questionnaires together with their registration form. Responses were returned together with the filled-in forms before the course began.

Post-test: The same 5-Facet Mindfulness Questionnaire (FFMQ – SF) were distributed to all 57 participants in the practicing room the moment that the course was at the end, which was on April 24, 2016 at 15.00 -16.00 pm.

Of these 57 pre-test and post-test returned questionnaires, the completed and appropriate filled-out responses were 47 sets.

**Results**

**Characteristics of the participants**
Using descriptive statistics to analyze demographic data, it was found that most of the participants were women (42 women or 89.4%), the age is varied from 22 to 60 years old, most of which were between 46-55 years old (22 persons or 46.8%).

The differences of mindfulness levels between before and after practice

Data analysis using simple t-test to test the differences of mindfulness levels measured before (as pre-test) and after (as post-test) attending the basic vipassana practice resulted that the Basic Vipassana Practice significantly induced mindfulness as a whole ($\bar{x}_{pre-test} = 74.85, \bar{x}_{post-test} = 80.87, t = -3.400, p < 0.001$). In addition, the effect of the Basic Vipassana Practice on each facet of Mindfulness, as summarized in Table 2, indicated that:

1. The Basic Vipassana Practice significantly induced the observing facet.
   
   ($\bar{x}_{pre-test} = 13.43, \bar{x}_{post-test} = 14.66, t = -2.911, \ p < 0.01$)

2. The Basic Vipassana Practice did not significantly induce the describing facet.
   
   ($\bar{x}_{pre-test} = 16.83, \bar{x}_{post-test} = 17.60, t = -1.288, \ p = 0.204 \text{ or } .05$)

3. The Basic Vipassana Practice significantly induced the acting with awareness facet.
   
   ($\bar{x}_{pre-test} = 15, \bar{x}_{post-test} = 17.64, t = -2.962, \ p < 0.01$)

4. The Basic Vipassana Practice significantly reduced the nonjudging of inner experience.
   
   ($\bar{x}_{pre-test} = 13.77, \bar{x}_{post-test} = 12.43, t = 2.120, \ p = 0.039$)

5. The Basic Vipassana Practice significantly induced the nonreactivity to inner experience
   
   ($\bar{x}_{pre-test} = 15.81, \bar{x}_{post-test} = 18.55, t = -4.626, \ p < 0.001$)

The results strongly supported the effects of vipassana practice on inducing mindfulness level as a whole, and on the 3 mindfulness facets: observing, acting with awareness, and nonreactivity to the inner experience. However, results found no difference of mindfulness on the describing facet and found the decrease of mindfulness level after vipassana practice on the facet of nonjudging of inner experience.

Table 2 Inferential Statistics by t-test comparing between pre-test and post-test

<table>
<thead>
<tr>
<th>Facets of Mindfulness</th>
<th>$\bar{x}_{pre-test}$</th>
<th>$\bar{x}_{post-test}$</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>Sig.</th>
</tr>
</thead>
</table>

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The differences of mindfulness levels between male and female participants

Data analysis using simple t-test to test the difference of mindfulness levels of male and female participants during before (as pre-test) and after (as post-test) attending the basic vipassana practice, showed that there was no difference in mindfulness level between male and female before the practices (pre-test: $\bar{x}_{\text{male}} = 73.00$, $\bar{x}_{\text{female}} = 75.05$, $t < 1, p > .05$). However, after practice, female participants reported higher mindfulness level as a whole (5 facet) as compare to the level of male (post-test: $\bar{x}_{\text{male}} = 75.17$, $\bar{x}_{\text{female}} = 81.65$, $t = 2.063, p < .05$).

Conclusions and Discussions:

The results of this study strongly supported the significant effect of Basic Vipassana Practice on inducing mindfulness levels, particularly on 3 facets: observing, acting with awareness, and nonreactivity to inner experienced. The findings clearly support the use of vipassana practice to prepare ordinary people to learn, move and work with caution and positive or no feeling. The results could also support the success of mindfulness practice programs in inducing psychological well-being and reducing stress (Camody and Baer, 2007) as well as enhancing relationship (Carson et al., 2004).

However, this study found 2 diverse results of the effect of vipassana practice on 2 facets of mindfulness: (1) there was nonsignificant effect on the describing facet of mindfulness, and (2) there was significant negative effect on the nonjudging of the inner experience facet of mindfulness.

In vipassana practice program, participants were not allowed to communicate to one another in any form, such as word by mouth, eye contact and body gesture. It was the intention of the course to introduce this iron regulation because normally the Basic Vipassana Practice took 21 days while this program took only 7 nights & 8 days. This regulation was to allow all the participants to experience the observation of their internal thoughts and feelings clearly. Describing is not in this concern. Also, the post-test questionnaires had been handed out to all the participants to fill in the moment they had just finished the course while they still did not allow to talk to other.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
<th>(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total – 5 facet</td>
<td>74.85</td>
<td>80.87</td>
<td>-3.400</td>
</tr>
<tr>
<td>Observing</td>
<td>13.43</td>
<td>14.66</td>
<td>-2.911</td>
</tr>
<tr>
<td>Describing</td>
<td>16.83</td>
<td>17.60</td>
<td>-1.288</td>
</tr>
<tr>
<td>Acting with awareness</td>
<td>15</td>
<td>17.64</td>
<td>6.106</td>
</tr>
<tr>
<td>Nonjudging of inner experience</td>
<td>13.77</td>
<td>12.43</td>
<td>4.335</td>
</tr>
<tr>
<td>Nonreactivity to inner experience</td>
<td>15.81</td>
<td>18.55</td>
<td>4.067</td>
</tr>
</tbody>
</table>
participants. Thus, the mindfulness level on the describing facet had not changed much enough to indicate the difference.

Regarding the negative effect of vipassana practice was found in this study on the nonjudging of the inner experience facet, which indicated that participants reported lower mindfulness level after attending the vipassana practice. First, from literature review, there are 2 misunderstanding viewpoints about stop thinking or nonjudging: (1) to stop thinking, people tend to force themselves to stop, and if they could not stop thinking, they would blame themselves or feel frustrated (Wongpiromsarn Yongyud and Padminton Indhira, 2014); and (2) the abilities to detect and control the thoughts and make judgement is more active especially right after finishing the practicing program. Therefore, the mindfulness level on the nonjudging was found lower on the post-test as compared to the pre-test. Second, as mentioned earlier, the final goal of the Basic Vipassana Practice is to bring the participants to reach the highest benefits of human birth which is the purification of beings, the overcoming of sorrow and lamentation, the extinguishing of suffering and grief, the entering of the right path and the attainment of nibbana (Punyanubhab, 1996: 336). It is possible that the participants were taught to consider their thoughts deeper in order to find the root causes of the thoughts whether each came from the Lust, Hatred or Illusion. So the nonjudging of the inner experience became lower after vipassana practice.

**Limitations and Suggestions**

First, this experimental research has its limitation on studying a small number of various types of people who volunteered to attend the vipassana practice, future study should be conducted with more participants under the control of demographic characteristics. Second, the purpose of the study is to measure the effect of Basic Vipassana Practice on the level of mindfulness by using the 5-Facet Mindfulness Questionnaire – short form as an instrument. The questionnaire was developed by Western psychologists and in this study, it was used to test with eastern people, who have different backgrounds, demographic geographies, culture, education, etc. The questionnaire was also translated into Thai language. Although the translation was proved, this translated version of mindfulness questionnaire still needs to be reexamined its measurement qualities, particularly reliability on other groups of Thai people. Third, according to the opposite result and probably the misunderstanding or different understanding on the nonjudging of inner experience facet, future studies should clarify the objective of the basic vipassana practice if it overcomes the nonjudge of inner experience level of mindfulness but instead turn to judge with understanding the reality and having equanimity.

**References**

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Psoriasis Undergoing Phototherapy (UVB) and Photochemotherapy (PUVA). Psychosomatic Medicine 60: 625-632.


Higher Education in India and Thailand: A Comparative Study of Some Aspects

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Abstract

The present world is a globalized world where every country is developing itself by learning from other countries. Whatever growth and development are achieved by a country in higher education are also the result of learning and replicating the good practices of other countries. The same applies to India and Thailand. The present paper is an attempt to highlight the higher education system in two Asian countries of India and Thailand and to compare some aspects of higher education in the two countries. Thus, objectives of the study are to highlight and compare types of higher education institutions in India and Thailand, gross enrolment ratio (GER) at tertiary level, gross graduation ratio at tertiary level and positions of India and Thailand in Asian University Ranking and Ranking of World Universities. The study adopts a descriptive method of study. Data about higher education in the two countries were collected from secondary sources mainly from various internet sources. Data are presented in a tabular form for clarity, analysis and interpretation. The study found that: (i) There is no much difference in the broad classification of Higher Education Institutions (HEIs) in India and Thailand, (ii) India has more universities in terms of number as well as student population at tertiary level but Thailand has more universities in terms of university-population ratio, (iii) Gross Enrolment Ratios (GERs) in tertiary education for 5 consecutive years from 2011 to 2015 are higher and better in Thailand than in India (iv) Gross Graduation Ratio in tertiary education is higher and better in India than in Thailand. In both the countries, female’s Gross Graduation Ratios (GGRs) are higher than that of male’s GGRs, (v) The highest rank acquired by India in the 2017 Asian University Ranking is 50th followed by 69th and 71st ranks while Thailand captures 40th rank followed by 51st and 62nd ranks, (vi) The ranks captured by top 5 universities of Thailand in the "Webometrics Ranking of World Universities - January 2017 are higher and better than that of India, (vii) Parameter-wise, universities of Thailand are much better than their counterparts in India on the parameters of Presence and Impact whereas Indian universities are much better than that of Thailand on the parameters of Openness and Excellence and (viii) In Times Higher Education World University Rankings 2016-2017 and in QS World University Rankings 2016-2017, Indian universities fare better than universities in Thailand.

Keywords: Higher education institutions, India, Thailand, Universities, Ranking.
1. Introduction

India and Thailand are the two Asian countries with population of 1,311,051 thousands and 67,959 thousands respectively as in 2015. While India has student population of 119,469,982, Thailand has 4,575,455 students at tertiary level by 2015 (http://uis.unesco.org/en/country/in). Thus, there are differences of 12,43,092 thousands in the total population and 1,14,894 thousands in the student population at tertiary level.

In India, the Department of Higher Education, Ministry of Human Resource Development (MHRD) is responsible for the overall development of the basic infrastructure of Higher Education sector, both in terms of policy and planning. Under a planned development process, the Department looks after expansion of access and qualitative improvement in the Higher Education, through world class Universities, Colleges and other Institutions (Department of Higher Education, MHRD, GOI). Higher Education in India is the shared responsibility of both the Centre and the States. The coordination and determination of standards in Universities and Colleges is entrusted to the University Grants Commission (UGC) and other statutory regulatory bodies. The Central Government provides grants to the UGC and establishes Central Universities and Institutions of National Importance in the country. The Central Government is also responsible for declaring an educational institution as "Deemed-to-be University" on the recommendations of the UGC.

Tertiary education in Thailand is offered at universities, institutes of technology (known collectively as the Rajamangala Institute), vocational and technical colleges, teachers colleges (known collectively as the Rajabhat Institute), and other professional colleges such as nursing colleges, and police and military academies.

The Ministry of Education, through the Office of the Higher Education Commission, regulates and oversees all state universities and private institutions of higher education, vocational and technical colleges, and teacher training colleges. Specialized training institutions fall under the purview of the relevant ministries, such as: tourism and sport, culture, defense, transport, and public health (Clark, 2014).

The present world is a globalized world where every country is developing itself by learning from other countries. Whatever growth and development are achieved by a country in higher education are also the result of learning and replicating the good practices of other countries. The same applies to India and Thailand also. The present paper is an attempt to highlight the higher education system in two Asian countries of India and Thailand and to compare some aspects of higher education in the two countries.

2. Objectives of the Study

1) To highlight and compare types of higher education institutions in India and Thailand
2) To highlight and compare gross enrolment ratio (GER) at tertiary level in India and Thailand
3) To highlight and compare gross graduation ratio at tertiary level in India and Thailand
4) To highlight and compare the positions of India and Thailand in Asia and World Rankings of Universities

3. Methodology of the Study

The present study adopts a descriptive method of study. Data about higher education in the two countries were collected from secondary sources mainly from various internet sources. Data are presented in a tabular form for clarity and percentages are mainly used for analysis of data.

4. Presentation and Analysis of Data

4.1. Types of Higher Education Institutions (HEIs) in India and Thailand

<table>
<thead>
<tr>
<th>India</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Broad Types</strong></td>
<td><strong>Broad Types</strong></td>
</tr>
<tr>
<td>Universities</td>
<td>799</td>
</tr>
<tr>
<td>Colleges</td>
<td>39071</td>
</tr>
<tr>
<td>Stand-Alone Institutions</td>
<td>11923</td>
</tr>
<tr>
<td>TOTAL</td>
<td>51793</td>
</tr>
</tbody>
</table>


*** http://education.stateuniversity.com/pages/1529/Thailand-HIGHER-EDUCATION.html

Higher education institutions in India are mainly categorized into: Universities, Colleges and Stand-Alone Institutions whereas in Thailand, the institutions are basically categorized into Universities, Colleges and Institutes. While India has 799 universities, Thailand has 153/155 universities. Total number of higher education
institutions in India is 51793 whereas the total number is only 780 in Thailand. The university-level institutions in the two countries are basically categorized as shown in the following tables:

Table 4.1.2: Types of Universities in India

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Break-up of University Level Institutions</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Central Open University</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Central University</td>
<td>43*</td>
</tr>
<tr>
<td>3</td>
<td>Deemed University- Government</td>
<td>32</td>
</tr>
<tr>
<td>4</td>
<td>Institution Under State Legislature Act</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Institutions of National Importance</td>
<td>75</td>
</tr>
<tr>
<td>6</td>
<td>Deemed University- Private</td>
<td>79</td>
</tr>
<tr>
<td>7</td>
<td>State Private University</td>
<td>197</td>
</tr>
<tr>
<td>8</td>
<td>State Open University</td>
<td>13</td>
</tr>
<tr>
<td>9</td>
<td>State Public University</td>
<td>329</td>
</tr>
<tr>
<td>10</td>
<td>State Private Open University</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Deemed University- Government Aided</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>Others</td>
<td>13</td>
</tr>
<tr>
<td>13</td>
<td><strong>Grand Total</strong></td>
<td><strong>799</strong></td>
</tr>
</tbody>
</table>

Source: AISHE 2015-16

*No. of Central University has come up to 47 by 2017.

Central Universities are established through Acts of Parliament and State Universities through State Legislatures. Deemed-to-be University is a status of autonomy granted by the Department of Higher Education on the advice of the UGC, under Section 3 of the UGC Act, 1956 for work of high quality in specialized academic fields. Institutions of National Importance are institutions established, or so designated, by Acts of Parliament. They fall under the administrative control of the Department of Higher Education. These Institutions undertake teaching and research in areas that are critical to national development.

Higher Education Institutions (HEIs) in Thailand are mainly composed of universities, colleges and institutes of various courses. The main types of universities are as given in the following table:

Table 4.1.3: Types of Universities in Thailand

<table>
<thead>
<tr>
<th>Types of Universities</th>
<th>No. of Universities</th>
<th>No. of Unv.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Universities</td>
<td>16 (Traditional)</td>
<td>80</td>
</tr>
<tr>
<td>Public Autonomous Universities</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Rajabhat Universities (Public)</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Rajamangala Universities of Technology (Public)</td>
<td>09</td>
<td></td>
</tr>
<tr>
<td>Private Universities</td>
<td>72</td>
<td>75</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>153</strong></td>
<td><strong>155</strong></td>
</tr>
</tbody>
</table>
**Public universities:** Universities in Thailand that had been established in the initial period were public universities, holding a status of a department, and were allocated annual budget for their operation. Personnel, financing and general administration of the universities have to entirely comply with the bureaucratic system. Apart from receiving budget from the government, a university president receives privileges equivalent to those of a director general who is the top executive at the departmental level.

**Public autonomous universities:** Public autonomous universities have their own administrative structure and budgeting system for self-governance and full autonomy, allowing decision making on administrative and management matters of the university to be handled by the university itself. Autonomous universities also receive regular budget allocation from the government in the form of block grants. The university employees are entitled to receive privileges no less than government officers are entitled to.

**Rajabhat Universities (public):** Rajabhat Universities were upgraded from Rajabhat Institutes to university status in June 2004. Rajabhat Universities are degree granting institutions that focus on community development. Their missions are to promote and enhance academic and higher vocational teaching and learning, undertake research, produce and promote teachers’ qualifications and standards, and provide other academic and learning services for their communities. Since Rajabhat Universities were developed from teacher colleges, each of them has a strong history of offering bachelor’s degree programmes in teacher education.

**Rajamangala Universities of Technology (public):** Rajamangala Universities of Technology were upgraded to university status and were previously Rajamangala Institutes of Technology. The Rajamangala Institutes of Technology were first established under the name of ‘Institutes of Technology and Vocational Education’ in 1975 by a combination of different vocational colleges. The former 40 campuses of Rajamangala Institute of Technology have been merged into 9 Rajamangala Universities of Technology emphasizing the development of graduates in science and technology.

**Private universities:** The establishment of private universities needs to comply with the Private Higher Education Act. A private higher education institution has the right and authority to provide higher education equivalent to the public universities. Each private institution has its own council which is the administrative body responsible for the general functioning of the institution as well as organizing its internal administrative structure. Private universities are not entitled to receive budget allocation from the government. Thus, support for institutional operation comes from their own revenue. However, Office of the Higher Education Commission (OHEC) has provided private universities with revolving fund allowing them to borrow with low interest rate for the purpose of educational development.
Comparison

There is no much difference in the broad classification of HEIs in India and Thailand. Although the types of Universities in the two countries presented in the above tables look different, their nature appears to be not much different. The absence of open universities in table 1.2 does not necessarily mean that Thailand does not have any open university. What we call in India ‘Institutions of National Importance’ and what Thailand calls ‘Rajamangala Universities of Technology (public)’ are almost of the same nature.

By 2015, India has 799 universities and a population of 1,311,051 thousands whereas Thailand has 155 universities for a population of 67,959 thousands <http://uis.unesco.org/en/country/in>. These imply that while India has 1 university for 2 million people, Thailand has 4 for 2 million people. Thus, India has more universities in terms of number but Thailand has more universities in terms of university-population ratio.

Again, India has 51793 HEIs for a student population of 119469.982 thousands at tertiary level whereas the number of institutions offering some type of higher education in Thailand for a student population of 4575.455 thousands is 780 & <http://education.stateuniversity.com/pages/1529/Thailand-HIGHER-EDUCATION.html>. These indicate that while India has 433 HEIs for 1 million student population at tertiary level, Thailand has 170 HEIs for 1 million students. Hence, India has more HEIs than Thailand in terms of number as well as student population at tertiary level.

4.2. Gross Enrolment Ratio (GER) in Tertiary Education

Table 4.2.1: Tertiary Education: GER (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>22.86</td>
<td>19.98</td>
<td>25.49</td>
<td>52.75</td>
<td>58.95</td>
<td>46.58</td>
</tr>
<tr>
<td>2012</td>
<td>24.37</td>
<td>-</td>
<td>-</td>
<td>51.57</td>
<td>58.39</td>
<td>44.79</td>
</tr>
<tr>
<td>2013</td>
<td>23.89</td>
<td>23.06</td>
<td>24.64</td>
<td>51.38</td>
<td>58.86</td>
<td>43.95</td>
</tr>
<tr>
<td>2014</td>
<td>25.54</td>
<td>25.31</td>
<td>25.74</td>
<td>52.51</td>
<td>60.03</td>
<td>45.04</td>
</tr>
<tr>
<td>2015</td>
<td>24.5*</td>
<td>23.5*</td>
<td>25.4*</td>
<td>48.86</td>
<td>57.28</td>
<td>40.52</td>
</tr>
</tbody>
</table>

Source: http://uis.unesco.org/en/country/in

*mhrd.gov.in/sites/upload_files/mhrd/files/statistics/AISHE2015-16.pdf*

Table 4.2.1 reveals that GERs in tertiary education for 5 consecutive years from 2011 to 2015 are higher and better in Thailand than in India as the range of GER for Thailand is 48.86% to 52.75% while it is only 22.86% to 25.54% in India. Again, Thailand is much better than India in terms of female’s GER. While female students of HEIs in Thailand constitute almost 60% of the total enrolment, female students in
India constitute less than 25% of the total enrolment in HEIs. Another marked difference is that in Thailand, female’s GERs in higher education during the five consecutive years are higher than GERs of their male counterparts whereas in India, female’s GERs are lower than male’s GERs.

4.3. Gross Graduation Ratio in Tertiary Education

Table 4.3.1: Tertiary Education: Gross Graduation Ratio. ISCED 6* and 7*. First Degrees (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>India</th>
<th></th>
<th></th>
<th>Thailand</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Female</td>
<td>Male</td>
<td>Total</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>2013</td>
<td>31.23</td>
<td>32.4</td>
<td>30.17</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2014</td>
<td>26.43</td>
<td>28.1</td>
<td>24.92</td>
<td>20.04</td>
<td>24.88</td>
<td>15.2</td>
</tr>
<tr>
<td>2015</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>26.99</td>
<td>33.1</td>
<td>20.89</td>
</tr>
</tbody>
</table>

Source:

*According to the International Standard Classification of Education (ISCED) 2011, ISCED level 6 is Bachelor’s or equivalent level and ISCED level 7 is Master’s or equivalent level.

Table 4.3.1 reveals that Gross Graduation Ratio in tertiary education (Bachelor’s or equivalent level and Master’s or equivalent level) is higher and better in India than that in Thailand. In both the countries, female’s Gross Graduation Ratios (GGRs) are higher than that of male’s GGRs.

4.4. Position of India and Thailand in University Rankings

Table 4.4.1: Top Ten Universities of India and Thailand in 2017 Asian University Ranking and Their Ranks

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>India</th>
<th></th>
<th></th>
<th>Thailand</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank</td>
<td>University</td>
<td></td>
<td>Rank</td>
<td>University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 50</td>
<td>Indian Institute of Technology (IIT), Bombay</td>
<td>40</td>
<td>Kasetsart University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 69</td>
<td>IIT, Kanpur</td>
<td>51</td>
<td>Chulalongkorn University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 71</td>
<td>IIT, Madras</td>
<td>62</td>
<td>Mahidol University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 74</td>
<td>University of Delhi</td>
<td>79</td>
<td>Chiang Mai</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 110</td>
<td>IIT, Delhi</td>
<td>85</td>
<td>Khon Kaen University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 135</td>
<td>VIT University</td>
<td>93</td>
<td>Prince of Songkla University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 169</td>
<td>Lovely Professional University</td>
<td>137</td>
<td>Thammasat University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 170</td>
<td>Sampurnanand Sanskrit</td>
<td>190</td>
<td>King Mongkut’s</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.4.1 reveals that the highest rank acquired by India in the 2017 Asian University Ranking is 50th followed by 69th and 71st ranks while Thailand captures 40th rank followed by 51st and 62nd ranks. When we compare the ranks occupied by the 5th, 6th and 7th top ten universities in both the countries, universities in Thailand do better by getting higher ranks of 85th, 93rd and 137th whereas the ranks in the case of Indian universities are 110th, 135th and 169th. Among the top ten universities occupying 4th, 8th, 9th and 10th positions in both the countries, the ones from India do better by occupying higher ranks of 74th, 170th, 181st and 186th respectively whereas the ranks occupied by those universities in Thailand are 79th, 190th, 192nd and 197th respectively. As a whole, 6 among the top ten universities in Thailand capture higher and better ranks in University Asia Ranking than their counterparts in India. This implies that universities in Thailand are better than universities in India particularly on the parameters used for the said ranking.

Table 4.4.2: India’s Position in the "Webometrics Ranking of World Universities - January 2017"
Table 4.4.3: Position of Thailand in the "Webometrics Ranking of World Universities - January 2017

<table>
<thead>
<tr>
<th>Rank-ing</th>
<th>World Rank</th>
<th>University</th>
<th>Presence Rank*</th>
<th>Impact Rank*</th>
<th>Openness Rank*</th>
<th>Excellence Rank*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>433</td>
<td>Mahidol University</td>
<td>147</td>
<td>404</td>
<td>841</td>
<td>658</td>
</tr>
<tr>
<td>2</td>
<td>452</td>
<td>Chulalongkorn Univ.</td>
<td>139</td>
<td>508</td>
<td>771</td>
<td>622</td>
</tr>
<tr>
<td>3</td>
<td>563</td>
<td>Kasetsart Univ</td>
<td>63</td>
<td>276</td>
<td>1721</td>
<td>1176</td>
</tr>
<tr>
<td>4</td>
<td>609</td>
<td>Chiang Mai Univ</td>
<td>150</td>
<td>399</td>
<td>2048</td>
<td>983</td>
</tr>
<tr>
<td>5</td>
<td>651</td>
<td>Khon Kaen Univ</td>
<td>24</td>
<td>551</td>
<td>2001</td>
<td>1031</td>
</tr>
</tbody>
</table>


The above tables show that the ranks captured by top 5 universities of Thailand in the "Webometrics Ranking of World Universities - January 2017 are higher and better than that of India. Moreover, the ranks of 433 and 452 obtained by the top 2 universities of Thailand namely Mahidol University and Chulalongkorn University are higher than the rank of 511 occupied by the top university of India namely IIT, Bombay. The rank occupied by each of the top 5 universities of Thailand is higher and better than the rank occupied by each corresponding university of India.

Parameter-wise analysis of top 5 universities in India and Thailand reveals that on the parameters of Presence and Impact, universities of Thailand are much better than their counterparts in India whereas Indian universities are much better than that of Thailand on the parameter of Openness. On the parameter of Excellence, top 5 Indian universities except one do better than their counterparts in Thailand. However, Chulalongkorn University, no. 2 in the top 5 universities of Thailand gets the highest rank among the top 5 Thai universities on the parameter of Excellence and its rank is also better than the rank occupied by IIT, Kanpur, the corresponding no. 2 in the top 5 universities of India. As a whole, universities of Thailand do better than universities of India based on the criteria or parameters used in the "Webometrics Ranking of World Universities.

Table 4.4.4: Position of Universities in India and Thailand in the Times Higher Education World University Rankings 2016-2017

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>India Rank</th>
<th>India University</th>
<th>Thailand Rank</th>
<th>Thailand University</th>
</tr>
</thead>
</table>

597
In the Times Higher Education World University Rankings 2016-2017, all the top 5 universities in India namely, IISc, Bangalore, IIT, Bombay, IIT, Delhi, IIT, Kharagpur and IIT, Madras are above the top university of Thailand, i.e., Mahidol University. While Indian top 5 universities are in the ranks between 251 to 500; top 5 universities in Thailand occupy the ranks between 501 to 800. The performance indicators used by the Times Higher Education are grouped into five areas which carry different weightages as follow: (i) Teaching (the learning environment) 30%, (ii) Research (volume, income and reputation) 30%, (iii) Citations (research influence) 30%, (iv) International outlook (staff, students and research) 7.5% and (v) Industry income (knowledge transfer) 2.5%. Indian universities are better in these areas than the universities in Thailand.

Table 4.4.5. Position of Universities in India and Thailand in the QS World University Rankings 2016-2017

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>India Rank</th>
<th>University</th>
<th>Thailand Rank</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>152</td>
<td>IISc, Bangalore</td>
<td>252</td>
<td>Chulalongkorn University</td>
</tr>
<tr>
<td>2</td>
<td>185</td>
<td>IIT, Delhi</td>
<td>283</td>
<td>Mahidol University</td>
</tr>
<tr>
<td>3</td>
<td>219</td>
<td>IIT, Bombay</td>
<td>551-600</td>
<td>Chiang Mai University</td>
</tr>
<tr>
<td>4</td>
<td>249</td>
<td>IIT, Madras</td>
<td>601-650</td>
<td>Thammasat University</td>
</tr>
<tr>
<td>5</td>
<td>302</td>
<td>IIT, Kanpur</td>
<td>701+</td>
<td>Kasetsart University</td>
</tr>
</tbody>
</table>

Source:

The QS World University Rankings is another famous exercise in ranking world universities. It uses the following six metrics for rankings and assign different weightage to each metric as follow: (i) Academic Reputation 40%, (ii) Employers Reputation 10%, (iii) Faculty-Student Ratio 20%, (iv) Citations per
faculty 20%, (v) International Faculty Ratio 5% and (vi) International Student Ratio 5%. In this ranking for 2016-2017, Indian universities again fare better than universities in Thailand. The ranks occupied by Indian universities namely, IISc, Bangalore, IIT, Delhi, IIT, Bombay and IIT, Madras are higher than the ones occupied by the top university of Thailand namely, Chulalongkorn University. Top 5 universities in India are in the ranks between 152 and 302 and top 5 universities in Thailand occupy the ranks between 252 and 701+.

5. Major Findings of the Study

5.1. Major Findings Relating to Types of Higher Education Institutions

1) There is no much difference in the broad classification of HEIs in India and Thailand. Types of universities in the two countries look different, but their nature appears to be not much different. What we call in India ‘Institutions of National Importance’ and what Thailand calls ‘Rajamangala Universities of Technology (public)’ are almost of the same nature.

2) India has more universities in terms of number but Thailand has more universities in terms of university-population ratio. While India has 1 university for 2 million people, Thailand has 4 for 2 million people.

3) India has more HEIs than Thailand in terms of number as well as student population at tertiary level. While India has 433 HEIs for 1 million student population at tertiary level, Thailand has 170 HEIs for 1 million students.

5.2. Major Findings Relating to Gross Enrolment Ratios (GERs)

4) Gross Enrolment Ratios (GERs) in tertiary education for 5 consecutive years from 2011 to 2015 are higher and better in Thailand than in India.

5) Thailand is much better than India in terms of female’s GER. While female students of HEIs in Thailand constitute almost 60% of the total enrolment, female students in India constitute less than 25% of the total enrolment in HEIs.

6) In Thailand, female’s GERs in higher education during five consecutive years of 2011 to 2015 are higher than GERs of their male counterparts whereas in India, female’s GERs are lower than male’s GER.

5.3. Major Findings Relating to Gross Graduation Ratio

7) Gross Graduation Ratio in tertiary education is higher and better in India than that in Thailand. In both the countries, female’s Gross Graduation Ratios (GGRs) are higher than that of male’s GGRs.
5.4. Major Findings Relating to the Positions of India and Thailand in Asia and World Rankings of Universities

Asia Rankings of Universities

8) The highest rank acquired by India in the 2017 Asian University Ranking is 50th followed by 69th and 71st ranks while Thailand captures 40th rank followed by 51st and 62nd ranks.

9) Among the top ten universities of both the countries occupying the 5th, 6th and 7th ranks, universities in Thailand do better than that in India by getting higher ranks.

10) Among the top ten universities occupying 4th, 8th, 9th and 10th positions in both the countries, the ones from India do better by occupying higher ranks.

11) As a whole, 6 among the top ten universities in Thailand capture higher and better ranks in 2017 Asian University Ranking than their counterparts in India. Universities in Thailand are better than that in India particularly on the parameters used for the said ranking.

World Rankings of Universities

Webometrics Ranking of World Universities - January 2017

12) The ranks captured by top 5 universities of Thailand in the "Webometrics Ranking of World Universities - January 2017 are higher and better than that of India.

13) The ranks of 433 and 452 obtained by the top 2 universities of Thailand namely Mahidol University and Chulalongkorn University are higher than the rank of 511 occupied by the top university of India namely IIT, Bombay.

14) The rank occupied by each of the top 5 universities of Thailand is higher and better than the rank occupied by each corresponding university of India.

15) Parameter-wise, universities of Thailand are much better than their counterparts in India on the parameters of Presence and Impact whereas Indian universities are much better than that of Thailand on the parameters of Openness and Excellence.

Times Higher Education World University Rankings 2016-2017

16) In Times Higher Education World University Rankings 2016-2017, all the top 5 universities in India namely, IISc, Bangalore, IIT, Bombay, IIT, Delhi, IIT, Kharagpur and IIT, Madras are above the top university of Thailand, i.e., Mahidol University. While Indian top 5 universities are in the ranks between 251 to 500; top 5 universities in Thailand occupy the ranks between 501 to 800.
In QS World University Rankings for 2016-2017, Indian universities fare better than universities in Thailand. The ranks occupied by Indian universities namely, IISc, Bangalore, IIT, Delhi, IIT, Bombay and IIT, Madras are higher than the ones occupied by the top university of Thailand namely, Chulalongkorn University. Top 5 universities in India are in the ranks between 152 and 302 and top 5 universities in Thailand occupy the ranks between 252 and 701+.

6. Conclusion

India and Thailand are faced with the challenge of mentoring their HEIs particularly university level institutions to enable them to come up to the level of good universities of the world. Both the countries have been working on this since the last number of years. India has made enormous strides in achieving access and expansion, equity and inclusion, and quality and excellence in higher education during the last two five-year plans. It has also been working to realize its higher education vision 2030 which contains a number of strategies to achieve quality and excellence. In spite of these, considerable challenges remain. One of the reform measures undertaken recently by India is the introduction of National Institutional Ranking Framework (NIRF) which was started in 2015. The ranking of Indian universities was firstly published in 2016 and again in 2017 for the second time. This is one strategy adopted by India to sensitize HEIs on the quality parameters and to further raise the quality of its HEIs in general and its best universities in particular. Likewise, Thailand has been striving to achieve its long ranged goals through various means including its ‘Second 15-Year Long Range Plan for Higher Education (2008-2022)’. The main aim of this plan is providing citizens with the skills and capabilities necessary to raise national competitiveness. The reform goals focus on expanded access and improvements in quality and relevance through a tiered service-delivery system (World Bank, 2009). With these reform measures put in place, India and Thailand are bound to achieve higher and higher in improving the quality of their higher education systems.
7. Reference


Clark, N. 2014. Education in Thailand. <> viewed 23 May 2017


Construction Of A Managerial Leadership Index In The Banking Sector Of A City Of Colombia

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Cesar Augusto Serna Mejia, Universidad del Bosque, Colombia

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Abstract

Leadership itself it’s a subject that from the past century has been bewildering with direction and Management. Nowadays managers, besides their technical role, should appropriate leadership roles considering the complexity that all different organizations are dealing presently. This past mentioned complexity is managed by human beings and if they are poorly guided or unsatisfied with their superiors, their performance would be deficient. The target of this investigation is to build a directive leadership index that measures the intensity of the leadership in the management of the banking system in city Neiva (Colombia). The mentioned index will measure conducts and specific attributes in order that a group of people, in this case the followers or working teams, allow themselves to be voluntarily guided by their leader; which at the same time will be done through a multivariate statistical processing of data approach implementing a poll with Likert scale type of questions. The respective index was assembled by three dimensions: Personality traits, Interpersonal relationships and the followers perception. The results showed that by applying the technical methodology it allows to evaluate in a sensitive way each of the different dimensions that assess the concept of leadership and jointly allows to evaluate leadership in a global manner.

Keywords: Leadership, Direction, Index, Followers, Factorial.
Introduction

Some leadership theories by essence are about direction. Such is the case of the Theory of conduct when it refers to de indication structure, which talks about those managers that focus only in chores and production but not in the different needs of the employees, just like the type of leadership fixated in the work exposed by the University of Michigan (Yukl, 2008). In the same manner, autocratic leadership is based on chiefs who have poor trust, don’t delegate, punish and inspire fear to their team (Daft, 2006).

One of the teste traits evaluates leadership in managers is the Big Five Personality Test (Colbert, Judge, Choi, y Wang, 2012; Deinert, Homan, Boer, Voelpel, Gutermann, 2015; Ozbag, 2016), which measures five personality traits: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism; and other investigations had been made with the Multifactor Leadership Questionnaire (MLQ), instrument developed by the authors: Bass and Avolio (2000) that measures the leadership in transactional and transformational and the Laissez-Faire.

This investigation proposes an alternative methodology to measure, based on an evaluation test, the leadership index in managers, using a multivariate statistical processing of data approach that helps building indexes based on the performance of the leadership related to the perception of the followers or work team.

Direction and leadership

Since de X century BC there was already the need of a method to manage the different civilizations (George, 2005). None of the classic authors like Taylor (1998) or Fayol (1998) gave insight of an effective leadership, all refer to direction, excluding Mary Parker Foller (Witzel, 2013) who in 1925 stated about the revolution of the dominant business man stereotype into a directive leader and about the need of coaching these men into real leaders (Follet, 1927).

The leadership competition is increasingly identified as key to the working force of the XXI century (O’Connell, 2014). Leaders must direct nowadays employees, by need, in a different way (Anderson, Baur, Griffithc, Buckley, 2017), because leaderships affect in a big manner the attitude of their employees towards their workstations. The role of the actual leaders has changed and the success of any organization depends of the leadership style practiced by the managers. (Saleem, 2015).

Leadership must have an identity and must be distinguishable enough for the upper management (Pautt, 2011). The people that are in height of the organization are characterized by being intelligent, ambitious, hardworking, polite, and with luck and no necessarily by their talent, of leadership (Hogan & Kaisser, 2005). The focal point
of the leader is not to emphasize in the production or efficiency, but in the people (Gagnon, 2012). Recently leadership has been conceived like a separated, different role and function from management, but also like a distinct concept, essential for the success of the organization (Nienaber, 2010). A 20-year study about leadership revealed that there’s an existing and positive relationship with the net income of 167 companies and that the abilities of coaching that a leader possess affects the success of the work teams (Kinicki & Kreitner, 2003).

A leader is who has de sufficient self-confidence to assume risk, is honest, communicates in a simple way which at the same time motivates and designs environments that are open to change and takes advantage of technology using it as a communication vehicle and as a tool to create new businesses (Bennis, 2002). A real leader is who the group he works with accepts to follow voluntarily (Palomo, 2007), inspires appealing to the needs, values and emotions of his team for it to maintain the right direction (Kotter, 2007). Leaders can defy the processes; inspire a joint vision, enable other into action, serve as a role model and provides encouragement to the people that conform the organization (Kouzes & Posner, 2008).

Thereupon, in this investigation its defined “Directive leader” as a manager or executive that besides effectively managing the organizations with positive results, inspires his employees and coworkers, build environments that adapt easily to change and makes use of technology to obtain important information for their organization and to gives importance to keep an open, fluent and constant communication with his work team.

Leadership evaluation

If what the organizations intend is choose the managers who are leaders, it’s important that these organizations apply evaluations that assure the income of these leader-managers; which will avoid what Bents (1985) calls “modern derailment”. Which consists in finding executives with positive characteristics like intelligence and ambition, but at the same time they possess another group of characteristics such as bad temper and is dishonest, which makes them tend to failure, because they manifest a personality defect that is dominant causing to alienate their subordinates, impeding a good team work. The result is going to be a failure leadership rate of 50% to 60%. (Hogan, Curphy & Hogan, 1994).

Different cultures probably have disparate views about what an effective leadership in the organizations implies, besides it’s possible that they support different types of performances (Fukushige & Spicer, 2008). Nevertheless, “most cultures seem to consider the intelligence, honesty, sociability, comprehension, aggressively, social abilities, determination and industriousness as important aspects of leadership, independently of the assignment or situation of the team” (Hogan, Curphy & Hogan, 1994, p. 497). There are existing instruments that measure positive aspects of leadership (Bass y Avolio, 2004; Avolio y Gardner, 2005) and negative or destructive (Larsson, Brandlebo y Nilsson, 2012). We can see an increasingly creation of instruments to measure different aspects of leadership, like the case of the 3 scales to measure the responsibility of the leader (Wood y Winston, 2007); other instruments
evaluate the laces of commitment in managers connected through networks (Voegtlin, 2011; Dastmalchian, Rezac, Muzyka, Bayraktar, Steinke & Imer, 2016); and other evaluate also the servant leadership (Dierendonck & Nuijten, 2011; Winston & Fields, 2015).

The “Big Five” personality test has been widely use to comprehend the linkage between leadership and personality traits, that’s how Judge, Ilies, Bono & Gerhardt (2002) made an investigation about leader personality traits finding out that “extroversion” is the component that has most coherence with leadership. Darr y Kelloway (2016) determine the organizational profit of the aspects that comprises the traits of the big components, in other words, the most important personality traits used in the prediction of a range of results of the organization. In addition, this instrument functions in a similar way in different cultures (Robie, Brown y Bly, 2005). This investigation proposes a new useful model to evaluate the level of leadership in the Nowadays leaders and in consequence assure success in the organizational management.

**Statistic implementation of a leadership index.**

Like it was mentioned initial, this document puts into consideration a new way of valuing leadership, through a statistical analysis of the perception of the followers towards a diversity of attributes of their leaders. A set of attributes, traits or qualities of any person, are the characteristics that can differentiate them from the others. By gathering this characteristic into a hole general idea (or ideal) it’s what investigators define as a “Construct”; nevertheless, this construct, by being an idealization of what’s desired or expected, it’s almost impossible to quantify. A multivariate statistical processing of data approach that is very common when it comes to quantify constructs, is the factorial analysis (FA); which takes off thanks to a set of manifested variables of interest in this investigation, grouped in blocks which characterize the dimensions of the investigation. Just like is illustrated in the following figure.

![Figure 1: investigation dimensions.](source: own development.)

Each dimension is explained by a set of variables that characterize it, wherefore, in each dimension its applied the multivariate statistical technique AF, to reduce the number of attributes or variables in each block and in result create an index of rating that represents each dimension. This index is a standardized measure of the
perception of the followers towards their leader. As the result of a standardized (multivariate) measures, gives standard values, in other words, measures between -3.9 and 3.9, which makes it hard to comprehend and interpret; therefore, it was necessary to rescale the into perceptual values (0% - 100%), where the minimum value (0%) represents the absence of this condition or construct, while the maximum value (100%) references a total concordance or a fulfil presence of itself. In accordance with the applied form, each dimension was built with a specific group of manifest variables of Likert scale; as it is described hereafter: Dimension 1 (personal traits): Honest, intelligent, emotional intelligence and openness to experience. Dimension 2 (interpersonal relationships): extroversion, social intelligence. Dimension 3 (follower’s perception): Support to the chief, motivation, trust, communication, listening, relationship with the boss, closeness with the boss and role model.

One statistic measure of quality of these kind of transformation is the Cronbach’s Alpha, that evaluates the reliability of the scale used to capture information; if this statistic take values close to the unity it implies a high common reliability; in our case, the Cronbach’s Alpha are the following: Personality traits, Alpha=0.8662; Interpersonal relationships, Alpha=0.8571; y Followers perception, Alpha=0.8683. All the three-dimension indicated a high close to one Cronbach’s alpha, indication optimal reliability conditions. Based on these results the calculation of the scores or escalated scores of the ratios and evaluation of the followers towards their bosses, in every indicated dimension, just like is presented up next.

When quantifying the perception of all the followers interviewees and convert their appreciation into percental figures is done the following step is to make any type of groups and summarize up this rating through ratios. The most important group is the evaluation a ratio given in each of the three dimensions and the global evaluation of all the followers towards their leaders behavior. In our investigation, this technique was applied to a group of followers of the banking system of the city of Neiva (Colombia), whom it was asked everything that was related to the three main dimensions of interest. Their results are showed in the following chart.

Chart 1: Rating of the directive leadership.

![Chart 1: Rating of the directive leadership.](image)

Source: own development.

Based on the previous chart there is evidence that for the 1 dimension, which talks about personality traits, the followers appreciation achieved an 81% score being this the best evaluation compared to the others. The second-best score was the Followers perception dimension; it approaches a 78% rating. And finally, was the
interpersonal relationship dimension with a 76% score. At the end, the average score for the investigation applied into a corporate banking system of the 3 dimensions was a 78%. Other possible comparisons of these scores could be made, for example it was compared the ration in the leadership based in gender, by type of contract, or time in their job, some of these are presented up next.

Chart 2: Leadership global rating based on dimensions and gender.

From the comparative chart, it can be concluded that the appreciation of the leader practices, doesn’t has a significant variation in any of the dimensions when gender is considered. It’s only appreciated a slight difference in the ration of the evaluation between women and men in terms of leadership, deducing that women have a slightly better appreciation for their bosses comparing to men

Another way of comparison of this final rating was made through the dimensions previously mentioned based in education level, if the target of the investigation considers its convenient, this comparison in showed in the following chart.

Chart 3: Global leadership rating based on dimensions and education.
The previous rendering signs slight variation in the global leadership rating, specifically in some dimensions, when some levels of education are considered, especially for university education level, de punctuation of each dimension varies scientifically, pointing out a greater punctuation y personality traits (80%) and a lower score in the interpersonal relationships (73%)

Like in the other comparisons, it is possible, through this method to make every possible comparison according any type of variable factor in hand; this means it could be does comparisons by region, wages range, type of position or by year evaluated. The options are many, thus, the investigator must focus on the objectives of his investigation and then propose his multiple desegregations.

Rating Scale

In exchange to grant a comparative value about the processed and standardized information, we recommend to evaluated with a rating scale that fixates threshold values of classification about final leadership scores. These threshold values are used to define the level of fulfillment under which it should be developed some interventions to improve the minimal acceptance conditions or on the other hand when the measurements throw higher levels of fulfilment compared to the threshold values stablished in the scale, it is assumed that the following results without carry out any actions for improvement.

The threshold are reference points used to compare a measure. Is the minimum value of a magnitude that produces an effect, which implies cut-off points for this effect, the minimum threshold of the rating scale which define low levels of performance shouldn’t be lower than 50%; the rest of the scale can be distributed in
an equivalent (proportional) or in an intended way looking for the upgrading of the evaluated condition.

It is important to warn that even when the minimum level of performance limit establish itself in the 50% action range the whole scale, assessment rules that only have 3 action areas, are insensitive scales for the evaluation of the goals, because this rule is allowable and indicates satisfaction condition to goals that are not likely to achieve the best performances.

![None proportional scales](chart1.png)

**Figure 1:** None proportional scales.

Source: own development.

To follow up, make the right evaluation and count with the right elements to make the best decisions, in this rating will justify in the 5-threshold classified by percentages of compliance, for data visualization purposes it’s presented in a traffic light display like its appreciated in the chart 4. The traffic light display parameters are established in accordance with the significance of the indicator towards the goal, like its shown in the following chart:

**Chart 4: Quantitative assessment scale**

<table>
<thead>
<tr>
<th>Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>90% - 100%</td>
<td><strong>Full leadership:</strong> Represents the value that implies a superior or full leadership.</td>
</tr>
<tr>
<td>80% - 89%</td>
<td><strong>Outstanding leadership:</strong> Represents the value that implies a leadership in a higher level but not superior.</td>
</tr>
<tr>
<td>60% - 79%</td>
<td><strong>Acceptable leadership:</strong> Represents the approving value that implies a leadership under what is expected but still acceptable.</td>
</tr>
<tr>
<td>50% - 59%</td>
<td><strong>Insufficient performance:</strong> Represents a non-approving value that implies a leadership under the acceptable level, but being better than a deficient performance.</td>
</tr>
<tr>
<td>Less than 50%</td>
<td><strong>Deficient performance:</strong> Represents the value that implies a completely deficient leadership.</td>
</tr>
</tbody>
</table>

Source: own development.
It is suggested to use these rating criteria, the scores generated by the indicator through the AF of each dimension inside the rating matrix, and give a qualitative interpretation to this quantification.

In the banking system case of Neiva (Colombia), the dimensions interpersonal relationships and followers perception showed a 76% and 78% ratings respectively; which are in between the 60%-79% (yellow scale), this means, an acceptable leadership, what can be interpreted like an approving value of leadership, which is under of what was expected but still approving. On the other hand, in the Personality traits dimension showed an 81% score which is placed in the 80%-89% range (Green scale), an outstanding leadership, it implies that the rate is in a high degree (but not superior). Finally, a global rating of the directive leadership, using this methodology was in a 78%; that following the interpretation criteria given by the traffic light display is in the acceptable leadership; indicating in a global matter that the leaders behavior, is not ideal, but it`s also not the worst.

Conclusion

An alternative appreciation of directive leadership is the definitions stated in this investigation “Directive leader” as a manager or executive that besides effectively managing the organizations with positive results, inspires his employees and coworkers, build environments that adapt easily to change and makes use of technology to obtain important information for their organization and to gives importance to keep an open, fluent and constant communication with his work team.

statistic; the new statistic evaluation and rating methodology turns out to be an alternative way to evaluate directive leadership through attributes or perceptions of the followers, differing by not incurring in scale of the original variables problems. Besides, it offers the great advantage of provide quantified information of each dimension in evaluation and a global rating which can be consider in a quantitative evaluation. Additionally, this rating has the capacity of using external variables from the ones used to build the indicators such as gender, position among other. Finally, by being a standard evaluation it can be used for individual and general results.
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Abstract

Jakarta Governor Election period 2017-2022 is the most interesting one in the history of Indonesian election. Some observers perceive that Anies Baswedan-Sandiaga Uno’s victory is the victory of the Radical Muslim group over the Non-Muslim group which is supported by the Liberal Muslim. This article would answer the question whether ethnicities and religions are the vote determining factor of voters in Jakarta Governor Election period 2017-2022. To analyze the voters’ behavior and to explain considerations used as the reason by the voters in casting their votes, it is known that there are three types of approaches, namely the Columbia School which uses the sociological approach, the Michigan School which is known for its psychological approach, and the Virginia School which is known for its rational approach. This research is an explorative study with the qualitative approach by using the secondary data provided by Lembaga Survei Indonesia (LSI), Indikator Politik Indonesia, and other survey institutions, which aims to identify the voters’ behavior of Jakarta Governor Election period 2017-2022. The result of the research showed that ethnicities and religions are not the only factor that determined the voters’ behavior of Jakarta Governor Election period 2017-2022. Generally, the factors of one’s linkage to political parties and one’s orientation to issues and candidates also determine their votes. For instance, the image of the pair Anies Baswedan-Sandiaga Uno as friendly/polite and good-looking/handsome candidates has also become the reason for the voters to cast their votes for the pair. Besides that, the role of mass media, including social media, is very important in establishing the image of the candidates and the rising political issues.

Keywords: Candidate, Political party, Voters’ behavior
1. Introduction

Democracy is one of the systems that can guarantee good governance. The benevolence of the democracy system is that the government’s authority comes from the people, both in a direct way and representation. The implementation of democracy enables the implementation of political participation and participation of citizens from all social classes to open up wide.

One of the means to bring about the people’s participation is the direct election for local leaders and deputy local leaders. In Indonesia, direct elections for local leaders have been held since 2014. The direct election for local leaders is the realization of the model for the filling of public official positions by the public, in order that the accountability to the owner of sovereignty is more concrete. In addition, the direct election for local leaders is an effort to make the system of the filling of public official positions more consistent, from the president, local leaders (provinces, regencies/cities) to village heads.

The consequences of direct elections for local leaders is that the people who determine the political choice, is not a group of elites called legislators anymore. The strategy approach towards the public as the vote owners has been often applied by local leaders’ candidates. As a result, political advertisements are scattered anywhere in outdoor media such as billboards and others, both in the printed matter and electronic ones. Through the political advertisements they try to offer various political promises. The direct election for local leaders is believed to have a sufficient capacity to widen political participation of the public, so that they have an opportunity to choose their local leaders freely. Related to the direct election, studies on the voters’ behavior have become very important. Studies on the voting behavior basically try to answer the question why someone votes for a certain candidate. Why do certain groups of the public have nearly the same political choice? What are the factors that influence someone to determine their vote in general elections?

Researches on the voters’ behavior have started to flourish since the fall of the New Order. King’s research (2003) and Liddle and Mujani’s research (2000) are the examples of researches on the voters’ behavior which used the 1999 General Election as the subject. King (2003) tried to observe whether there was any similarity in the vote of between the voters of the 1955 General Election and the voters of the 2004 General Election. Empirical facts proposed by King indicated a continuity, a significant correlation between the regions that supported certain political parties in 1955 and the regions that supported certain political parties in 1999.

However, during the year span of 2009-2011, a number of research results have shown that there is a shift from the party’s ideology-oriented voters to rational voters by prioritizing the choice of figures. Voters have also determined the standard of objectives or success priorities of leaders, namely: economic growth, wealth, national unity, education, and law enforcement. The public trust the individuals more than political parties, with the standard of individuals in the form of personal integrity, social awareness, and professional competence. There is a tendency in the rising role of political advertisements in bringing out the figures, so that only those who have the
power of advertisements in the mass media, or have the opportunity in the mass media that obtain the attention.

This article would study the voters’ behavior in Jakarta local Election of 2017 that was one of elections for local leaders which gained the public attention from all classes. It is inseparable from the position of Jakarta as the capital city of Indonesia hence it becomes the political barometer in Indonesia. In addition, some issues on blasphemy, diversity, and obedience to religion have also marked the election for local leaders of Jakarta.

2. The Voting Behavior Approaches

The voters’ behavior is one of the behavior factors to determine their vote which they feel the most preferred and the most suitable to vote. Generally, the theory on the voters’ behavior in determining their vote is affected by two approaches, namely the Columbia School or the sociological approach and the Michigan School or the psychological approach.

Sociological Approach

The Sociological Approach basically explains that social characteristics and social groups have quite a significant influence to determine behavior vote. Social characteristics (such as occupation, education et cetera) and sociological characteristics or backgrounds (such as religion, region, sex, age et cetera) are important factors to determine political choices. The understanding of social groups, both in a formal way such as religious groups and professional organization, and in an informal way, such as family, friendship, or other small groups, has a big role in forming one’s attitude, perception, and orientation, which later becomes the base or preference to determine their political choice (Anwar, 2004: 23-24).

Psychological Approach

This approach explains that attitude, as the reflection of their personality, is quite a determining variable in influencing one’s political behavior. The psychological approach emphasizes three psychological aspects, namely emotional bond to a political party, orientation towards issues, and orientation towards candidates (Niemi and Herbert F. Weisberg, 1984: 9-12).

Rational Approach

There is a situational factor which also plays a role in affecting one’s political choice. Therefore, voters are not just passive but also active, they are not only tied to sociological characteristics but also they are act freely. These situational factors may be in the political issues and the nominated candidates. Hence, political issues become an important consideration. Voters will determine their vote based on their evaluation on political issues and the proposed candidates. They see an analogy between market (economy) and voting behavior (politic).
3. **Research Methods**

This research uses a qualitative approach method. It is also a descriptive research in which the research conducted by the writers to describe and explains the situation or events. This research used secondary data survey conducted by Lembaga Survei Indonesia (LSI), Indikator Politik Indonesia, and the other survey institutions which aim to identify the behavior of the voters of the Jakarta Special Capital Region of 2017. The data were subsequently analyzed by using the voters’ behavior approach.

4. **Result**

**Demographical Characteristics of Voters**

In the book of *Proyeksi Penduduk Indonesia* published by the National Development Planning Agency (2013), the population of the Jakarta in 2017 was projected to reach 10.37 million. The largest number is in the age group of 25–34 years. Population composition of males and females is relatively in balance, with a slightly higher number of the male population. It was estimated that there are almost 8 million voters in local Jakarta Election 2017. 70% of the voters have been or had been married. More than 65% voters had graduated from high school or higher education and only 16% of them had graduated from elementary school or lower. It indicated that the voters in the Jakarta local Election had a high level of education and they determined their vote based on the candidates’ capacity.

44% of the population of the Jakarta were non-natives who came from various regions. The following composition have shown from table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Region of Origin</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Central Java and Yogyakarta</td>
<td>17%</td>
</tr>
<tr>
<td>2</td>
<td>West Java and Banten</td>
<td>12%</td>
</tr>
<tr>
<td>3</td>
<td>East Java</td>
<td>5%</td>
</tr>
<tr>
<td>4</td>
<td>North Sumatra</td>
<td>3%</td>
</tr>
<tr>
<td>5</td>
<td>Sumatra</td>
<td>2%</td>
</tr>
<tr>
<td>6</td>
<td>Others</td>
<td>5%</td>
</tr>
</tbody>
</table>

More than 50% voters used the Internet during the last 3 months (Susenas 2015) and almost 95% of them accessed the Internet through their cellular phones. The data on the voters’ characteristics indicated that the voters in Jakarta were likely to be able to use their vote rationally.

**Election for Local Leaders of Jakarta: Rational vs. Primordial**
Anies-Sandi’s victory in Jakarta local election 2017 of the Jakarta has sparked a long debate among the supporters of both candidates. The victory of Anies-Sandi has been considered as the victory of primordial groups and it has strengthened ideological groups in Indonesia. This assumption is inseparable from the case of blasphemy blamed on Basuki Tjahaja Purnama (Ahok) which triggered demonstration by some Muslims demanding prosecution for the case.

Referring to the results of surveys conducted by some institutions, this assumption is not fully correct. For example, the survey of Populi Center which was released in last February found that about 73% of the voters did not make an issue of the religion adhered by gubernatorial candidates. Meanwhile, the result of the survey conducted by Indikator Politik Indonesia (2017) indicated that majority of the respondents (80%) did not agree with the use of religious issues for attacking or winning certain pairs of candidates in the Election for Local Leaders of the Jakarta Special Capital Region.

If so, what was the factor that has caused the defeat of the pair Ahok-Djarot? In fact, the result of the survey conducted by Indikator Politik Indonesia showed that in average the public satisfaction with Ahok’s performance reached 73.4 percent. Muhtadi (20017) called this phenomenon the anomaly of electoral politics. Generally, there is a very consistent and robust correlation between the incumbent’s performance and the voted level. Rationally, the public acknowledged Ahok’s performance in overcoming floods and waste matter, improving services in government offices, etc. Although they had not been satisfied in overcoming traffic jam, the public had seen the concrete effort of the provincial government in developing mass transportation facilities. However, the high approval rating of Ahok did not automatically raise up his electability. It proved that the “head” and “heart” of some Jakartans were split. They acknowledged that the incumbent had a good performance, but it was hard for their heart to accept Ahok. George Orwell called it “doublethink”, which in this context was understood as "the power of holding two contradictory beliefs in one’s mind simultaneously without guilty feeling or inconvenience (cognitive dissonance)" (Alifia, 2016).

The result of exit poll (the result of the survey conducted by directly asking the voters after casting their votes in the polling stations) conducted by Indikator Politik Indonesia on 15 February 2017 found the indication of doublethink which was particularly experienced by Muslim voters, voters who came from Betawinese and Sundanese origin, voters who graduated from high school, voters who earned Rp 2 million to Rp 4 million a month, and most of the voters who lived in South Jakarta and East Jakarta. These voters acknowledged Ahok’s performance but they were reluctant to vote for him.

This condition is relevant to the pre-election survey conducted by Indikator Politik Indonesia which found that Ahok had a strong supporting basis in the rational aspect, but it was very weak in the emotional dimension. Out of 1,000 selected respondents, 100% of them knew Ahok, but only 68% of them that stated they favored him. Meanwhile, 98% of the respondents knew Anies and 74% of them stated that they favored Anis. It was supported by Anies’s personal image as a friendly/polite person and a good-looking/handsome one. As many as 88% of the
respondents stated that Anis was a friendly and polite person, while Ahok was considered friendly and polite by only 44% of them.

Indikator Politik Indonesia also showed the other data that 56% of the respondents did not agree with the statement that Muslims would commit a sin if they voted for Ahok as the Governor, 36% of the respondents agreed that Muslims would commit a sin if they voted for Ahok as the Governor and the rest 9% stated that they did not know. The data above showed that the three approaches can be utilized to analyze the 2017 Election for Local Leaders of the Jakarta Special Capital Region. The sociological approach that explains that sociological characteristics or backgrounds are an important factor in determining political choices is relevant in explaining political choices of Muslim voters who supported the pair Anies-Sandi. Although the number was only 36%, this figure is sufficient to show that religion is one of considering factors in electing a leader.

The psychological approach which emphasizes three aspects, namely emotional bond to a political party, orientation towards issues, and orientation towards candidates, is relevant to explain the support for the pairs based on the party basis. The data of the survey conducted by Indikator Politik Indonesia indicated that supporters of parties that back the candidates would vote for the pairs according to the parties they chose, as the following:

<table>
<thead>
<tr>
<th>Basis of Supporting Parties</th>
<th>Ahok - Djarot</th>
<th>Anies - Sandi</th>
</tr>
</thead>
<tbody>
<tr>
<td>COALITION OF AHOK-DJAROT</td>
<td>83.8</td>
<td>15.8</td>
</tr>
<tr>
<td>NASDEM</td>
<td>71.4</td>
<td>28.6</td>
</tr>
<tr>
<td>PDIP</td>
<td>89.9</td>
<td>10.1</td>
</tr>
<tr>
<td>GOLKAR</td>
<td>64.1</td>
<td>33.3</td>
</tr>
<tr>
<td>HANURA</td>
<td>60.8</td>
<td>39.2</td>
</tr>
<tr>
<td>COALITION OF ANIES-SANDI</td>
<td>7.4</td>
<td><strong>90.4</strong></td>
</tr>
<tr>
<td>PKS</td>
<td>3.9</td>
<td>94.1</td>
</tr>
<tr>
<td>GERINDRA</td>
<td>9.4</td>
<td>88.2</td>
</tr>
</tbody>
</table>

Source: Indikator Politik Indonesia, 2017

Sympathizers of PKS were the most solid party that supported the pair Anies-Sandi. Meanwhile, sympathizers of the Hanura Party tended to be loose in electing the pair Ahok-Jarot. It was likely, considering PKS is a party that has Islam as its ideology with a relatively strict cadre formation.

Meanwhile, the rational choice states that there is a situational factor which plays a role in affecting one’s political choice in the form of political issues or the proposed candidates. The political issue of the case of blasphemy became the factor that also influenced the voters in electing Anis-Sandi. Meanwhile, orientation towards candidates relates to the candidates’ personality. Anies’s image as a friendly/polite person and a handsome/good-looking one had appeal of its own for the voters.
Sukmajati (2017) had another perspective on the issues carried by the candidates. The pair Ahok-Djarot was judged to give the impression of conservative and maintaining the status quo. The spirit of changes was not strongly felt in the programs they delivered in some campaign forums and public debates. In other words, the retrospective approach in creating new agenda, breakthrough, and innovation did not appear to be quite robust. The stiff and formalistic impression was more dominant in providing the solution for urban problems in Jakarta.

Meanwhile, Anies-Sandi was able to explain the alternative solution for various strategic problems in Jakarta. The pair Anies-Sandi was able to select the other side in the development program of Jakarta, which distinguished them, particularly from the incumbent candidate. It included the issues of human quality, religious values, and the level of social gap, and other issues in a more conceptual level. On the other side, Sandiaga also offered the Oke Oce program to meet the real demand of Jakartans, particularly in the economic sector, in order to create jobs to lower the unemployment rate. In short, the candidate number 3 was able to provide perception among the public that they were more polite, more human, and more substantial than the other candidate.

Further, Sukmajati (2017) explained that the voting behavior of Jakartans was rational. It turns out that forums of public debates which were broadcast live were significant enough in affecting the supporting level of the public towards the candidate. Some voters got a good impression of the concrete acts of the pair Ahok-Djarot. Some others appreciated Anies-Sandi’s conceptual maturity in developing Jakarta in the future. It appears in some results of polling which previously had been conducted routinely, in which the support for Ahok-Djarot tended to be stable and the support for Anies-Sandi kept rising.

5. Conclusion

The voters’ behavior in Jakarta local election 2017 can be explained by using sociological, psychological, and rational choice approaches. The voters’ rational attitude does not mean they pay no attention to religion and ethnicity aspects. The voters tend to elect the candidates based on the similarity in religion. Besides that, the factor of the candidate’s personality also determines the voters’ political choice. Friendly/polite persons still have a great appeal for the voters. In this way, candidates supported by political parties should consider these factors.
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Using Co-creation Techniques to Develop Novel Students’ Services

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Abstract

Higher Education Institutions are operating in a more and more competitive environment. In the case of Southeast Asia for instance, the creation of the Asian Economic Community (AEC as part of the ASEAN), is allowing AEC members and International universities to open campuses in any of the 10 founding countries without having to have a local university partner. Furthermore, the number of entry students is currently declining due to pyramid age gap in most Asian countries. Consequently, universities are operating in a much more competitive environment and in order to compete, or even just to survive, they need to provide more than just excellent education. The services that are provided to students must also meet students and parents high demanding and high quality expectations. University service providers are in general not fully equipped with the tools and mindset to develop novel services that will fully meet students’ expectations. This research looked at how using a co-creation approaches and tools, involving graduate students and university service providers, could help developing novel services. An action research approach was used to test this approach and shown positive outcomes in helping building stronger understanding between university service providers and students, but also by helping building empathy between them leading to the co-creation of novel university students’ services ideas. This study was conducted in a private Thai university but the researchers believe it could be similarly applied in any other university context (private or public and in any other country).

Keywords: Co-creation, Service innovation, University, Higher education, empathy
Introduction

The ASEAN Economic Community (AEC) regroups 10 countries (Indonesia, Philippine, Malaysia, Singapore, Thailand, Laos, Myanmar, Cambodia, Vietnam, Bruni Darussalam). These countries share similar objectives and agreed to help each other in term of accelerating economic growth, social progress, culture development in the region, to promote the region peace and stability. They collaborate more effectively for the greater utilization of their agriculture and industries, the expansion of their trade and to provide assistance in the form of training and research facilities by facilitating each member to do business with no boundary and by improving the educational standards to satisfy and give more opportunity to their people. In term of education, "opening borders" of AEC affect educational institutions by increasing competition and by forcing them to improve their services standards, and service quality. Since high quality and famous education institutions can now start new educational businesses in each member countries, local educational institution need to improve their standards to remain competitive or they might disappear. So universities which are not in the top ranking, need to find out solutions and set up a new business strategy to compete and survive in the educational war. The quality of the education provided is very important, but the educational services provided around it are also important for student consideration. Consequently, every business sector needs more innovation than ever before. Innovation is the process used to transform an idea into something that has value and that can improve human well-being and the society. Higher educational institutions need to change and add value to each of their products and services, universities need to create or improve their performance by creating new products or services to satisfy student’s need and reach their expectations otherwise students will turn to their competitors who can better serve their needs. Service innovation can provide an effective solution and create a sustainable competitive advantage to the organization in a longer term. Higher educational institutions can benefit from a service-based strategy in many ways because adopting service-based strategy can help improve the service offering, cost structure, delivery system and technology (Gronroos, 2000).

Objectives of the Study

1) To examine how service innovation can help to improve new student service development process by facilitating “Co-creation technique” in new student service idea generation process.

2) To investigate how student involvement in new student service development process can help creating value to new student services.

We could not find any study that shows how service innovation could support the service business units of a university. The researcher was particularly interested in studying how university service providers and students can use service innovation through Co-creation activities. Co-creation is an approach that can help each party to
better understand each other and generate new ideas to solve the current problems that they face and as a new way to improve and develop university student services.

The research question associated with this study is to investigate: How Co-creation could be used to support service innovation in a university context? This study does not look at the educational services provided but focuses on the services provided to graduate students. In order to better understand the status of service innovation in the university context, we conducted an initial study. The purpose of this study was: firstly, to understand the current process used to develop new student’s services. The Second purpose was to evaluate the strength and weakness of the current student services. We used semi-interviews to assess the perception and expectation from the students and from university service providers’ point of view. The researcher collected the information by note taking, voice recording and with a questionnaire. The interview showed that currently student services did not fully meet students’ expectations. There was a lack of understanding of students because there was no clear communication channel between students and other stakeholders causing a lack of student involvement. Then it showed that there was no systematic mechanism to generate new student service ideas. On the customer's side (students and other stakeholders), have high expectations about the university's facility accessibility. Students expect novel and new student services which provide a convenient way to access student's information systems. A key finding and useful for the new student service development is that students expected effective services and channel for them to provide feedback which will be beneficial to the university in order to improve and develop new student services. This expectation needs to be considered as a big opportunity to better understand and receive students' voice, which is a good way for the student involvement to the new student service development process. We believe that these findings and problems are common to most universities. They reinforced our motivation to find novel ways to develop new services that match students and service providers’ expectations.

**Literature Review**

There are many definitions about service innovation. The first concept of service innovation was proposed by Miles (1993) and was developed over the past decades. Ian Miles describes service innovation as: Innovation in services or in service products, which creates new or improved service products by using technology, new system, new knowledge or new idea or even by looking at the service production process in a different aspect. Innovation in service processes is the way that innovation creates new or improved ways of designing and producing services and can include service delivery systems. Another definition of service innovation was proposed by Van Ark et al. (2003) "Service innovation is defined as a new change of service concept which requires new technology to structure client channel, service delivery system". It makes a new change to the firm and the market. Tidd and Hull (2005) defined the meaning of service innovation as "A process of new service creation and/or in an improvement of existing services". Service can be the new idea to create or improve the new ways to facilitate the transportation or delivery system of products and services from the producer or supplier to the consumer which help to reduce time, cost and can be more satisfy customer needs.
Since the wide and speed of globalization and technology impact people life and business competition, every products and service sector need to move faster and stay up to date and beyond the customer expectations. The educational sector has the ability to improve its service quality by using all existing resources and the modern equipment and technology, in order to improve the existing programs, the admission information services, the service delivery system even to create new program/curriculum to satisfy the needs of the existing and new customers. The educational direction and strategy need to be stated and clearly understood by the organization to guide and encourage educational faculties and staff to improve their performances and reach the organization's goal. So, the customer expectations and perceptions should drive the strategy plan. Service innovation has become significant and challenges not only the profit-oriented organizations but also non-profit organizations, like higher educational institutions. If applied into educational context, it can make a new value and help to develop and utilize for service quality enhancement, positioning and gaining the competitive advantage in the higher educational marketplace, also can be fostering customer satisfaction. Customer satisfaction can be defined in term of the perception of the customers, how the customer understands and realize that the products and services which they have taken be useful and satisfy their need. So the service providers overcome the negative feedback and complaints from the customer by involving the customer in the production process, started from the beginning of the initiative ideas, product and service design, production process until the finished products and services, and introduce to the market. The customer interaction and involvement help to shape the business to be more customized and add value to the products and services even create new value to the customer as well. Before, going further to the improvement process, customer's expectation and customer's perception need to be addressed and understood clearly.

Co-creation is a way to help product or service providers to produce a better product and service to the end user by working and sharing their competency and resources to other such as their customers, suppliers or even with their competitors. They can work together from the beginning stage as the idea generation and during the operation process. This concept will bring value to all of the stakeholders, create new value to the customers and reduce production cost and time to market for the producers.

In the past almost all business sectors were only focusing on the producers and their roles in the production process. The role was separated between sellers and buyers, or products or services sender and receivers. The producer created products and services were a source of value which was exchanged in the marketplace. The problem of this value creation is that most of the attention is given to the producer and their roles are much bigger than the customer. Prahalad and Ramaswamy (2004b) defined that the businesses and customers have become no longer separate, but interacting various activities and create a new form of value-value-in-use. The interaction approach have been used between customers and organization and the relationship is enabled by a joint creation of value. The role of customer is changed by more involvement in the co-creation process. Gummesson et al (2008, 2009), Cova and Dalli (2009), Baron and Harris (2008), Payne et al (2007), Prahalad and Ramaswamy (2000, 2004a, 2004b), Gronroos (2011) and Ng et al (2010) analyzed the nature of co-creation processes and its meaning, they defined co-creation as a
platform of market or business strategy that emphasizes the customer value. The active customer share their ideas and resources and create new value through new forms of interaction, service and learning mechanism. In 2008 Payne et al defined that co-creation includes active involvement between firm and customer, integration of resources that create firm-customer value, willingness to interact and a spectrum of potential form of collaboration. Hauser et al (2006) raised "Successful innovation rests on first understanding customer needs and then developing or improving products and services to meet their needs".

**Research Methodology**

The researcher decided to use action research as a methodology to answer the research questions. The study was designed to accomplish the objective, to show that “Co-Creation” technique can help to improve new student services innovation in the university context. In this study, the researcher also would like to capture new knowledge which is created from the interaction between the participants, to observe how action research, facilitated through the co-creation technique, could help each participant to better understand the real problem and find out a new solution. Action research is known by many names, including participatory research, collaborative inquiry, action learning, and contextual action research, but all are different depend on the content. The simple definition is "Learning by doing" is a group of people to discuss and identify their problems, think and find out the way to solve it, see how it worked if not satisfied, try again. There are many ways to conduct research. Particularly, in the field of education action research is very popular and often uses to collect information that's used to explore topics of teaching, curriculum development and student behavior in the classroom. Fundamentally, action research is based on the qualitative research paradigm which aims to get a better understanding and clarity on the issues or problem which people are facing and how things are happening more than focusing on what is happening. It does not mean that the action research is separated completely from quantitative research because quantitative is a part of the knowledge that needs to be incorporated into the study but it is not in the main of the process.

This study, it based on a pragmatist worldview where the researcher is interested in a particular issue in the university context and would like to raise a current issue among participants. A clear understanding of that issue will happen through the co-creation technique that will be used to facilitate and help to generate new ideas for the solution. The researcher is interested in getting a better understanding about the student’s pain points about student service issue and researchers will use different co-creation techniques to support service innovation in the university context. Researchers will use the co-creation process all along the study, we will reflect the results from each cycle of action research to better improve and help to plan for next cycle until the results are satisfactory. Action research is composed of four steps, plan, act, observe and reflect. Usually, the cycle begins with the planning of the studied problems and how to solve the problems. After having planned the details of the study method or tools to be used for the next step, the plan can be acted by the participants through the several of activities or approaches. During the action, the researcher can act as an observer and facilitator to facilitate and support the learning and by creating new knowledge among the participants. The last step of this cycle is the reflection of all processes and how/ or what can/should be modified
for the next cycle. The cycle of action research can be repeated until the researchers are satisfied with the outcome of the study or until they find out the solution of the studied problem.

The researcher analyzed the data from the initial study and identified the problem in the university context, students and university service providers will be involved in the new student service idea generation which will help co-creating new student services. The initial study showed a gap and a lack of student involvement in the new student service development process. For this experimentation, researchers have designed three co-creation activities for each action research cycle, in order to answer the research question and find a potential working/tested solution.

Participants

The participants are Thai Graduate students from different majors who are studying at least in the second semester of master programs, in Thai private university in Thailand. They are currently studying and experiencing the student services from the university. Thai university service providers are the main people who developed and provide student services and will also be part of the participants of this study. Since the researcher found out from the initial study that there was a satisfaction gap between university service providers and students, consequently, the researcher would like to help the university to fill this gap and further develop the customer's relationship by using co-creation techniques. We will invite Thai Graduate students and university service providers from the student service related business units to participate in a Co-creation workshop on a voluntary basis. The co-creation workshop will be facilitated in Thai language and all questionnaires will also be translated in Thai.

The detail of each step of the co-creation process, data collection and the measurement are shown in the table 1;

<table>
<thead>
<tr>
<th>Steps</th>
<th>Participants</th>
<th>Objective</th>
<th>Experiment Technique/method</th>
<th>Expected outcomes/results</th>
<th>Measurement technique/ criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>4-5 Thai graduate students -Studying at 2nd semester of Master program -From different</td>
<td>-To identify student service problems -To better understand students’ pain points -To hear from the</td>
<td><strong>Activity A: Student Journey Mapping technique (provided with template)</strong> -Video recording of</td>
<td>-Each student provide minimum of positive and negative feedback in each student journey process. -Student journey map</td>
<td>-Satisfaction survey to measure the overall satisfaction level from students -Notes taking technique -VDO recording to measure qualitative data</td>
</tr>
<tr>
<td>Step 1</td>
<td>majors</td>
<td>-By voluntary</td>
<td>customer’s voice about non-educational/teaching issue</td>
<td>students’ service experience.</td>
<td>-Students share their experience openly</td>
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</tr>
<tr>
<td>Step 2</td>
<td>-Students participants from step 1</td>
<td>-4-5 University service providers from 3 student service related business unit (Library center, Record office, Graduate school)</td>
<td>-To build the “Empathy” among participants</td>
<td>- Service providers watch the video recorded by students in Step 1</td>
<td>-Participant engagement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-To do “iced-breaking” among participants</td>
<td></td>
<td>-The empathy atmosphere</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-To hear student service providers’ voice</td>
<td></td>
<td>-Build empathy between participants</td>
</tr>
<tr>
<td>Step 3</td>
<td>-Students and university service providers</td>
<td>-To stimulate “New student service idea generation”</td>
<td>- Focus on a selected student problem</td>
<td>-New student service ideas</td>
<td>-“Measurement of ideation effectiveness” questionnaires</td>
</tr>
<tr>
<td>problem</td>
<td>co-creation</td>
<td>data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- To capture novel new student service ideas</td>
<td>“LEGO Serious play”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Collective debriefing and feeling sharing (in circle)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Findings**

The 16 voluntary participants were Thai Graduate students who were at least on their second semester of study in a Thai Private University and 7 university service providers who worked in 3 different student service related business units (Library center, Record office, Graduate school). The researchers used an action research methodology that led to three cycles of analysis. Tools and techniques used were based on the co-creation concept. Measurement related to empathy building, perceived students’ involvement satisfaction level, and overall workshop satisfaction were collected with a survey instrument. The interactions between participants were analyzed by video recording after each action research cycle.

Through the 3 activities conducted during each action research cycle, the objectives were first for students to openly share, via a journey map, their experienced service pain points and lack of satisfaction. After having collaboratively created this journey map, students recorded a short video to summarize these pain points. A video was used since it is less intimidating to present pain points in a video than directly in front of the service providers. During the second activity, service providers watched the video to better understand the students’ issues and a follow up scenario activity was used for them to act as students and for students to act as them (service providers), so they can better understand each others’ point of view and can start building empathy between them. Once empathy was built, students and service providers could start to collaboratively find a service solution to one of the pain points previously presented. The co-created ideas were materialized/pretotyped by using a Lego set.

The first round of action research, worked as planned. A source of improvement was identified regarding activity C. The co-creation process between the students and service providers was not so well coordinated and the solution proposed was not a real integrated co-created solution. Consequently, the researchers decided to add an extra step to activity C for the 2nd cycle of action research. Before starting the co-creation process directly with the Lego set, the students and service providers will spend 10 minutes brainstorming on various ideas/solutions. Each participant was given some post-it to write down there ideas individually, and then each of them presented them to the group. Once all ideas were presented, they were grouped on the wall by ideas’ themes and the pretotyping activity could start. This change demonstrated to work well for the second cycle of the action research.
From the 1st and 2nd cycles the researchers noticed that the students and service providers seem to co-create part of the solution in separate subgroups. The researcher realized that the rectangle table in which the Lego set were seating on was probably too small and that the service providers were seating close to each others and students were also seating close to each others. Consequently, for the 3rd cycle the researchers decided to use a larger and round table to give more space for all participants to co-create and students and service providers were asked to seat not in subgroups but on alternate seats, to facilitate the overall integration. At the end of the 3rd cycle, the researchers were happy with the results since every activity seemed to achieve its planned objectives, so the researchers decided to end the action research process after the 3rd cycle.

Due to time constraint, the overall co-creation workshops lasted 3 hours. The last service co-creation phase lasted only 30 minutes, consequently the idea that emerged from this service co-creation activity were not as revolutionary as we would have liked to see them, but some new ideas came out that will still be worth exploring further.

Questionnaires were used to measure the level of empathy after the activity B (role play) and another questionnaire was used at the end of the co-creation workshop to measure the perceived students’ involvement satisfaction level, the perceived empathy for each others, and the overall satisfaction with the service co-creation workshop. Due to the limited number of pages available for this paper we will only focus on the main summarized findings.

Empathy building

Both graduate students and service providers filled the questionnaires. In order to measure the level of empathy, five questions were used (Cf. Table 2 and Table 3). The measurement scale ranged from: 1 (To a very low extent) to 6 (To a very high extent) – Median value = 3.5

<table>
<thead>
<tr>
<th>Empathy Questions (Students)</th>
<th>AVG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When I talk to university service providers, I tend to talk about their experiences rather than my own.</td>
<td>2.8</td>
</tr>
<tr>
<td>2. I can usually appreciate the student service providers’ viewpoint, even if I don’t agree with it.</td>
<td>3.0</td>
</tr>
<tr>
<td>3. I try to understand student service providers better by imagining how things look from their perspective</td>
<td>3.6</td>
</tr>
<tr>
<td>4. I believe that there are two sides to every problem and I try to look at them both.</td>
<td>3.8</td>
</tr>
<tr>
<td>5. When I am upset at student service providers, I usually try to “put myself in their shoes” for a while.</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Average score</strong></td>
<td><strong>3.5</strong></td>
</tr>
</tbody>
</table>

Table 2: Empathy questions for Graduate Students (n=16)
When I talk to students, I tend to talk about their experiences rather than my own.  

I can usually appreciate the students’ viewpoint, even if I don’t agree with it.  

I try to understand students better by imagining how things look from their perspective.  

I believe that there are two sides to every problem and I try to look at them both.  

When I am upset at students, I usually try to “put myself in their shoes” for a while.  

<table>
<thead>
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</tr>
<tr>
<td>Average score</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Table 3: Empathy questions for University Service Providers (n=7)

The average empathy scores are very similar and are around the median value of the measurement scale (3.5). Activity B helped them to build some empathy but there is still some room for improvement.

After Activity C, another set of questions was used to measure if the participants perceived that the co-creation workshop had helped them increase their empathy for each others. Two questions were asked.

1. To which extent, did this workshop helped you increase your empathy toward students/Service providers  
2. To which extent, did this workshop helped you get closer to students/Service providers?

Using the same measurement scale as before, the average score for Question #1 for service providers was 5.3/6 and for students 5.6/6.

The average score for question #2 were the same for students and service providers = 5.3/6  

These high scores demonstrate that by the end of the co-creation workshop, both parties had built empathy for each others and better understood each others issues and constraints. They had reached a point were they could now collaboratively look for creative service solutions to current issues, rather than blaming each others.

Perceived students’ involvement satisfaction level

After Activity C, another set of questions was used to measure if the participants perceived that if students were involved in the service development process it could help improving such services quality and satisfaction. Two questions were asked to both students and service providers.

1. To which extent, do you think that if you/students were involved in the student service development process, it could help to create better student services?
2. To which extent, do you think that if you/students were involved in the student service development process, it could make you/students more satisfied?

The average score for these 2 questions was 5.3/6 for service providers and 5.2/6 for students. Once again these high scores demonstrate that the co-creation process had a positive impact on the participants and that they can see the value of such approach.

**Overall satisfaction with the service co-creation workshop**

The average score for this question was 5.4/6 for service providers and 5.5/6 for students. Once again these high scores demonstrate that participants of the co-creation service idea process were satisfied with the new approach used and that they could see the value of using such approach. Open ended questions were also used to ask the service providers if they will, from now on, consider using such approach to develop new services and all of them were very positive and enthusiastic about the idea of doing so.

**Conclusions**

This study used an action research methodology to examine how service innovation could help improving new student service development process by using a “Co-creation approach” and to investigate how student involvement in new student service development process could help creating value to new student services. The designed workshop was composed of three main activities. The objectives of these activities were to let students express their pain points and unmet needs related to the current services, to have university providers listen to these issues and develop empathy for each others by inversing their roles. Once done, the last activity of brainstorming and new service co-creation activity was used to prototype some novel service solution ideas.

After three rounds of action research, and modifications made at every round, the researchers met a level of satisfaction related the process flow and output. The format of the co-creation workshop demonstrated that it is able to build empathy between students and service providers, which is a precondition to any successful co-creation process. The following service co-creation process, using a Lego serious play toolkit to materialize/prototype the co-crated ideas also seemed to work.

At the end of the workshop both students and service providers were happy with the new experience they went through and found it to be very valuable and applicable to develop new novel students’ services.

This study is just an initial experiment to test the value of involving students in the co-creation of new services. Until now, few universities co-create services with their students, and the resulting services they create are often lower than students’
expectations. Students who voluntarily participated in these co-creation workshops also really liked the experience and were open to participate again in future co-creation activities organized by the university.

The value of this initial research it shows that, yes, it is possible to co-create with students once a level of empathy is developed between service providers and them. Without this initial and critical phase, there will be no understanding, no trust and no open mind behavior for positive and constructive discussion and service creation. This study also shows that simple and low cost co-creation techniques using prototyping are a good tool to materialize ideas and to get a common understanding of what new services could be developed. Another important aspect of this study is that it shows service providers that the best idea not always come from them but it can be co-created with students. For students, it is way to feel that their needs are considered and that their opinions and ideas are valued. So everyone will strongly benefit from using such approaches.

There are limitations to this initial study, the first ones are that this study was conducted only in a Thai private university, with only 3 business units represented and involving only graduate students. Nevertheless, the researchers believe that the co-creation process that was used in this study could be easily applied in other types of universities (public) in Thailand and in any other countries. For sure national culture may have an effect on how service providers are willing to interact and put themselves at the same level of students (power distance), but if it is for the good of the university such approach should at least be considered and tested. We proposed an initial set of activities, but these activities can be customized and modified based on the culture and/or objective of the co-creation workshop.

For the future research, the researchers might consider exploring using different activities for Activity C, in order to encourage all participants to better co-create new student service idea generation, since some service providers participants didn’t feel too comfortable using a Lego set (maybe a Thai cultural issue). The researchers would also like to involve undergraduate students and run co-creation workshops which are full day workshops to develop more solid service solutions ideas. We welcome any feedback and experience sharing on similar approach.
References


