AN ANALYTICAL STUDY OF SOCIAL INTELLIGENCE AND

JOB PERFORMANCE OF TEACHER EDUCATORS

by

SU MYAT AYE (BEd, MEd)

A DISSERTATION

SUBMITTED TO THE YANGON UNIVERSITY OF EDUCATION

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

NOVEMBER 2018

We certify that we have read the following dissertation and that, in our opinion, it is satisfactory in scope and quality as dissertation for the degree of Doctor of Philosophy in Education

AN ANALYTICAL STUDY OF SOCIAL INTELLIGENCE AND

JOB PERFORMANCE OF TEACHER EDUCATORS

by

SU MYAT AYE

BOARD OF EXAMINERS

Chairperson/ Supervisor
Dr. Naing Naing Maw
Professor/Head of Department
Department of Education Psychology
Yangon University of Education

External Examiner
Professor Dr. Khin Zaw
Retired Rector
Yangon University of Education

Co-Supervisor
Dr. Moe Moe Naing
Lecturer
Department of Educational Psychology
Yangon University of Education

Referee
Dr. Khin Thuza Saw
Principal
Thingangyun Education College

Member
Dr. Daw San Win
Lecturer
Department of Educational Psychology
Yangon University of Education

Date 4. 11.2018

excellent academic pieces of advice and precious suggestions toward the completion of this study. I would like to express my heartfelt gratitude to Dr. Khin Thuzar Saw (Principal, Thingangyun Education College) for her expert judgment, great kindness precious suggestions and academic help toward the completion of this paper and for her time, encouragement and support as a referee.

I would like to record my sincere thanks to Dr. Daw San Win for her valuable suggestions, kindly editing and reviewing of the research instruments as well as for her member judgement, essential help and cooperation in this study. I also extend a sincere thank you to Dr. Nu Nu Khaing (Lecturer, Department of Educational Psychology, Yangon University of Education) for her untiring efforts to ensure the completion of my dissertation by assisting me get the required information and supporting in statistical computing and programming endeavours.

Also, without the willingness of the rector, principals, teacher educators and prospective teachers to participate in surveys and interviews, the research process and final dissertation would not have been compromised. Moreover, I will never forget the Education Universities and Education Colleges for their willingness to participate in many facets of my study. Finally, I also acknowledge all the support given to me by all of my teachers in Yangon University of Education and by my friends of the Doctoral Degree Programme in Educational Psychology 2014-2018.

Above all, I want to express my gratitude to my parents who have been incredibly supportive throughout my academic career and for their never ending support.

Abstract

The main purpose of this study is to develop a social intelligence scale for Myanmar teacher educators. Then, to investigate the impact of teacher educators' social intelligence on their job performance was next of interest. Both quantitative and qualitative approaches were used in this study. A total of 1102 teacher educators from three education universities and nine education colleges participated as a sample and cluster sampling technique was used in this study. An appropriate social intelligence scale for Myanmar teacher educators was developed by applying two parameter logistic model of item response theory (IRT). The results showed that the accuracies of ability estimates of the scale are sufficient on the ability scale of between -1 and + 3. According to the discrimination indices, the items are fairly good items to provide appropriate discrimination for the whole test. Considering their difficulty indices, it is concluded that the test is fairly difficult. The results showed that among the four dimensions of social intelligence, social awareness stood the highest whereas social skill was found to be the weakest. According to the result of independent sample t-test, there were no significant differences in social intelligence by gender and marital status. But, concerning their professional specialization, teacher educators in pedagogic majoring had higher social intelligence than those in non-pedagogic majoring. The results of ANOVA revealed that younger teacher educators were higher socially intelligent than older teacher educators. Furthermore, out of the four dimensions of job performance, responsibility dimension was found to be the highest. According to the independent sample t-test, gender was one of the related factors of teacher educators' job performance as female teacher educators performed much better than male teacher educators whereas there was no significant difference in social intelligence by marital status, age and professional specialization. The result of the correlation showed that teacher educators' social intelligence was positively related to their job performance. Moreover, teacher educators' social intelligence is a significant predictor of their job performance and it explains 8.7% of the variance of job performance. Furthermore, social awareness and social skill had direct predictive contribution to teacher educators' overall job performance. A qualitative follow up study was conducted by using multi-dimensional technique. According to the qualitative results, it was found that hobby, teaching skill, commitment, classroom management and interpersonal relationship with others were related factors for improving the job performance of teacher educators.

Table of Contents

List of Tables

List of Figures

CHAPTER 1

Introduction

Education is that which transforms a person to live a better life. Education is the key to success because it opens doors for people of all backgrounds, and it expands the human mind with knowledge. Many nations in the world choose to invest in the education of their citizens because each government understands the significant growth and positive impact education has on an entire country. So, nations worldwide are implementing plans designed for education development. As education is the foundation of a country, teachers are the builders who make the foundation concrete and shape the country's future. If a doctor makes a mistake, perhaps one person might die, but if a teacher makes a mistake, generations get unborn will come to suffer the effect of mistakes. This explains importance of teachers in the society and in nation building. No person ever argues that education and teachers are the life wire and mainstay of the nation.

In daily life, teachers have to bond with students and educate students as emotional and social beings. There may be many factors affecting the quality of this interaction and communication. These factors can be originated either from personal characteristics or other external factors. Individuals' past experiences, personal characteristics, interests, attitudes, and expectations can influence their interpersonal relationships. So, teachers are considered to be a significant role in learners' personal and social development. In doing so, teachers need to have social skills. The social skills of the teachers may promote student-teacher relationship, the student's improvement, cooperation and interpersonal skill that can boost students' ability to learn (Livergood, 2013).

Furthermore, the social competence and effective social relationship were vital keys for classroom success. Actually, social skill and competence are very close to notions as social intelligence (Gini, 2006). Therefore, teachers should have high social intelligence to create the effective social relationship with their supervisors, colleagues, students and others. Actually, social intelligence is the ability to understand the intentions, motivations and feelings of others and skill of making relationships with others. One concept of social intelligence refers to the ability to read non-verbal cues or make accurate social inferences and one's ability to accomplish relevant objectives in specific social settings. It is closely related to one's own, personality and individual behavior. Those with social intelligence are fully aware of themselves and understand their environment. It assists in creating a sense of identity for the individual, emphasizes interpersonal skills and

adaptability within social contexts. A person's social intelligence can also be known or measured only from his adaptability. Well-adjusted person has to be intelligent so that he can think rationally, act purposefully and deal effectively with the environment (Landy, 2006).

In essence, social intelligence can be perceived simplistically as "people skills", which is one of the essential managerial skills that teachers and students must have in order to work together effectively leading to educational system. Teachers who haven't developed their social intelligence cannot connect effectively with others and may even alienate or offend them. If so, without doubt, socially competent teachers have empathy and communication skills as well as social and leadership skills that are all central to their success to excel their job performance in teaching professional life.

Actually, performance could be described in various ways. Teacher's positive attitude towards teaching and higher aspiration level determines his positive perception of the environments and performance. It is universally recognized that teachers' job performance and effective social relationship with their supervisors, colleagues and students play key role to the development of the educational system. There are many factors that influence the teachers' job performance such as, attitude, subject mastery, teaching methodology, personal characteristics, the classroom environment, general mental ability, personality and interpersonal relationships with supervisor, colleagues and students. For development of teachers' performance, one has to understand the factors associated with it.

As teachers are true builders of the nation, the effect of social intelligence on teacher educators' job performance cannot be ignored and also be taken into account as a crucial point to enhance the quality of educational process. Recognizing the importance of teacher educators' social intelligence on their job performance, it shows the necessity to examine first social intelligence and job performance of teacher educators since they are considered to be the mainly powerful resource in producing social intelligent teacher educators with efficient job performance.

1.1 Significance of the Study

Individuals are born distinct from each other and are unique in their own way. But they need to relate and interact with others interpersonally for their survival, growth and development. That "No man is an island," shows man's relationship to other people as very important. Man is a social being, and in his everyday living, he comes to meet and interact with different types of people with different personalities. Because of individual

2

differences, man comes to experience misunderstandings, conflicts, quarrels and frustrations in life if he cannot manage and direct his social relations. Compromising differences, resolving conflicts, and enhancing personal and social relations have now become a challenge to every individual (Lull, 1911, cited in Gardner, 1983).

To respond to these needs, everyone's social intelligence is deemed to be important. Social intelligence is different from academic ability and a key element in what makes people succeed in life. Many people accept that social intelligence is just as important element of human social development. Moreover, social intelligence is at the heart of human happiness and emotional comfort. Explored further, the reason for unhappiness is the inability to maintain positive human relationships with the society. The result will be depression, fear, confusion and anger, created by the lack of positive human emotions that are critical to the happiness of us all. So, social intelligence is very important in human's life that is created to bring the practical technology of skills-based training into the world of human interaction and relations (Lull, 1911, cited in Gardner, 1983).

So far, undoubtedly, social intelligence appears to be an important one of the psychological abilities that relate to success in life, achieving social goals. Therefore, Kolski-Anderaco (2010) said that social intelligence helps one knows of social, identifying the social and self-awareness. It helps in understanding and analyzing of others social intelligence.

In contrast to the past decades, people in both well-developed and still developing countries are striving to change their life styles due to growing tensions, stresses and various complexities. It can be learned, developed and used as an effective life skill for managing personal life and interpersonal relationships. Needless to say, without social intelligence, how can they cope with the demands of changing societies and effectively manage their personal life. So, nobody can deny that social intelligence is an effective life skill for achieving success in all the walks of life.

Furthermore, aspects of social intelligence have been found to be associated with enhanced social problem-solving abilities, experienced leadership, social relationships as well as positive interpersonal experience and skill. In fact, not only in education, social intelligence also plays an important role in any organization because it increases the productivity and performance of employees (Richard, 1984). Therefore, it highlights that educators, marketers, religious leaders, political leaders, and consultants should have this talent. In education setting, teacher needs more to have the social intelligence than others

because they always interact and meet with students from different families who have different personalities, characters and morals.

Teachers' social intelligence is imperative not only for their personal well-being but also to motivate student learning. Students are the leaders of tomorrow and the leaders of tomorrow are in the hands of the teachers who are the future of a nation. The future of the nation lies in the hands of the teacher educators because they are able to mold the prospective teachers into qualified teachers and good citizens. Therefore, teacher educator's social intelligence is deem important because it directly influences the teacher's achievement and performance. If the teacher educators do not have sufficient social intelligence then they are less competent which directly influence the prospective teachers and the education system (Murata, 2008).

Furthermore, teacher educator needs to become adaptive and flexible in dealing with others, develop healthy and smooth relationships, possess the capacity and ability to understand and manage their pupils and job. They also need to know how to operate and handle various situations, and they should have high social intelligence to interact and adjust with other people in social environment. If so, it is undeniable that, social intelligence is an important element for our survival and to maintain social balance.

Albrecht (2005) considers social intelligence as a prerequisite for teacher educators. He is of the view that the educational system and teacher educators should respect the rules and behaviors associated with social intelligence to enhance the quality of educational process. Furthermore, the quality of educational process and its product is unquestionably influenced by teacher educators' job performance. Performance is very important factors in terms of organization success and achievements. Job performance is one of most essential elements of organizational behavior and has been considered as significant indicator for the effective organizations. Thus, the success of an organization is dependent on good performance of its employee (Colquitt, LePine, & Wesson, 2010). The educational sector is also dependent on the good performance of its employees as the quality of an educational process is influenced by teacher' job performance. Therefore, effective job performance of a teacher is essential for improvement of educational system as whole (Yusoff, Khan, & Azam, 2013).

Moreover, the entire edifice of education is shaky if the performance of teacher is weak and ineffective. Therefore, effective job performance of teachers is the corner stone for educational improvement, which they are striving hard to bring about. So, it cannot be denied that teacher educators' job performance is the way in which a teacher behaves in

the process of teaching and it is known to be related to teachers' effectiveness. It is said that the future of prospective teachers and the whole educational system depend upon effective teaching and job performance of teacher educators. Thus, it is important to examine the factor that could enhance teacher educators' job performance in educational system (Cai & Lin, 2006).

Nowadays, social intelligence has become an existing topic with enormous implications for many areas. Therefore, it will investigate the present conditions of the teacher educators' job performance and give the related factors to promote job performance of teacher educators and towards better education system. Moreover, there has been no research on developing a social intelligence scale for Myanmar teacher educators and investigating the relationship between social intelligence and teacher educators' job performance in Myanmar. On this reason, social intelligence of teacher educators and its impact on their job performance are considered as an urgent need. Moreover, the results may further help the administrators to enhance job performance among the teacher educators with respect to social intelligence.

1.2 Purpose of the Study

The main purpose of the study is to develop a social intelligence scale for Myanmar teacher educators. The specific aims of the present study are,

1. To examine the social intelligence level of teacher educators

2. To explore the strength of teacher educators' social intelligence by gender, age, marital status and professional specialization

3. To examine the job performance level of teacher educators

4. To explore the strength of job performance of teacher educators by gender, age, marital status and professional specialization

5. To explore the relationship between social intelligence and job performance of teacher educators

6. To investigate the impact of teacher educators' social intelligence on their job performance

1.3 Research Questions

1. What is the social intelligence level of teacher educators?

2. To what extent is the strength of dimensions involved in social intelligence scale among teacher educators?

3. What are the related factors of social intelligence among teacher educators?

4. What is the job performance level of teacher educators?

5. To what extent is the strength of dimensions involved in job performance questionnaire among teacher educators?

6. What are the related factors of job performance among teacher educators?

7. Is there any significant relationship between social intelligence and job performance of teacher educators?

8. Does social intelligence act as the predictor of job performance of teacher educators?

1.4 Scope and Procedure

Literature review was made from related books, educational journals, thesis, World Wide Web and other relevant sources to grasp the outline of the research. This study develops a social intelligence scale for Myanmar teacher educators by using two parameter logistic model of item response theory and investigates the impact of social intelligence on teacher educators' job performance. The research designs for this study were descriptive research survey method and qualitative study. Before data collection, the expert review and pilot study were carried out to get content validity and face validity. After modifying the survey questionnaires, the actual data collection was done and analyzed these data by using BILOG MG-3 and SPSS software. A total of 1102 teacher educators from Yangon Region, Mandalay Region, Sagaing Region, Bago Region, Ayeyarwady Region, Shan State, Mon State and Kayin State as participants for this study and social intelligence scale and job performance questionnaire for Myanmar teacher educators were used to collect the data in this study. Then, the four groups of teacher educators such as high SI and high JP, low SI and low JP, high SI and low JP, low SI and high JP were categorized and 3 teacher educators was drawn from each group for qualitative study. A follow up qualitative study was carried out by using the multi-dimensional technique with a total of 12 teacher educators. Each participant was assessed by their respective supervisor with Supervisor's Assessment Rating Questionnaire, by 2 colleagues with Colleagues' Assessment Rating Questionnaire and by 10 students with Students' Assessment Rating Questionnaire. Therefore, 12 respective supervisors, 24 colleagues and 120 students were participated in the follow up study to obtain more complete information about social intelligence and job performance and Teacher Educators' Interview Form would be used and conducted with the selected teacher educators for qualitative study.

1.5 Definitions of Key Terms

Social Intelligence: Social intelligence is the ability to understand, aware, adapt, interact, and cooperate successfully with other people for their mutual satisfaction in any social situation (Marlowe, 1986 & Albrecht, 2009).

Teacher Educator: Teacher educator is anyone who educates teachers. Teacher educators are identified as those educators who provide formal instruction or conduct research and development for educating prospective and practicing teachers (Fisher, 2008).

Teacher Educators' Job Performance: Teacher educators' job performance is defined as the ability of teacher educators and the job responsibilities or duties performed by the teacher educator to combine relevant inputs for the enhancement of teaching and learning processes (Adeyemi, 2008)

Acceptance: The ability to understand and respect the other's opinion or position (Silvera, et al., 2001).

Social Skill: The ability to modify behaviours when enter in a new situation and the ability to get to know new people (Silvera, et al., 2001).

Social Information Process: The ability to understand and foresee others' feelings and behaviours as well as the ability to understand delivered messages in both verbally and nonverbally while being in relationship with others (Silvera, et al., 2001).

Social Awareness: The ability to be aware of one's and other's actions when in the relationship (Silvera, et al., 2001).

References

Adeyemi, T. O. (2008). Organisational climate and teachers' job performance in primary schools in Ondo State, Nigeria: An Analytical Survey. *Asian Journal of Information Technology,* 7(4), 138-145.

Albrecht, K. (2005). *Social intelligence: The new science of success*. San Fransisco: Pfeiffer. Retrieved February 14, 2016, from http://www.karlalbrecht. Infodb/crisis.onnigeria09

Albrecht, K. (2009). Social intelligence: The new science of success. *Personal Excellence*, 10(12), pp.5.

Cai, Y., & Lin, C. (2006). Theory and practice on teacher performance evaluation, *Frontiers of Education in China,* 1(1), 29-39.

Colquitt, J., LePine, J., & Wesson, M. (2010). *Organizational behavior*: *Improving performance and commitment in the workplace*, McGraw-Hill Education.

Fischer, K., & Immordino-Yang. (2008). Introduction: *The brain and learning*. San Francisco, CA: Jossey-Bass.

Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. New York: Basic Books. Retrieved May 11, 2015, from http://books.google.com/books?id=4Do-bFrt9tUC

Gini, G. (2006). Adolescence. *Journal of Adolescence*. 29. 307-312.

Kolski-Anderaco, A. (2010). *Social intelligence*. Smart Business Network Inc. kolskiandreacoa@upmc.edu or (412) 647-8728.

Landy, F. J. (2006). The long, frustrating, and fruitless search for social intelligence: *A cautionary tale. In* K.R. Murphy (Ed.), *A Critique of emotional intelligence: what are the problems and how can they be fixed?* (pp.81-123). Mahwah, NJ: Lawrence Erlbaum.

Livergood, N. (2013). *Social intelligence*: *A new definition of human intelligence*. Retrieved August 24, 2017, from http://www.hermes-press.com/socint4.htm

Marlowe, H. A. (1986). Social intelligence: Evidence for multidimensionality and construct independence. *Journal of Educational Psychology*, 78, 52-58.

Murata, A. (2008). Human error management paying emphasis on decision making and social intelligence. Forth International Workshop on Computational Intelligence & Application, Hiroshima University, Japan.

Richard, D. L., & Raymond, N. W. (1984). Revision of the self-monitoring scale. *Journal of Personality and Social Psychology*, 46(6), 1349-1364.

Silvera, D. H., Martinussen, M., & Dahl, T. I. (2001). The Tromso Social Intelligence Scale, a self-report measure of social Intelligence. *Scandinavian Journal of Psychloogy*, 42, 313-319.

Yusoff, K. A. (2013). Job stress, performance and emotional intelligence in Academia, *Journal of Basic & Applied Science Resesearch*, 3(6), 1-8.

CHAPTER 2

Review of Related Literature

2.1 Different Views of Intelligence

Intelligence derives from the Latin verb intelligence, to comprehend or perceive. A form of this verb, intellects, became the medieval technical term for understanding, and a translation for the Greek philosophical term nous. Intelligence has been defined in many different ways such as in terms of one's capacity for logic, abstract thought, understanding, self-awareness, communication, learning, emotional knowledge, memory, planning, creativity and problem solving. It can also be more generally described as the ability to perceive information and retain it as knowledge for applying to itself or other instances of knowledge or information, thereby creating referable understanding models of any size, density, or complexity, due to any conscious or subconscious imposed will or instruction to do so.

Different researchers have proposed a variety of theories to explain the nature of intelligence. The followings are some of the major theories of intelligence that have emerged during the last 100 years. Socrates saw intelligence as basically unitary, but Plato and Aristotle saw intelligence as multiple (as cited in Martinez, 2000). Plato expressed the notion that intelligence is endowed by God, and that social rank is the reflection of it, as it is determined from birth. In 1575, the Spanish physician Juan Huarte defined intelligence as the ability to learn, exercise judgment, and be imaginative (as cited in Calvin, 1996). Francis Galton (1869) defined intelligence as a unified mental ability, providing a methodological foundation for studying intelligence and other individual differences quantitatively (as cited in Martinez, 2000).

Binet would argue that intelligence whatever else it was could never be isolated from the actual experiences, circumstances, and personal associations of the individual in question (Fancher, 1985, cited in Marulus, 2007). Binet believed intelligence was a multifaceted psychological faculty which were tied together in a real world and controlled by practical judgment. In 1909, Binet and Simon listed the following three criteria for intelligent thought: the taking and maintaining of a given mental set; the adaptation of thought for the purpose of obtaining a given end; and the taking of a critical attitude toward one's thought, and correcting it where necessary (as cited in Marulus, 2007).

Around the beginning of the 20th century, Spearman (1904) discovered that people who do well on type of intelligence test do well or others- a trait he calls 'g' for general

intelligence. He proposed two factors of intelligence; general intelligence presented as 'g' which was described as a kind of neurological energy or force needed to perform intellectual work; and specific intelligence; represented as 's', which was described as the specific ability, which will be required for certain specific tasks only and unrelated to others (as cited in Martinez, 2000).

Psychologist Thorndike (1920) classified intelligence into three categories of intelligence as:

- Concrete intelligence; it is the ability based on the manipulation with objects.
- Abstract intelligence; it is the ability to understand and manipulate with the verbal and mathematical symbols and to respond words, numbers and letters etc.
- Social intelligence; it is the ability to understand people, cooperate with them and react to social situations of daily life (as cited in Goleman, 2000).

Psychologist Louis L. Thurstone (1938) offered a differing theory of intelligence. Thurstone's theory focused on seven different "primary mental abilities." The abilities that he described were:

- S- Spatial Ability,
- P- Perceptual Ability,
- N- Numerical Ability,
- V- Verbal Meaning,
- R- Reasoning Ability,
- M- Memory,
- W- Word Fluency (as cited in Department of Educational Psychology, 2012).

According to Cattell (1971), intelligence consists of two major components: fluid intelligence and crystallized intelligence. Fluid intelligence involves information processing, especially in novel or complex circumstances, such as reasoning, drawing analogies and thinking quickly and flexibly. In contrast, crystallized intelligence includes those aspects of intelligence that improve drawing on previously learned information to make decision or solve problems. Classroom tests, vocabulary tests and many social situations involve crystallized intelligence (as cited in Department of Educational Psychology. 2012).

Psychologist Robert Stemberg defined intelligence as mental activity directed toward purposive adaptation to, selection and shaping of, real-world environments relevant to

one's life. Sternberg proposed what he referred to as 'successful intelligence' comprised of three different factors:

- Analytical intelligence refers to problem-solving abilities.
- Creative intelligence involves the capacity to deal with new situations using past experiences and current skills.
- Practical intelligence refers to the ability to adapt to a changing environment (as cited in Gazzaniga & Heatherton, 2007).

In 1983, one of the more recent ideas to emerge is Howard Gardner's theory of multiple intelligences. His theory describes eight distinct intelligences based on skills and abilities that are valued in different cultures. The eight intelligences Gardner described are:

- **Logical/mathematical intelligence:** includes logical thinking, the ability to detect patterns and mathematical abilities.
- **Musical intelligence:** includes the ability to detect and appreciate musical patterns and pitches.
- **Linguistic intelligence:** includes the ability to learn languages, use words to accomplish goals and expressive language.
- **Visual-spatial intelligence:** includes the ability to recognize patterns across spaces and use or manipulate the patterns.
- **Body/kinesthetic intelligence:** includes the ability to use the body effectively to solve problems.
- **Intrapersonal intelligence:** includes understanding and appreciating one's innermost feelings.
- **Naturalistic intelligence**: includes knowledge about your environment and an appreciation for nature.
- **Interpersonal intelligence:** includes the ability to understand and relate to others.

He acknowledges the role of social, or what he calls interpersonal intelligence and defined it as understanding others. Some approaches to understanding social intelligence focus on its application to the solution of everyday life problems. Therefore, there is no doubt that interpersonal intelligence is a main source of highlighting social intelligence (as cited in Goleman, 2006).

2.2 Historical Context of Social Intelligence

Social intelligence as one of the new areas in psychology, in the recent decades, owing to its appealing and widespread aspects has attracted the attention of psychologists and other experts in various fields such as organization and management. Social intelligence is an inclusive term that embraces a wide range of skills and personal characteristics and usually refers to those interpersonal and intrapersonal skills that transcend specific areas of the previous knowledge such as intelligence and technical or professional skills. Today a lot of researchers intend to obtain deep insight about the factors effective in maximal use of the staff and managers' capabilities (Brown, 1992).

Actually, the study of the social intelligence construct has a long history. Research on social intelligence started a few years after Spearman (1904) introduced academic intelligence (as cited in Thorndike, 1920). In fact, the concept was actually mentioned earlier by Dewey in1909, who defined social intelligence as "the power of observing and comprehending social situations" and later by Lull (1911) in their writings about morality and public education (as cited in Landy, 2006).

However, Dewey and Lull's stance on social intelligence was more focused on revising the school curriculum and attempting to engage the student in socially current issues and as such involved in the comprehension of social behaviors and norms. This is in contrast to the proposition of social intelligence as an attribute that was suggested by Thorndike in 1920.

The first accepted historical commentary of social intelligence surfaced in the 1920 *Harper's Monthly Magazine*, authored by Columbia University psychologist, Edward Thorndike. By juxtaposing real life situations with known intelligence studies, Thorndike recognized that "interpersonal effectiveness was of vital importance for success in many fields, particularly leadership". The idea goes back to Thorndike (1920), who defined social intelligence as "the ability to understand and manage men and women, boys and girls – to act wisely in human relations" (as cited in Goleman, 2006).

Thus, Thorndike (1920) was the first person who included social intelligence in a model of human intellectual abilities. Since that time, social intelligence has taken on many meanings, sometimes very different than Thorndike's original interpretation of the construct (as cited in Walker & Foley, 1973). Therefore, in order to facilitate a meaningful research, a review on historical developments and empirical findings from literature pertaining to social intelligence is required.

In fact, social intelligence has a checkered history. Early studies tried to distinguish social intelligence from academic intelligence (e.g., Hoepener & O'Sullivan, 1968; Keating, 1978). However, these research efforts were unsuccessful. The problem was that measures of social intelligence did not correlate highly among themselves and that academic intelligence and social intelligence formed one factor. Methodologically, it was troublesome that both intelligences were measured with the same method (paper-and-pencil measures). The early research led to the conclusion that the "putative domain of social intelligence lacks empirical coherency, at least as it is represented by the measures used here" (as cited in Keating, 1978).

In the late 1950s, David Wechsler defined "social intelligence is just general intelligence, applied to social situations". In this view, abstract or general intelligence enters into social intelligence. The old concept of social intelligence as purely cognitive as assumes as many early theorists claimed that social intelligence may be different from general intelligence. The old view saw social intelligence as the application of general intelligence to social situations – a largely cognitive aptitude. But when ordinary people were asked to list what make a person intelligent, social competence emerged as prominent natural category. But psychologists emphasis were on verbal and problem solving skills but new concept of social intelligence defines it interpersonal talent.

Gardner (1983) describes interpersonal intelligence as empathy, on the awareness and appraisal of the subjective feeling evoked in one self by others as well as the awareness and appraisal of non-verbal expressions of others with emotional content. If so, emotional intelligence could be viewed as collective effort of interpersonal and intrapersonal intelligence but social intelligence gives importance to interpersonal abilities. That's why it can be said that social intelligence is the key element which makes people succeeds in life. To be exact, social intelligence is the capacity of the individual to interact effectively with his environment. Therefore, it can be concluded that the interpersonal relation in various work environments is itself reflection of social intelligence. At that point, two advancements led to more optimism. The first was the distinction between *cognitive* social intelligence (e.g., social perception or the ability to understand or decode verbal and nonverbal behaviors of other persons) and *behavioral* social intelligence (effectiveness in social situations). Using this multidimensional definition of social intelligence and multiple measures (self, teacher, and peer ratings), Ford and Tisak (1983) were able to distinguish social intelligence from academic intelligence. In addition, social

intelligence predicted social behavior better than academic intelligence (as cited in Marlowe, 1986).

In today's hectic world, it is necessary to instill the art of effective social intelligence management. An individual must master the social space and navigate efficiently to assess, express and develop one's social intelligence. People with high social intelligence have magnetic powers that attract others, and they are friendly, supportive, caring, etc., and are successful in society. People who have low social intelligence lack insight and are preoccupied with so many other things and also fail to understand the perception of others, thereby becoming a misfit in the society. It is a learnable skill that can lessen conflicts, construct relationships, put an end to prejudices and divisions, and prevent people from falling into the miseries of life such as alcohol and drug addiction, suicide, broken families, failed marriages, crimes, murders, terrorism and war (Marti, 2005). Such a long history of social intelligence led to its sound theories and definitions.

2.3 Theories and Definitions of Social Intelligence

The definition of social intelligence is still being debated in the literature. Mainly social intelligence is comprised of two words 'Social' and 'Intelligence'. "Social" means to relate to the human society. "Social" is related to society as a system of common life. It is the society that makes an individual culture. Almost everything that he learns is acquired from the society only the capacity of learning is his own. It is in society that his ego develops whereby he is called a human being. Personalities don't exist in vacuum but to a large extent depend upon social environment. "Intelligence" means the capacity to adjust. Generally, intelligence is considered to be the power to think, understand, learn and decide. However intelligence is much more than it. According to ancient Indian Philosopher, the inner self of man has three parts: Mind, Intelligence and Ego. Due to coordination of the Mind, the external senses become active and due to it, the Intelligence becomes active. This kind of intelligence comprehends the fields of skills in behavior which include the qualities of personality and character, temperament, mood, honesty, decisiveness, humor, nature, these indicate the individual's "Social Intelligence". So, according to Jones and Day (1996), high social intelligence is possessed by those who are able to handle people well.

Interestingly, social intelligence has two key constituents which are distinctly personal and social in nature, one is intrapersonal intelligence and other is interpersonal intelligence. Intrapersonal intelligence is the ability of the person to gain access to his or

her own internal, emotional life while interpersonal intelligence is the ability to notice and make distinctions among other individuals.

Therefore, it can be generalized that social intelligence means the ability of an individual to react to social situation of daily life. It is the ability to adapt with the people or the capacity to balance effectively with the people. Anyone who has facility of manners to get along with others has social intelligence. Social intelligence would not include feelings or emotions aroused in us by other people but merely our ability to understand others and react in such a way toward them that the ends directed should be attained. As the child grows, the social behaviour of child undergoes a change. This in between process is known as social change or the process which has changed and egocentric child to a child in rapport with his environment is called social development. In short, social intelligence means ability to tolerance, ability to cooperate, ability of sharing joys and sorrows with others, give and take and mixing with others. In addition, it refers to the ability to read other people and understand their intentions and motivations. It is basically the capacity to effectively negotiate complex social relationships and environments. Psychologist Nicholas Humphrey believes that it is social intelligence, rather than quantitative intelligence, that defines humans' relation (as cited in Mohit & Parminder, 2015).

According to Sean Foleno, social intelligence is a person's competence to understand his or her environment optimally and react appropriately for socially successful conduct. Social intelligence is a critical factor in brain growth, social and cognitive complexity. Social scientist Rose Honeywill believes a social intelligence quotient is an aggregated measure of self and social awareness evolved social beliefs and attitudes and a capacity and appellate to manage complex social change (as cited in Ganaie & Hafiz, 2015).

It is almost a century before, when Thorndike (1920) included the construct 'Social Intelligence' in a model of human intellectual abilities. Thorndike (1920) divided intelligence into three facets; understanding and managing ideas (Abstract Intelligence), concrete objects (Mechanical Intelligence) and people (Social Intelligence). Thorndike (1920) originally defined social intelligence as "the ability to understand and manage men and women, boys and girls - to act wisely in human relations". Adequate adjustment in social situations is the index of social intelligence (as cited in Yahyazadeh & Lotfi, 2012).

Originally, Thorndike had a psychometric view of social intelligence. The psychometric view describes social intelligence as general intelligence applied to social situations or the ability to understand and manage people measurable by tests. Thorndike

16

required a "genuine situation with real persons" for the measurement of social intelligence. It was rare that the behaviour of genuine persons served as stimuli. Therefore, Thorndike subsequently failed to find a way to measure social intelligence. Thorndike (1920) noted that "convenient tests of social intelligence are hard to devise. Social intelligence shows abundantly in the nursery, on the playground, in barracks and factories and salesroom, but it eludes the formal standardised conditions of the testing laboratory. It requires human beings to respond to, time to adapt its response, and face, voice and gesture". Nevertheless, true to the goals of the psychometric tradition, the abstract definitions of social intelligence were quickly translated into standardised laboratory instruments for measuring individual differences in social intelligence (as cited in Fambrough & Hart, 2008).

Thus, social intelligence as conceived by Thorndike consisted of cognitive and behavioral elements (i.e."understanding people" vs "act wisely in human relations"). Additionally, the cognitive components are subdivided into different operational requirements (i.e., reasoning, memory, perception, creativity, and knowledge requirements) (as cited in Fambrough & Hart, 2008). These components were extracted by Fambrough and Hart (2008) as follow.

Table 2.1 Definitions of Social Intelligence Extracted from the Literature

Cognitive Requirements	Cognitive Components	Behavioral Components
Reasoning	Insight into the moods or personality traits of strangers (Vernon, 1933) Judge correctly the feelings, moods, and motivation of individuals (Wedeck, 1947) Ability to judge people with respect to feelings, motives, thoughts, intentions, attitudes, etc. (O'Sullivan et al., 1965) Understand the feelings, thoughts, and behaviors of persons, including oneself (Marlowe, 1986)	Get along with others and ease in society (Vernon, 1933) Ability to get along with others (Moss & Hunt, 1927) The ability to deal with people and the applications of means to manipulate the responses of others (Orlik, 1978) Act appropriately upon an understanding of the feelings, thoughts, and behaviors of

17

		persons, including oneself (Marlowe, 1986)
	Judgment in social situations (Moss et al., 1955)	persons, including oneself (Marlowe, 1986)
	Recognition of the mental states behind words and from facial expressions (Moss et al., 1955)	The ability to manipulate the responses of others (Weinstein, 1969)
	Role-taking ability (Feffer, 1959)	Attainment of relevant social goals (Ford, 1982)
	The ability to interpret social cues, The ability to predict what will happen (O'Sullivan & Guilford, 1966)	Ability to speak effectively, to be appropriately responsive to the interviewers questions, to display appropriate nonverbal behaviors (Ford & Tisak, 1983)
	The ability to identify the internal mental states (O'Sullivan & Guilford, 1966)	Effectiveness in heterosexual interaction (Wong et al., 1995)
	Decoding of social cues (Barnes & Sternberg, 1989; Buck, 1976; Sundberg, 1966)	Social problem solving (Cantor & Harlowe, 1994)
	Ability to comprehend observed behaviors in the social context in which they occur (Wong, Day, Maxwell, & Meara, 1995)	
Memory	Memory for names and faces (Moss et al., 1955; Sternberg et al., 1981)	
Perception	Sensitivity for other people's behavior (Orlik, 1978) The ability to perceive the present mood of other people (Orlik, 1978)	
Creativity (Fluency)	The ability to create recognizable categories of behavioral acts, the ability to imagine many possible outcomes of a setting (Hendricks et al., 1969)	
Knowledge	Knowledge of social matters (Vernon, 1933)	

	The capacity to know oneself and to know others (Gardner, 1983)	
	Individuals fund of knowledge about the social world (Cantor & Kihlstrom, 1987)	
	Social problem solving (Cantor & Harlowe, 1994)	
	Knowledge of rules of social interaction (Orlik, 1978)	
	Knowing the rules of etiquette (Wong et al., 1995)	

Actually, social intelligence has been concentrated by educators since the early decades of 20th century. For example, Moss and Hunt (1927) defined social intelligence as the ability to get along with others. Vernon (1933) provided the definition of social intelligence as the person's ability to get along with people in general, social technique or ease in society, knowledge of social matters, and susceptibility to stimuli from other members of a group as well as insight into temporary moods or underlying personality traits of strangers.

On the other hand, Wedeck (1947) concentrated upon the cognitive aspect of social intelligence and defined social intelligence as correctly judging the feelings, moods, and motivations of people. In some of the studies carried out on the subject, the concepts of social competence and social skills were sometimes used instead of social intelligence.

Weschler (1958) viewed "social intelligence is just general intelligence applied to social situations". Wechsler acknowledged that the Picture Arrangement subtest of the WAIS (Wechsler Adult Intelligence Scale) might serve as a measure of social intelligence because it assesses the individual's ability to comprehend social situations. According to Walker and Foley (1973), social intelligence is the ability to deal with people, understand the feelings, thoughts and intentions of others, judge correctly the feelings, moods and motivations of individuals.

Ford and Tisak (1983) laid emphasis on the usefulness of adopting a behavioral effectiveness criterion to define social intelligence. They selected social intelligence measures according to the criterion of behavioral effectiveness in social situations rather

than cognitive understanding of them. It was claimed that there is little evidence to support a cognitive conceptualization of social intelligence.

Sternberg's (1985, 1988) triarchic view of intelligence explicitly represents social intelligence. According to the triarchic theory, intelligence is composed of analytical, creative and practical abilities. Practical intelligence is defined in terms of problem-solving in everyday contexts, and explicitly includes social intelligence (Sternberg & Wagner, 1986). According to Sternberg, each type of intelligence reflects the operation of three different kinds of component processes: performance components, which solve problems in various domains; executive metacomponents, which plan and evaluate problem-solving; and knowledge-acquisition components, by which the first two components are learned. Also, Sternberg argued that the measurement of all forms of intelligence, especially practical and social intelligence, is sensitive to the context which it is assessed.

Marlowe (1986) argued that social intelligence is composed of a set of problem-solving skills that enable the individual to find and to resolve interpersonal problems. Accordingly, social intelligence is defined as the ability both to understand the feelings, thoughts and behaviors of one-self and others in interpersonal situations and also to act appropriately upon that understanding.

Al-Ghoul (1993) defined it as the ability to understand the feelings, intentions and ideas of others or comprehend social situations faced by the individual through his relationships with others. Also, Driver defined social intelligence as a type of intelligence that is used by individual in their interaction with others and in social relationships, and he indicates that high social intelligence is synonymous with the concept of tact (as cited in Al-Qudra, 2000). Moreover, Habib (1994) defined it as an individual's ability to behave in social situations, distinguish the psychological conditions of others from their facial expressions, judge human behavior, remember names and faces, understand jokes, participate with others in their free time and have knowledge of proverbs and wisdoms.

Soon after those definitions, Buzan (2002) introduced the Social Intelligence Theory. According to Buzan, social relation is 'brain-to-brain communication', on which an individual has the ability to communicate with himself and manage to address the brain of other people. Individual with this competency is considered as someone who is intelligent. According to Buzan's social intelligence theory, someone who can communicate well with another person is considered intelligent because of the need to generate their brain and body to communicate and read other people. Interestingly, this

intelligence can be learned, nourished and developed through education or training (as cited in Gardner, 1983; Harris, 2007; Goleman, 1995).

Again, Albrecht (2004) defines social intelligence as the ability to get along well with others and to get them to cooperate. Social intelligence is characterized as a combination of a basic understanding of people – a kind of strategic social awareness and a set of skills for interacting successfully with them. Albrecht (2005) proposed a five- part model of Social Intelligence – Situational Awareness or Social Awareness, Presence, Authenticity, Clarity and Empathy (S.P.A.C.E.).

It was not until years later that Daniel Goleman and Karl Albrecht further explored and popularized this concept. According to Goleman (2006), social intelligence is concerned with the best interests of others. Social intelligence is the human capacity to understand what is happening in the world and responding to that understanding in a personally and socially effective manner.

Hopkins and Bilimoria (2008) imply that to be considered socially intelligent one has to be adept at human relationships not just about them. It is most interesting that Joseph and Lakshmi (2010) elaborate that an individual's social intelligence depends on a lifelong learning process. Socially intelligent employees exhibit confidence in social situations, demonstrate a genuine interest in their fellow workmates, are assertive and appropriate in expressing their feelings and emotions, are capable of adapting, understanding and responding effectively, and show a great level of self-awareness. Social intelligence competency as the ability to be aware of, understand and act on emotional information about others that leads to effective performance.

2.4 Social Intelligence Models

Thorndike (1920) had pointed out that there is an aspect of personality that can be called social intelligence distinct from concrete and abstract intelligence. Marlowe (1986) suggested that individuals who are socially intelligent appear to experience a rich, meaningful life, as opposed to truncated affective experiences. Jones and Day (1997) found some evidence that social intelligence can be divided into knowledge of the social world and the ability to perceive and adapt to ambiguous social situations.

Furthermore, aspects of social intelligence have been found to be associated with enhanced social problem-solving abilities, experienced leadership and positive interpersonal experience (Cheng et al., 2001). Ford and Tisak (1983) defined social intelligence in terms of behavioral outcomes and were successful in supporting a distinct

domain of social intelligence. Social intelligence is incorporating internal and external perceptions, social skills, and other psycho-social variables (as cited in Taylor, 1990).

Kozmitzki and John (1993) stated that social intelligence is made up of seven constituents:

(i) to sense the internal conditions and moods of others

(ii) a general ability of establishing relationships with persons

(iii) knowledge about social theories and life

(iv) social intuition and sensitivity in case of complex social circumstances

(v) use of techniques in order to manipulate others

(vi) empathy and

(vii) social adaptation

Silberman (2000) examined social intelligence and the traits of individuals having social intelligence on the base of eight aspects:

(i) understanding people

(ii) expressing one's own feelings and ideas

(iii) expressing one's own needs

(iv) giving/receiving feedback to/from the person contacted

(v) influencing, motivating and persuading others

(vi) offering innovative solutions to complex situations

(vii) working cooperatively instead of individualistically, being a good team member, and

(viii) adopting the appropriate attitude in the event relationships come to a deadlock.

Silvera et al. (2001) stated that social intelligence consists of various components; perceptibility of internal conditions and moods of other people, general ability to deal with other people, knowledge of social norms and social life, ability to orientate oneself in social situations, use of social techniques that enable manipulation, negotiating with other people, social charm and social adaptation (Parkinson, 1996). Silvera (2001) proposed the three dimensions of social intelligence including social information process (SP), social skills (SS), and social awareness (SA).

- **Social information:** Social information process refers to the ability to understand and foresee others' feelings and behaviors as well as the ability to understand delivered messages in both verbally and nonverbally while being in relationship with others.

- **Social skills:** Social skills focus on the ability to modify behaviors when enter in the new situation and the ability to get to know new people.

- **Social awareness**: Social awareness emphasizes on the ability to be aware of one's and others' actions when in the relationship.

According to Buzan (2002), social intelligence comprises of eight factors:

(i)   reading persons' minds: understanding and knowing people by making use of their body signals and verbal and nonverbal communication data

(ii)   active listening skill

(iii)   sociability

(iv)   influencing others

(v)   being active in social medium (popularity)

(vi)   negotiation and social problem solving

(vii)   persuasion, and

(viii) knowing how to behave in different social mediums.

Greenspan (1979) proposed a hierarchical model of social intelligence. In this model, social intelligence consists of three components: social sensitivity, reflected in role-taking and social inference; social insight, including social comprehension, psychological insight, and moral judgment; and social communication, subsuming referential communication and social problem solving. Greenspan did not propose specific tests for any of these components of social intelligence, but implied that they could be derived from experimental procedures used to study social cognition in general.

Also, Marlowe's (1986) model of social intelligence comprised five domains:

1. Pro-social attitude,

2. Social performance skills,

3. Empathetic ability,

4. Emotional expressiveness, and

5. Confidence.

According to Dong et al. (2008), pro-social attitudes were indicated by having an interest and concern for others; social performance skills were demonstrated in appropriate interaction with others; empathetic ability refers to one's ability to identify with others; emotion expressiveness describes one's "emotionality" toward others; and confidence in social situations is based on one's comfort level in social situations.

In another model, social intelligence includes the following aspects:

• **Primal empathy:** Feeling with others, and sensing non-verbal emotional signal.

• **Attunement:** Listening with full receptivity, and attuning to a person

• **Empathy accuracy:** Understanding other's thoughts, feelings, and intentions.

• **Social cognition:** Knowing how the social world works.

• **Social facility:** Building on social awareness to allow smooth and effective interactions, and includes the following aspects.

• **Synchrony:** Interacting smoothly at the nonverbal level.

• **Self-presentation:** Presenting ourselves effectively.

• **Influence:** Shaping the outcome of social interactions.

• **Concern:** Caring about others' needs and acting accordingly (Murata, 2008).

Weis and Sus (2005) proposed a performance model of social intelligence that incorporated only cognitive ability requirements. The performance model, representing a structural model of social intelligence incorporated social understanding, social memory, social perception, social creativity and social knowledge as cognitive abilities.

According to Weis and Sus (2005), social understanding requires individuals to understand or interpret social stimuli against the background of the given social situation (e.g., understand correctly what a person wants to express via verbal or nonverbal means of communication). The stimuli can vary according to their complexity (e.g., from a simple facial expression to a sequence of interaction between persons) and should allow conclusions about a person's emotions, thoughts, intentions, motivations or personality traits. Social memory is defined as the storing and recall of objectively given social information that can vary in complexity (e.g. from memory for names and faces to the memory for a sequence of interactions). They defined social perception as the ability to perceive socially relevant information in more or less complex situations and social creativity as the production of as many and as diverse solutions or explanations as possible for a social situation or problem. Social knowledge is defined as the knowledge about the social world (i.e. social rules, social matters etc.) (as cited in Cantor & Kihlstrom, 1987; Vernon, 1993).

2.4.1 Albrecht's Model of Social Intelligence: S-P-A-C-E

Albrecht notes that though some individuals may possess an ample supply of 'abstract intelligence' (the IQ that academics, psychologists, and educators have studied so diligently), they may not have much social intelligence (SI)—the ability to get along with others and to get them to cooperate. This competency can be characterized as a basic understanding of people (i.e., a kind of strategic social awareness) and a set of component

skills for interacting successfully with others. Thus, SI consists of both insight and behavior.

The extremes of SI can be thought of as either "toxic" or "nourishing." Whereas, toxic behaviors are those that cause others to feel devalued, inadequate, intimidated, angry, frustrated, or guilty, nourishing behaviors cause others to feel valued, affirmed, encouraged or competent, capable, loved, respected, and appreciated. People with high SI (those who are socially aware and basically nourishing) are magnetic—thus the expression "magnetic personality." A continued pattern of toxic behavior indicates a low level of social intelligence–the inability to connect with people and influence them effectively. A continued pattern of nourishing behavior tends to make a person much more effective in dealing with others; nourishing behaviors are the indicators of high social intelligence (Albrecht, 2009).

Albrecht believes that the biggest single cause of low SI is simply a lack of insight. Toxic people are often so preoccupied with their own personal struggles that they do not understand their impact on others; thus, they need help in seeing themselves as others see them. Albrecht (2006) noted that social intelligence is a basic of understanding of people and cooperate with them successfully. He proposed the concept of social intelligence, which is based on five key dimensions called S.P.A.C.E. The S.P.A.C.E. formula tends to identify social intelligence in terms of observable behaviors (as cited in Albrecht, 2009).

The "**S**" factor in the S.P.A.C.E. model represents one's Situational Awareness (or situational "radar"). It is the ability to understand and empathize with people in different situations, sense their feelings and possible intentions, and "read" situations based on a practical knowledge of human nature. It includes a knowledge of the cultural "holograms"—the unspoken background patterns, paradigms, and social rules that govern various situations. It means having an appreciation for the various viewpoints of others and a practical sense of the ways people react to stress, conflict, and uncertainty. Individuals who are self-centered, preoccupied with their own feelings, needs, and interests, will probably have difficulty in getting acceptance and cooperation from others. Having good situation radar means having a respectful interest in other people, which they tend to return.

The "**P**" factor represents Presence—the way a person affects individuals or groups through physical appearance, mood and demeanor, and body language, and how he or she occupies space in a room. It is a bearing—a physicality that gives and gets respect and attention. It involves listening with skill, and it creates and provides a quality of self-

assurance and effectiveness that allows one to connect with others. And, though looks count, the primary element of a positive Presence is an inviting demeanor. Thus, all people need to pay attention to whether they are conveying confidence, professionalism, kindness, and friendliness, or whether they are communicating shyness, insecurity, animosity, or indifference.

In the S.P.A.C.E. model, the "**A**" factor represents Authenticity—a dimension that reveals how honest and sincere individuals are with self and others. Albrecht believes that when people respect themselves, have faith in their personal values and beliefs, and are "straight" with others, they are likely to behave in ways that others perceive as authentic. When people feel—consciously or unconsciously—that others will not accept, respect, love or cooperate with them, if they act according to their own needs and priorities, they are likely to behave in ways that others perceive as inauthentic. However, in the context of SI, Authenticity involves more than simply being oneself and includes the ability to connect genuinely with other people—which demands empathy and compassion. What some psychotherapists call narcissism (i.e., malignant self-love), Albrecht sees as another variant of inauthentic behavior, which can become pathological when it renders the individual incapable of engaging in two-way relationships of mutuality, sharing, and support. It is, therefore, possible to have well-developed "people skills" and yet lack the emotional depth to be considered truly socially intelligent.

The "**C**" factor in the S.P.A.C.E. model represents Clarity—the ability to express one's thoughts, opinions, ideas, and intentions clearly; to understand the power of language as a medium of thought and expression; and to use language as a strategic asset. Albrecht notes, for example, that those with high SI Clarity have mastered the ability to move from a "sky-high" level of abstract communication to a ground- or concrete-level. In other words, they can pilot a "verbal helicopter," choosing terms, figures of speech, expression, analogies, and metaphors that position the listener's thinking process at the desired altitude. Thus, they are capable of taking their listeners down to the lowest level of detail or up to the highest level of generality. People who lack this skill cannot seem to control the throttle or the stick, moving too fast from the concrete to the abstract or spending too much time at one level or the other. Another critical Clarity skill is the ability to monitor one's own language patterns, and the language patterns of others, so as to avoid certain verbal pathologies that can cause both individual and collective misunderstandings, conflicts, and even psychological maladjustments. Albrecht refers to

these corrupted linguistic forms as *dirty language* that can intimidate, offend, anger, alienate or confuse others and, thus, muddy communication.

The "**E**" factor in the S.P.A.C.E. model represents Empathy—a dimension that invites individuals to look at how truly aware and considerate they are of the feelings of others and how capable they are of tuning into other people as unique individuals. In its usual connotation, being empathetic means identifying with another person and appreciating and/or sharing his or her feelings. However, in the context of SI, there is also a sense of connectedness, which inspires people to cooperate. Thus, Albrecht defines "Over time, a greater respect for the power of language can help you understand, be understood, persuade others, and win them to your points of view." Empathy as "a state of positive feeling between two people, commonly referred to as a condition of rapport." Such rapport cannot be established without the link of emotional intelligence and social intelligence (as cited in Albrecht, 2009).

2.4.2 Goleman's Model of Social Intelligence

Goleman (2006) came across an article in an academic journal by two psychologists, John Mayer and Peter Salovey, who offered the first formulation of a concept they called "emotional intelligence," which was a departure from the prevalent view of intelligence at the time, which was the idea that life success was influenced by other components besides intellectual ability. In 1995, Goleman supported the theory with updated research in his 10th anniversary edition.

Goleman explains how his view of emotional intelligence is based on a set of human capacities within us as individuals that he characterizes as crucial. His theory of social intelligence developed from the theory of emotional intelligence, as an extension beyond the individual to include interaction with others (Goleman, 2005). As detailed in the section on the historical development of social intelligence, social intelligence is not a new concept, dating back to Dewey in 1909. Goleman could be seen as a researcher who stood on the shoulders of giants, modernizing and expanding upon the existing research on social intelligence as well as developing a theory of social intelligence (as cited in Goleman, 2006).

Individuals who are socially intelligent are primarily skilled in three psychomotor areas (Goleman, 1995; 2000; Buzan, 2002). The areas are,

 (1) Understand own self (self-efficacy),

 (2) Understand the other person (empathy), and

 (3) Competencies to address relationship.

Other social competencies are having the ability to handle a conflict relationship, a good listener, comfortable when in a group or with others of different backgrounds, ages, cultures and social strata. However, the most important is the ability to make people relaxed and comfortable.

Goleman organized social intelligence into two broad categories, social awareness and social facility. Social awareness includes what a person senses about others and social facility includes what a person then does with that awareness. According to Goleman (2006), social awareness and social facility includes the following domains:

SOCIAL AWARENESS

Domains	**Specification**
Primal Empathy	Feeling with others; sensing non-verbal emotional signals
Attunement	Listening with full receptivity; attuning to a person
Empathic Accuracy	Understanding another person's thoughts, feelings and intentions
Social Cognition	Knowing how the social world works

SOCIAL FACILITY

Domains	**Specification**
Synchrony	Interacting smoothly at the nonverbal level
Self-presentation	Presenting ourselves effectively
Influence	Shaping the outcome of social interactions
Concern	Caring about others' needs and acting accordingly

Goleman (2006) has argued that to fully understand social intelligence requires us to include "non-cognitive" aptitudes—"the talent, for instance, that lets a sensitive nurse calm a crying toddler with just the right reassuring touch, without having to think for a moment about what to do". His model emphasizes an affective interactive state where both social awareness and social facility domains range from basic capabilities to more complex high-end articulation. Social awareness is comprised of four dimensions: primal empathy, attunement, empathic accuracy, and social cognition. Primal empathy is being able to sense others' nonverbal emotional signals. Attunement refers to active listening and giving someone our full attention. Empathic accuracy is a cognitive ability and builds on primal empathy, i.e., the individual is able to not only feel, but understand, what the other person is experiencing. Social cognition describes knowledge about how the social world works, e.g., the rules of etiquette, finding solutions to social dilemmas, or decoding social signals.

Social facility expands on this awareness to allow smooth, effective interactions, and its four dimensions include: synchrony, self-presentation, influence, and concern. Synchrony was defined as gliding gracefully through a nonverbal dance with another person. Just as music invokes a rhythm and beat—engaging us—so does our nonverbal dance create a flow and ease with another individual. Self-presentation describes the ability to present oneself favorably, such as leaving a good impression. Influence is the ability to constructively shape the outcome from the interaction with another, and concern is not only caring about another's needs, but acting accordingly. Although considered soft skills, these ingredients are the basic elements of nourishing and sustaining interpersonal relationships (Goleman, 2006). In fact, these soft skills are pathways to success of human's life in the 21st century. Therefore, measuring social intelligence will be quite meaningful in education to produce socially competent citizens leading effective performance in their respective workplace.

2.5 Measuring Social Intelligence

Social scientist Rose Honey will believes a social intelligence quotient is an aggregated measure of self and social awareness evolved social beliefs and attitudes and a capacity and appellate to manage complex social change.

2.5.1 The George Washington Social Intelligence Test

The first of these was the George Washington Social Intelligence Test (as cited in Moss, Hunt, & Omwake, 1949; Moss, Hunt, Omwake, & Woodward, 1955). Like the Stanford-Binet Intelligence Test or Wechsler Adult Intelligence Scale, the GWSIT was composed of a number of subtests, which can be combined to yield an aggregate score. The subtests are:

(1) Judgment in Social Situations;

(2) Memory for Names and Faces;

(3) Observation of Human Behavior;

(4) Recognition of the Mental States Behind Words;

(5) Recognition of Mental States from Facial Expression;

(6) Social Information; and

(7) Sense of Humor

The first four subtests were employed in all editions of the GWSIT. The Facial Expression and Social Information subtests were dropped, and the Humor subtest added, in later editions. Hunt (1928) originally validated the GWSIT through its correlations with adult occupational status, the number of extracurricular activities pursued by college

students, and supervisor ratings of employees' ability to get along with people. However, some controversy ensued about whether social intelligence should be correlated with personality measures of sociability or extraversion (e.g., Strang, 1930; Thorndike & Stein, 1937). Most important, however, the GWSIT came under immediate criticism for its relatively high correlation with abstract intelligence. Thus, Hunt (1928) found that aggregate GWSIT score correlated $r = .54$ with aggregate score on the George Washington University Mental Alertness Test (GWMAT), an early IQ scale. A factor analysis by R.L. Thorndike and Stein (1937) indicated that the subtests of the GWSIT loaded highly on the same general factor as the subtests of the GWMAT. Woodrow (1939), analyzing the GWSIT with a much larger battery of cognitive tests, found no evidence for a unique factor of social intelligence. R.L. Thorndike and Stein (1937) concluded that the GWSIT is so heavily loaded with ability to work with words and ideas, that differences in social intelligence tend to be swamped by differences in abstract intelligence.

The inability to discriminate between the social intelligence and IQ, coupled with difficulties in selecting external criteria against which the scale could be validated, led to declining interest in the GWSIT, and indeed in the whole concept of social intelligence as a distinct intellectual entity. Spearman's (1927) model of g afforded no special place for social intelligence, of course. Nor is social intelligence included, or even implied, in Thurstone's (1938) list of primary mental abilities (as cited in Moss, Hunt, & Omwake, 1949; Moss, Hunt, Omwake, & Woodward, 1955).

2.6 Social Intelligence and Related Constructs

Out of many related constructs of social intelligence, the followings were extracted as remarkable constructs.

2.6.1 Social Intelligence and Leadership

Every organization has its own distinctive work culture- the psychological environment within which people work and interact. In every workplace, there are dozens that are mired in conflict and craziness. Respecting diversity is a key aspect of social intelligence in the workplace relies on people understanding and supporting each other. The root of the problem is the need to communicate, honestly and openly and yet tactfully in the workplace. Leaders who succeed in building healthy, high-performing cultures capitalize on the sense of community and advance the aims of the enterprise.

General intelligence continues to exhibit a strong connection to various indices of leadership and leader effectiveness, and this association has been observed under a variety of research settings (Zaccaro et al., 2003). Some emerging leadership theories also

imply that emotional and social intelligence are even more important for leaders and managers, because cognitive and behavioral versatility and flexibility are important characteristics of competent leaders (Bosman, 2003).

In general, social intelligence has a connotation closely related to notions such as social skills and competence. Social intelligence may be regarded as an overall construct for understanding how successfully people manage social relationships. House and Aditya (1997) explain that leadership is rooted in a social context and social intelligence is a required trait for leaders. House et al., (1999) describe leadership as a social process that is "the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of the organization" (as cited in Parolini, 2005).

In organizations, social intelligence refers to intentionally using good people skills with an understanding that the effective use of those skills will have a positive impact on others - an impact which is biologically based and observable. Zaccaro and his colleagues have argued that social appraisal skills, or social intelligence, reside at the heart of effective leadership (Zaccaro et al., 2003).

In essence, social intelligence is using an awareness of the substantial impact of relationships to help leaders enhance the performance of the people they are leading. Personal skills such as initiative, empathy, adaptability, and persuasiveness are vital for a leader's toolbox. Lacking awareness of his or her emotional impact on others can doom a leader to failure as a people manager, regardless of how competent in the subject matter or job skills he or she may be. Social intelligence, when applied to leadership, recognizes that the most important activity of a leader is to connect with others in order to amplify the latter's performance (Kolski-Anderaco, 2010).

Social intelligence also includes the ability to select an appropriate response and to be flexible on one's behavior (Robert, 2008). Meanwhile, people who haven't developed their social intelligence skills cannot connect effectively with others and may even alienate or offend them. That can be true both of employees and leaders alike (as cited in Kolski-Anderaco, 2010). If so, how can teachers who are also community leaders today handle disciplineary problems in their classrooms? It highlights the relationship between social intelligence and classroom discipline strategies.

2.6.2 Social Intelligence and Classroom Discipline Strategies

A teacher's most important activity in a typical class environment is the one related to classroom discipline strategies. Learning and teaching cannot take place in a classroom without discipline (Marzano et al., 2003). Disciplinary problems have long been

recognized as a major issue in schools (Edwards, 2008). Classroom discipline management refers to control of time and behavior of students as well as of teachers in a classroom setting (Fredrick et al., 2000). Classroom discipline management involves many interrelated and complicated facets arising from class and environment. The teacher, as the class manager, is expected to lead the class environment, as stated by Lemlech (1988) considering these dimensions as an orchestra. Another important dimension of classroom management is to prepare the physical conditions of the class, to create a proper learning environment and a good student-teacher relationship.

A well-prepared physical environment and order facilitates the learning and teaching process and can enhance students' class participation. On the contrary, a dull, unaired, noisy and ill-prepared classroom environment adversely affects class participation and learning. Environment also affects the quality of teacher-student relations (Grubaugh & Houston, 1990).

Classroom discipline management involves teachers encouraging positive social interactions as well as active management in learning and self-motivation. They shape a positive learning society in which the students are actively engaged in individual learning process and classroom management (Burden & Byrd, 2002). Classroom discipline management strategies play an effective role in building positive teachers and students relationships (Wang et al., 1993).

Classroom discipline management strategies are a set of interactions that assist teachers to influence students' behavior and teach them to act positively. These interactions are developed not only to reduce teacher's stress level but to help these professional people and students to establish social climates of cooperation, a setting in which children and adults can learn together, play together, and build quality relationship (Danforth & Boyle, 2007).

It is important to study how teachers promote classroom discipline and limit or reduce disruptive behavior of students. Scholars argue that high intelligent quotient (IQ) does not necessarily guarantee success in a person's life. It is not responsible for the differences beyond personality factors and characteristics (as cited in Mehrabian, 2000). Hence, other forms of "intelligence" were investigated (Goleman, 1997). Moreover, social intelligence is yet an effective element in classroom discipline management. Albrecht (2005) claimed, the teachers whose behaviors are associated with high social intelligence, stress the value of collaboration. Similarly, there is a need for educational system which equips the

students to state their opinions obviously in order to make themselves understood, and to try to understand the others before they show any reactions to the behavior.

One concept of social intelligence referred to it as the "ability to read non-verbal cues or make accurate social inferences" and "one's ability to accomplish relevant objectives in specific social settings" (Brown & Anthony, 1990; Ford & Tisak, 1983). According to Zirkel (2000), social intelligence is closely related to one's own, personality and individual behavior. Those with social intelligence are fully aware of themselves and understand their environment. This enables them to control their emotions, make decisions about their goals in life. Her model centered on the term "purposive behavior" which is deliberate action taken after evaluating one's environment, opportunities and risks and the goals set.

In fact, this model of social intelligence assists in creating a sense of identity for the individual, emphasizes intrapersonal and interpersonal skills and focuses on thinking and resultant behavior within social contexts. Magida (2006) agreed that educators with high levels of social intelligence are able to mould individuals from different age groups to lead a wholesome life (as cited in Dincer, 2007). Albrecht (2005) considers social intelligence as a prerequisite for teachers. He is of the view that the educational system and teachers should respect the rules and behaviors associated with high social intelligence. This reminds social intelligence should be highly valued in any society. And according to Goleman and Boyatzis (2008), social intelligence can be better understood through a hybrid field between neuroscience and social psychology, called social neuroscience.

2.6.3 Social Intelligence and Neuroscience

Social neuroscience, simply put, is the study of what happens in the brain when people interact. Social neuroscientists focus on the brain's role in driving social behavior and how our social world influences our brain and biology (Goleman, 2006). Aspects of social intelligence are better understood through the findings of social neuroscience. In their article on social intelligence and the biology of leadership, Goleman (2006) explain how those leaders who are "finely attuned" to those whom they lead has what many would call greater intuition, which is produced by a class of neurons called *spindle cells*. These long cells attach to other cells making the transfer of thoughts and feelings (what Goleman would refer to as low road processes) occur quicker. Spindle cells also bond the high and low roads, helping us to orchestrate our emotions with our responses (as cited in Goleman & Boyatzis, 2008).

Goleman and Boyatzis (2008) also discuss mirror neurons, which they describe as a type of neural Wi-Fi (which is a variety of brain cells) that detect the emotions of others and duplicates emotions within us. Mirror neurons sense both movement and feelings of another and prepare us to imitate and feel with them. Mirror neurons make emotions contagious. They help us perceive intentions of others, keeping us a step ahead in our social interactions. Goleman (2006) explains the importance of the behavioral component of social intelligence from an evolutionary perspective. The existence of mirror neurons can be understood as part of a biological system that, like all biological systems, has evolved to conserve energy through efficiency. The brain achieves this efficiency by firing the same neurons while perceiving and performing an action. Therefore, perceiving someone's distress makes coming to their aid the brain's natural tendency (as cited in Goleman & Boyatzis, 2008).

Bloom (2013) is more skeptical about the social function of mirror neurons as Goleman appears to be. Bloom writes that many of the claims associated with mirror neurons are overblown and cannot be sufficient for social reasoning, since Macaque monkeys also possess these neurons, but do not have complex social reasoning. Bloom suggests that there is much controversy in this area as to whether mirror neurons does have a social function or if they are primarily for learning motor movements. A review of the most recent literature on mirror neurons seems to support the conclusions of both Goleman and Bloom. For example, Sperduti, Guionnet, Fossati, and Nadel (2014) concluded from their review of the literature that mirror neurons do have a social function as suggested by Goleman, but are also not sufficient for social functioning as suggested by Bloom. The precise function of mirror neurons also does appear to be controversial as also suggested by Bloom. Neuroscience does offer support to the idea that humans are "wired" to connect, or as Goleman (2006) puts it, neuroscience tells us that the brain is designed to be social, or in other words, to "link" to other brains when possible through communication. Therefore, significance of social intelligence in all aspects of human's life led to the interest of research studies that are related to social intelligence (as cited in Bloom, 2013).

2.7 Related Research on Social Intelligence

Organizational Performance and Social Intelligence: Habib, Adel and Azim (1994) investigated the relationships among dimensions of social intelligence, social skills, social information processing, social awareness, social desirability of organizational performance. This research was a descriptive study. The population in this study

comprised all experts, assistants and managers of regional water companies in Ardabil province, and was about 164 randomly selected people. And to gather data from field methods the means of questionnaires were used. Tromso questionnaire was chosen and designed to measure social intelligence and organizational performance by assessing specific questions about Balanced Scorecard as independent variable. To achieve the multiplier effect of each variable on the dependent variable, Pearson correlation test was performed. Results indicated that social skills, social information processing, social awareness and social desirability of improving organizational performance had the most important part in social information processing, and social awareness and social skills played a secondary role in improving performance.

Academic Achievement and Social Intelligence: Xavier (2003) attempted a study on social intelligence and academic achievement among higher secondary school students. The samples of 300 were taken from government, government aided and private higher secondary schools in Trivandram. The samples were tested by Rao's social intelligence scale. Some of the major findings were (i) Gender has no influence on social intelligence (ii) Type of schools had no influence on social intelligence (iii) Social intelligence and academic achievement are positively correlated.

Aggression and Social intelligence: Sameer (2007) conducted the relationship between social intelligence and aggression. Population is the senior secondary school students of Malappuram district of Kerala state of India. Sample of the study is 84 senior secondary school students of Malappuram district. To collect information from the sample an integrated approach is good. Here normative survey method was used. Social Intelligence among senior secondary school students is of average. They have a greater amount of aggression. Relationship between social intelligence and aggression scores of senior secondary school students is found negative and negligible for the whole sample. But it is not proven significant. Gender based comparison of social intelligence is proved significant. Social intelligence based comparison of aggression is proven significant. Therefore, specified strategies should be developed to deal with aggressive behaviour.

Job Satisfaction and Social Intelligence: Soleiman and Fatemeh (2012) examined the relationship between teachers' social intelligence and their job satisfaction factor at senior secondary schools level. Participants were 177 educators who completed the Tromsø Social Intelligence Scale (TSIS), and the Job Descriptive Index.The findings of the study showed that there was significant relationship between teachers' social intelligence and their job satisfaction. The study also revealed that there was a significant

difference between teachers' social intelligence and their academic degree levels. Further, significant relationships were found between teachers' social intelligence and five factors of job satisfaction: nature of the work itself, attitudes towards supervisors, relations with co-workers, opportunities for promotion, work condition in the present environment, but the relationship with one factor (salary and benefit) of job satisfaction is low and negligible. The results indicated that the higher social intelligence the teachers had the greater job satisfaction they enjoyed.

Mental Health and Social Intelligence: Prathima and Kulsum (2013) examined the relationship between secondary school teachers' social intelligence and their mental health and also found out the effect of different level of social intelligence of teachers on their mental health. The participants were 150 secondary school teachers. The findings of the study showed that there was a significant relationship between secondary school teachers' social intelligence and their mental health. The significant difference exists between male and female secondary school teachers' mental health. The results indicated that higher the social intelligence the teachers had the better mental health they possessed.

Subject Stream and Social Intelligence: Rai and Singh (2014) conducted to know the social intelligence of male and female undergraduate students of science and arts subject streams studying in various degree colleges of Dhampur, Bijnor. For this purpose descriptive survey method was used. 30 Arts and 35 Science undergraduate students were selected, for the sample by adopting stratified disproportionate random sampling technique. The data was collected by using Social Intelligence Scale (SIS) constructed and standardized by Dr. N.K. Chadda and Usha Ganesan. The data was analyzed by using 't' test. The findings of gender analysis indicates that female student's possess more social intelligence than male students and analysis of stream indicates that arts students are having greater social intelligence than students of other streams. It is noticeable that various research studies mentioned above lack interest in the variable, job performance which might be related to social intelligence.

2.8 Different Views of Job Performance

In the past ten years or so more attention has been paid to the definition and exploration of job performance at least from the perspective of organizational behavior research. From their perspective individual performance is seen as actual behavior that can be scaled and measured in terms of proficiency, rather than the outcomes which the employing organization derives from that performance (Campbell et al., 1993). Thus job performance includes work behaviors which are: relevant to organizational goals; within

the individual's control, measurable, observable, scorable etc. (as cited in Viswesvaran & Ones, 2000).

Performance refers to how well or badly an individual, organization, group or institution does something or some task. On the other hand, Otemo (2004) defines performance as the consistent ability to produce results over prolonged periods of time and in a variety of assignments (as cited in Nampa, 2006).

Van Scotter and Motowidlo (1996) introduced two dimensions of contextual performance: job dedication and interpersonal facilitation. Job dedication behavior refers to "self-disciplined, motivated acts," and interpersonal facilitation concerns "cooperative, considerate, and helpful acts" (Van Scotter & Motowidlo, 1996, cited in Schmitt, Cortina, Ingerick, & Wiechmann, 2003).

Sackett and Laczo (2003) offered two different central aspects of job analysis; activity versus attribute. The latter refers to examining worker' performance and behaviors at work labeled, *work-oriented'* (italics in original) and the former akin to examining workers personalities such as skill, talent resulting to fulfilling their function on the job-this labeled *worker-oriented* (italics in original).

Campbell (1990) proposed a multifactor model of job performance consisted of eight components (as cited in Motowildlo, 2003):

- Job-specific task proficiency,
- Non-job-specific task proficiency,
- Written and oral communication,
- Demonstrating effort,
- Maintaining personal discipline,
- Facilitating team and peer performance,
- Supervision,
- Management and administration

Also, Hackman and Oldman (1976) designed a job characteristics model (JCM) which they suggested enriched work with more challenges. It includes five job characteristics (as cited in Hulin & Judge, 2003):

- Task identity-degree to which one can see ones work from beginning to end.
- Task significance-degree to which ones work is seen as important and significant.
- Skill variety-degree which job allows employees to perform different tasks.
- Autonomy-degree to which employees can regulate their job.

- Feedback-degree to which the work itself offers feedback.

However, good performance involves being punctual at work, cooperating with co-workers, management in overcoming problems, having control over emotions, commitment and regular at work among others while poor performance involves late arrivals at work place, leaving early, lack of commitment, absenteeism, too much complaints, unwillingness to accept the delegated duties and having no control over emotion hence, strikes (Cole, 1998).

Doneedy (2002) rightly explained that job performance is concerned with the overall effectiveness and efficiency of getting things done. It gives an overview of how an organization is fairing. The concept of job performance can be viewed from many perspectives like economic, industry and management. Mali (2005) looked at job performance as reaching the peak of performance with the least expenditure on resources. Job performance, therefore, is a critical factor in socio-economic development as it justifies huge expenditure by the organization and has many other salutary effects (as cited in Mali, 2005).

According to Nwachukwu (2006), job performance "is the output, resulting from a given resources input at a given time". Benton (2002) projected the following benefits of an effective job performance.

1. Strengthening the general economic foundation of workers.

2. Improvement in working and living conditions.

3. Higher earnings.

4. Increased output or services at less resource.

5. Ultimate shorted hours of work.

The measurement of job performance is also complicated by the fact that what counts for job performance is itself complex, changes over time and situation, and consists of multiple dimensions (Hough & Oswald, 2001). Job performance, which refers to the degree to which an individual executes his or her roles with reference to certain specified standards set by the organization, is central to any organization. However, Perertemode (1996) argued that job performance is determined by the worker's level of participation in the day to day running of the organization. It is noted that employees behave differently under different situations (as cited in Aye Aye Aung, 2015).

2.9 Job Performance of Teachers

To say simply, job performance of employees remains an issue of great concern to many organizations including the school. So, enhancing teachers' job performance is of

paramount importance to meet with the needs of students (especially disadvantaged ones) who will not accept any more outdated preparation and teaching strategies.

Since it can be deduced that job performance entail doing more with less resources, making more from what you have rather smarter than harder, it is imperative to examine the various means of encouraging job performance in our immediate society. For instance, Nwachukwu (2006) suggested that for a teacher to improve his productivity, he must possess a natural ability and the will-power to be involved in productive ventures. He believed that, acquisition of skills, compensation, supervision, evaluation and managerial support must be present to encourage job performance of school teachers. Additionally, prompt application of personnel management technique, has an important and influential bearing on productivity.

Performance of teachers mainly depends on the teacher characteristics such as knowledge base, sense of responsibility, and inquisitiveness; the student characteristics such as opportunity to learn, and academic work; the teaching factors such as lesson structure, and communication; the learning aspects such as involvement and success; and the classroom phenomena such as environment and climate, and organization and management. If the teachers take care of these factors, their performance can be enhanced to the optimum level (Rao & Kumar, 2004).

Leigh and Mead (2005) clearly bring about the fact that the quality of teaching has come down gradually world over, demonstrate that the skills of teachers have come down due to outdated preparation on the part of the teacher and stagnant compensation schemes by the management of the educational institution. This condition in the recent years for the teacher has led to (1) very few growth opportunities (2) inadequate compensation structure. The condition is worse with disadvantaged students who require excellent teachers but have the least.

The place of supervision as a vital managerial tool need not be undermined in any organizational setting. In schools system where better teachers' performance remains the watchword, educational supervision involves guiding and coordinating the works of teachers such that learning is facilitated. Obilade (1999) states that teachers' job performance could be described as the duties performed by a teacher at a particular period in the school system in achieving organizational goals. Okeniyi (1995) says that it could be described as "the ability of teachers to combine relevant inputs for the enhancement of teaching and learning processes". If the performance of teachers is weak and ineffective,

the whole educational system is shaky. Therefore effective job performance of teachers is a must for educational improvement, which we are striving hard to bring about.

Seigh and Mead in their suggestion for lifting performance of teachers have emphasized the need for periodical performance appraisal just as it is in the corporate or business organization. Teachers will have to be periodically evaluated and the compensation structure will have to be based on performance. A stringent policy will have to be developed in order to modernize and enrich teacher quality for hiring, evaluating and compensating. Merit based rewards yielded the best performance and indicated how quality matters by comparing the performance of students of an average teacher with that of the performance of students of an excellent teacher (as cited in Akinyemi, 1993).

There are some factors which contribute to teacher's performance. Some of such factors are as under; (i) Satisfying the learners through his teaching style and quality, (ii) Apart from teaching, performance of other assignments as assigned by the Principal and the department, (iii) Management of class discipline, students' motivation and improvement of their achievement, (iv) Performance of his duties in a regular way, and (v) Interaction with students, parents, colleagues and high officials. All these can be said to be teachers' qualifications that are indispensable to promote teacher professional competences (as cited in Akinyemi, 1993).

2.10 Teacher Professional Competences

Since the 1920s, the issue of teachers' qualifications, which can guarantee their effectiveness, has been of concern for not only the science of Pedagogy, but also for those in charge of staffing schools with qualified professionals. A good teacher has to teach effectively in the class and to satisfy with his teaching style and teaching quality; moreover he has to manage time for teaching and other duties assigned by head teachers and department. He also has to manage class discipline, disruptive students, students' motivation and achievement levels. He has to be good interaction with his students, their parents and his colleagues because his interpersonal skills also determine his job performance, rather directly or indirectly. His attitude should be same for high grader students and low grader students. Factors contributing to the good job performance of school teachers are many and diverse. Job performance needs to be studied with multidimensional approach (Aye Aye Aung, 2015).

Therefore, a good teacher should possess a wide range of qualifications, which could, schematically, be classified as follows:

Personality traits, attitudes and beliefs: These include personality traits related to the professional role of a teacher, which can be nurtured and developed through initial education and continuous training. Specifically, studies have shown that traits such as flexibility in terms of the appearance of students, a sense of humour, a sense of fairness, patience, enthusiasm, creativity, care and interest in the students, all contribute to the effectiveness of teachers (Malikow, 2005; Harslett et al., 1998).

These also include a teacher's attitudes and beliefs on teaching, learning, his role, all of which affect the way he chooses, evaluates and comprehends the knowledge acquired, as well as the way he benefits from this knowledge in practice, as this very practice is shaped by that knowledge. The attitudes of teachers affect their degree of commitment to their duties, the way they teach and treat their students, as well as how they perceive their professional growth. Specifically, teachers that have high expectations for their students and insist on promoting learning for all students tend to be more effective (Malikow, 2005; McBer, 2000). Another factor which contributes to the effectiveness of teachers is a feeling of commitment to the job at hand and interest in the personal life of students and their families. Lastly, "knowledge of self" and contemplation are worth mentioning, in that they presuppose critical and careful reflection, on the part of the teacher, on his actions and self (Turner-Bisset, 1999).

McBer (2000), from a series of interviews with teachers, identified 16 "professional characteristics", including personality traits and individual attitudes, which she then classified into five groups: (a) Professionalism: commitment, confidence, trustworthiness, respect;. (b) Thinking: analytic and conceptual thinking; (c) Expectations: disposal of achievement of high objectives, disposal for permanent comprehension of reality (e.g. the students, the order), and undertaking of initiatives; (d) Leadership: flexibility, accountability, passion for learning; (e) Relations with other: fertile interaction with involved in the educational process, skills of common work, comprehension. In addition to those professional characteristics, pedagogical skills and knowledge are core competences of a good teacher.

Pedagogical Skills and Knowledge: Pedagogical skills are not only understood as familiarization with techniques that are then used mechanically, but also as the acquisition of routines which, without doubt, every teacher needs in order to save time and energy for the more significant aspects of his work; at the same time, they refer to a set of theoretical principles and research data that lead to a variety of techniques and strategies which a teacher chooses and shapes, depending on the circumstances.

41

A plethora of related studies shows specific actions by teachers which can be considered factors for their effectiveness. With regard to the teaching approach, it seems that the more effective teachers (McBer, 2000): set realistic objectives, try and give incentives to students for learning, apply various teaching methods, select participative forms of teaching, test and create didactic material, present information in a clear manner, combine words with pictures, use various teaching aids, maximise teaching time through systematic measures (e.g. planning, reduced disturbances in the classroom), assign work that will stir the interests of the students, monitor and evaluate the progress of students, set evaluation criteria for students and inform the students about them, and provide feedback to the students. Another decisive factor in effectiveness is a teacher's ability to recognise the diversity of students, to choose the best method possible for each student, and to create incentives for students (Harslett et al., 1988).

Yet, another important factor is teachers' cooperation not only with the students, but also with the parents of the students, their colleagues and the community at large. A basic qualification, whatever the case, is the acquisition of an extended body of knowledge which contributes to the way the teacher performs in practice (Birman et al., 2000; Hawley & Valli, 1999). Generally, a teacher's training is classified into three fields: subject knowledge, pedagogical and didactic studies, and teaching practice.

This body of knowledge, that can guarantee a teacher's expertise, is determined by existing conditions and contexts, as well as the personal experiences, beliefs and needs of each teacher, a fact that renders an a priori definition of this knowledge extremely difficult. Nevertheless, there are knowledge fields that constitute a necessary prerequisite for every teacher, or at least for a large part of them, and which form the basic part of "professional knowledge". These include:
  ➢ Subject Knowledge
  ➢ Knowledge of Learners
  ➢ Teaching Methodology
  ➢ Curriculum Knowledge
  ➢ General Pedagogical Knowledge
  ➢ Knowledge of Contexts
  ➢ Knowledge of "Self" (Hawley & Valli, 1999).
Many of the studies on competencies of teachers focus on the teaching role of teachers in the classroom. Teachers need to improve knowledge and skills to enhance, improve and explore their teaching practices. They are responsible for operating educational

system and they need strong and efficient professional competencies. Competencies are defined as "the set of knowledge, skills and experience necessary for future which manifests in activities". Moreover, Gupta et al., (2009) defined competencies as "knowledge, skills, attitudes, values, motivations and beliefs people need in order to be successful in a job". The common understanding related to teachers' competencies is divided into three main areas as field competencies, pedagogical competencies and cultural competencies. The main feature of teachers' professional competencies can be displayed very briefly.

- Field Competencies
- Research Competencies
- Curriculum Competencies
- Lifelong Learning Competencies
- Social-cultural Competencies
- Emotional Competencies
- Communication Competencies
- Information and Communication Technologies (ICT) Competencies
- Environmental Competencies (Gupta et al., 2009).

Among them, communication competence, as a system of knowledge, skills, abilities, motivational disposition, attitudes and properties in teaching communication and social interaction, is the essential competence of teachers. Teacher communication skills are viewed as the necessary skills for improving student learning. The teachers with developed communication competencies are more effective in all segments of the teaching process. They have skills to model and manage teaching communication. Communication competence is considered as a person's ability to choose communication behaviour which is suitable to achieve the aim of the social relation (Spitzberg & Cupach, 1984). Communication competence integrates two dimensions, cognitive and behavioural (Reardon, 1998), and the basic communication skills (cognitive skills and behavioural skills). Reardon (1998) considers the cognitive dimension of communication competence as a broad concept. Cognitive dimension consists of the awareness process and cognitive processing of information (interpersonal awareness, social perspectives, capturing, cognitive constructs, self-monitoring, empathy, etc.). Behavioural dimension indicates different manifestations of communication competence (interaction involvement, behaviour flexibility, listening, communication style, and other behaviour components) (as cited in Gupta et al., 2009).

43

Moreover, Perrenound (1999) identified ten competencies for a good teacher as follows:

(1) Organizing student learning opportunities;

(2) Managing student learning progression;

(3) Dealing with student heterogeneity;

(4) Developing student commitment to working and learning;

(5) Working in teams;

(6) Participating in school curriculum and organization development;

(7) Promoting parent and community commitment to school;

(8) Using new technologies in daily practice;

(9) Tracking professional duties and ethical dilemmas;

(10) Managing own professional development (as cited in San San Hla, 2008).

These competencies, without doubt, can enhance teachers' performance which should be assessed by well defined performance standards.

2.11 Teacher Performance Standards

The uniform performance standards for teachers are used to collect and present data to document performance that is based on well-defined job expectations. They provide a balance between structure and flexibility and define common purposes and expectations, thereby guiding effective instructional practice. The performance standards also provide flexibility, encouraging creativity and individual teacher initiative. The goal is to support the continuous growth and development of each teacher by monitoring, analyzing, and applying pertinent data compiled within a system of meaningful feedback. Teacher Assessment on Performance Standards (TAPS) defines the expectations for teacher performance consisting of 5 domains, 10 standards, and multiple performance indicators. There are five domains in TAPS: Planning, Instructional Delivery, Assessment of and for Learning, Learning Environment, and Professionalism and Communication. Performance standards refer to the major duties performed by a teacher. According to Teacher Assessment on Performance Standards (TAPS), there are ten performance standards that serve as the basis of the evaluation (as cited in Gupta et al., 2009).

Table 2.2 Teacher Assessment on Ten Performance Standards

	Planning
1	**Professional Knowledge:** The teacher demonstrates an understanding of the curriculum, subject content, pedagogical knowledge, and the needs of students by providing relevant learning experiences.
2	**Instructional Planning:** The teacher plans using state and local school district curricula and standards, effective strategies, resources, and data to address the differentiated needs of all students.
	Instructional Delivery
3	**Instructional Strategies:** The teacher promotes student learning by using research-based instructional strategies relevant to the content area to engage students in active learning and to facilitate the students' acquisition of key knowledge and skills.
4	**Differentiated Instruction**: The teacher challenges and supports each student's learning by providing appropriate content and developing skills which address individual learning differences.
	Assessment of and for Learning
5	**Assessment Strategies:** The teacher systematically chooses a variety of diagnostic, formative, and summative assessment strategies and instruments that are valid and appropriate for the content and student population.
6	**Assessment Uses:** The teacher systematically gathers, analyzes, and uses relevant data to measure student progress, to inform instructional content and delivery methods, and to provide timely and constructive feedback to both students and parents.
	Learning Environment
7	**Positive Learning Environment:** The teacher provides a well-managed, safe, and orderly environment that is conducive to learning and encourages respect for all.
8	**Academically Challenging Environment:** The teacher creates a student-centered, academic environment in which teaching and learning occur at high levels and students are self-directed learners.
	Professionalism and Communication
9	**Professionalism:** The teacher exhibits a commitment to professional ethics and the school's mission, participates in professional growth opportunities to support student learning, and contributes to the profession.
10	**Communication:** The teacher communicates effectively with students, parents or guardians, district and school personnel, and other stakeholders in ways that enhance student learning.

2.12 Assessment of Teacher Performance

From educational point of view, assessment is a process that characterizes a school system. Naugle et al. (2000) puts forward that the goal of such assessment is the determination of the presence and extent of learning among students, for which teachers are held responsible. Shymansky (1978) holds that the assessment of teachers' performance is as important as the assessment of students. Describing the need and use of assessment of teachers' job performance, Murphy and Williams quotes from Arvey (1998) that performance emulation is subtle subject. It is mostly use to; (i) Meet the basic needs of any organization, (ii) Improve the work force and provide certain administrative functions, (iii) Identify the strength and weaknesses of individual employees, and (iv) Develop and evaluate human resources system, and (v) Harder (1989) adds that performance evaluation is also used to reward past performance and justify increments (as cited in Naugle et al., 2000).

According to Nhundu (1999), teachers' performance is assessed for monitoring and evaluation purposes. However, in education sector there is great apprehension for the matters like who should be evaluated. Discussing the purpose of assessing teachers' performance, Tan (1998) identifies the following purposes; (i) Teachers performance is conducted for making decisions for permanency or promotion of teachers, (ii) Collection of information about the strengths and weaknesses of teachers, so that to improve their capacity and the conditions of school, (iii) Through collection of data, one can find out a clear picture of the condition of education, and (iv) Finally, it determines the standards of an institution to meet future challenges (cited in Naugle et al., 2000).

Actually, an assessment of teacher performance involves assessing if a teacher has the competencies in general areas required of a teacher. The teaching process can be viewed as a well thought of series of steps or action to facilitate learning and teaching effectiveness can be measured by the degree to which the expected learning takes place. Effective teaching is said to be brought about by the inner drive of the faculty to guide student learning equipped by his or her mastery of subject content and competence in utilizing appropriate pedagogical requirements (Aye Aye Aung, 2015).

2.13 Teacher Job Performance on Related Construct

Out of many related constructs of job performance, the followings were extracted as remarkable constructs.

2.13.1 Teachers' Job Performance and Commitment

To education researchers, the degree of teacher commitment is one of the most important aspects of the performance and quality of school staff. Commitment is defined here as the degree of positive, affective bond between the teacher and the school. It does not refer to a passive type of loyalty where teachers stay with their jobs, but are not really involved in the school or their work. Rather, it reflects the degree of internal motivation, enthusiasm, and job satisfaction teachers derive from teaching and the degree of efficacy and effectiveness they achieve in their jobs. To this effect, many writers of journal articles on teacher commitment have identified this element of commitment as one of the most critical but important factors for the future success of education and secondary schools in terms of their performance (Cheng et al., 1999).

Cheng reported that teacher commitment is closely connected to teachers' work performance and their ability to innovate and to integrate new ideas into their own practice, absenteeism, staff turnover, as well as having an important influence on student' achievement in, and attitudes toward school. This research's observation is good, but he does not indicate how commitment influences the performance of teachers especially in Busiro County secondary schools in Wakiso District (Cheng et al., 1999). So, if commitment is not so powerful for teachers' job performance, this finding aroused an interest to examine whether motivation has a direct effect on job performance.

2.13.2 Job Performance and Motivation

Dessler (2005) examined that from the perspective of teachers in schools, job performance and motivation are different. Motivation is an input to work, and job performance is an output from this motivation. Performance of the teachers in schools is highly affected by motivation. Teachers are when motivated their performance automatically reached towards high level. In schools teacher's performance can be mapped well through arranging training programs for the teachers and they will get motivated and their confidences will also increases. Motivation has a direct and positive effect on job performance when we properly account for effort. Effort has a positive effect on job performance. The idea that motivated employees are more productive held through the 1970s.

However, it was difficult to obtain support for the view that motivation has a significant effect on job performance. From a teacher's perspective, motivation and job performance may be difficult to distinguish and motivation is often inferred from the output produced, the possibility of high motivation and low output or low motivation and

high output is often not considered. The implications of either neglecting motivation or considering it a part of job performance for the empirically observed relationship between job performance and motivation can be significant. If effort is costly for an employee, ignoring effort can bias the estimated effect of job performance, because effort should increase job performance. As satisfaction is another very important thing in terms of motivation so employees are when satisfied with their job, organization environment, salaries, rewards, then automatically get motivated and show their best efforts towards their job performance (as cited in Inayatullah & Jehangir, 2012). Therefore, so far, it is not surprising that they have been focal themes of previous research studies, related to teachers' job performance.

2.14 Related Research on Job Performance

Leadership Style and Job Performance: Nanson (2010) investigated the effects of leadership styles on teacher performance in secondary schools in Nakaseke District. This study utilized a cross-sectional survey design which was both descriptive and quantitative in nature. It used both quantitative and qualitative approaches. The quantitative approach used self-administered questionnaires which were directed to secondary school teachers while the qualitative approach used interview guides which were directed to secondary school head teachers. The sample size was 126 secondary school teachers and 24 secondary school head teachers. The research hypotheses of the study were verified using Fishers' ANOVA technique.

The study found out that head teachers' involvement of teachers in decision making process of the school through committees and meetings enhances teacher performance. It was further discovered that teacher performance is enhanced by head teachers' communication to their teaching staff. It was also found out that head teachers' delegation of duties to teachers enhances teacher performance. From the study, it was concluded that the way head teachers' involved teachers in decision making had a significant effect on teacher performance in secondary schools in Nakaseke District. It was also concluded that the way head teachers' communicated with teaching staff had a significant effect on teacher performance in secondary schools in Nakaseke District. It was also concluded that the way head teachers' delegated duties to teachers had a significant effect on teacher performance in secondary schools in Nakaseke District. These research hypotheses were proved by Fishers' ANOVA results that indicated a significant in all the three study findings.

Stress and Job Performance: Rubina, Sadaf and Masood (2011) conducted to find out role of personal and job related variables in teacher stress and job performance of school teachers. Furthermore, levels and sources of stress and their relationship with job performance among teachers were also explored. The measures used in this study were indigenously developed i.e., Teacher Stress Inventory (TSI-Urdu), Teachers Job Performance Scale and personal and job related Information sheet. Two independent samples were selected from Government and Private Schools of Islamabad (Pakistan). Sample I was comprised of 400 teachers (men and women) from Primary and secondary schools. For the evaluation of teachers' job performance another sample of 1200 students from the classes of teachers of sample I was selected. Three students were randomly selected from each teacher's class. The students were requested to evaluate their respective teachers' job performance. The findings revealed that negative significant relationship exists between teachers stress and job performance. The step-wise regression analysis revealed school system, gender, job experience, number of family members, and number of students as significant predictors of teacher stress and gender, school system, family members, job experience and age as significant predictors of teachers' job performance.

Job Satisfaction and Job Performance: Langguyuan-Kadtong (2013) attempted to find out the relationship of job performance and job satisfaction among teachers of Division of Cotabato City. Results stated that most teachers are 31-40 age bracket. Majority of them are females, married, earned a college degree and further master's unit. Sixty- four percent of them had 11 to 15 years of service. Therefore, the findings concluded that the teachers of Division of Cotabato City display a high level of performance. They were contented with their job satisfaction facets such as school policies, supervision, pay, interpersonal relations, opportunities for promotion and growth, working conditions, work itself, achievement, recognition, and responsibility. This implies that a teacher's satisfied with their job is also a productive one. Furthermore, if the teachers contented with their job, they will develop and maintain high level of performance. Teaching learning process make more efficient and effective that could produce high competitive learners.

Emotional Intelligence and Job Performance: Aye Aye Aung (2014) explored to investigate the strength of teachers' emotional intelligence by four dimensions: utilization of emotion, optimism/ mood regulation, expression/ appraisal of emotion and emotional resilience. Next was to study the relationship between emotional intelligence and job

49

performance of school teachers. A descriptive research survey design was taken in this study. A total of 2014 school teachers from Yangon Region and Rakhine State participated by using multistage equal stratified random sampling technique. School teachers' emotional intelligence and job performance were assessed by using questionnaire survey method. In this study, out of four dimensions of EI, utilization of emotion is found to be the highest whereas emotional resilience is found to be the weakest among Myanmar school teachers. According to t-test result, gender and marital status are not related factors for EI. But senior teachers have higher EI than primary teachers and junior teachers. Then, more experienced teachers have higher EI than less experienced teachers. Comparing the two regions, school teachers in Yangon Region had higher EI than those in Rakhine State.

Working experiences and job designation were related factors of teacher's job performance whereas there were no marital status and region differences in job performance. Primary teachers and junior teachers performed better than senior teachers with regard to job designation. Multiple regression analyses revealed that emotional intelligence was moderate predictor for job performance of school teachers. Optimism/ mood regulation and expression/ appraisal of emotion had direct predictive contribution to teachers' job performance.

Motivation and Job Performance: Atiya and Palwasha (n.d.,) examined the effect of motivation on job performance in public and private schools of Peshawar city in the Province of Khyber Pakhtunkhwa. The main objective of this study was to examine the influence of teacher's motivation on their job performance pertinent to school teachers. For this, the study is used to do comparison of both public and private schools in order to distinguish the level of motivation and its impact on the performance of teachers in Peshawar, Pakistan. The study is quantitative in nature and to carry out the research, a survey was conducted to acquire the views of the respondents (teachers).

For research purposes, a sample of ten schools were selected that included five private schools and five public schools in Peshawar and the sample size of 120 teachers were randomly selected from both public and private sectors i.e. 60 from each. The collected data was analyzed through SPSS software. The findings of the study revealed that there is a significant and positive relationship between teacher's motivation and their job performance. There have been studies on the influence of motivation on performance; however there is a lack of research on the relationship in public and private school teachers in PKP. The study seems to fill the gap. The study would help organizations

(schools, colleges) to improve the motivation level of teachers that would lead to better job performance.

2.15 Item Response Theory (IRT)

Classical test theory is concerned with the reliability of a test and assumes that the items within the test are sampled at random from a domain of relevant items. Reliability is seen as a characteristic of the test and of the variance of the trait it measures. Items are treated as random replicates of each other and their characteristics, if examined at all, are expressed as correlations with total test score or as factor loadings on the putative latent variable(s) of interest. Characteristics of their properties are not analyzed in detail. This led Mellenbergh (1996) to the distinction between theories of tests and the theories of items. The so-called "New Psychometrics" is a theory of how people respond to items and is known as Item Response Theory or IRT (as cited in Ei Yamin Soe Naing, 2013).

In this study, item response theory will be employed in order to develop a social intelligence scale for Myanmar teacher educators. Item response theory (IRT) is a general statistical theory about examines item and test performance and how test performance relates to the abilities that are measured by the item in the test (Hambleton & Jones, 1993, cited in Ei Yamin Soe Naing, 2013).

The item response theory postulates that (a) the performance of an examinee on a test item can be predicted (or explained) by a set of factors called traits, latent traits, or abilities; and (b) the relationship between an examinee's item performance and the set of traits underlying item performance can be described by a monotonically increasing function called an item characteristic function or item characteristic curve (ICC) (Hambleton et al., 1991, p.7).

2.15.1 Assumptions of Item Response Theory

IRT models include a set of assumptions about the data to which the model is applied. The common assumptions of the item response theory are (1) unidimensionality, (2) local independence, and (3) speededness.

(1) Unidimensionality

The unidimensionality assumption is that all items in the test measure only one dominant component or ability that influences test performance. IRT models in which a single dominant ability is presumed sufficient to explain or account for examinee performance are referred to as unidimensional models. Models in which it is assumed that more than one ability are necessary to account for examinee test performance are referred to as multidimensional (Lord & Novick, 1968).

(2) **Local independence**

The local independence assumption states that an examinee's responses to different items in a test are statistically independent when abilities influencing test performance are held constant (Hambleton & Swaminathan, 1985). Therefore, local independence will hold only when (a) the items are not related to each other by content and (b) responses to the items are not linked by clues (Lord & Novick, 1968).

(3) Speededness

A common assumption to all IRT models is that the tests to which the model data fits are not administered under speeded conditions (Hambleton et al., 1991). If speed affects test performance, then at least two traits are impacting test performance: speed of performance, and the trait measured by the test content. To measure only the intended trait, the speededness of the test should be kept as constant as possible (Lord & Novick, 1968).

2.15.2 Item Characteristic Curves (ICCs)

The item characteristic functions or item characteristic curves (ICCs) specify that as the level of the trait increases, the probability of a correct response to an item increases. ICCs remain invariant from one group of examinees to the next, resulting in the invariance of item parameters. This is an important aspect of the item response theory which distinguishes it from the classical test theory (Lord & Novick, 1968).

The invariance of item and ability parameters means that the parameters that characterize an item do not depend on the ability distribution of the examinees and the parameter that characterizes an examinee does not depend on the set of test items (Hambleton & Swaminathan, 1985). Figure 2.1 shows an ICC for the case when only one trait underlies performance on the item.
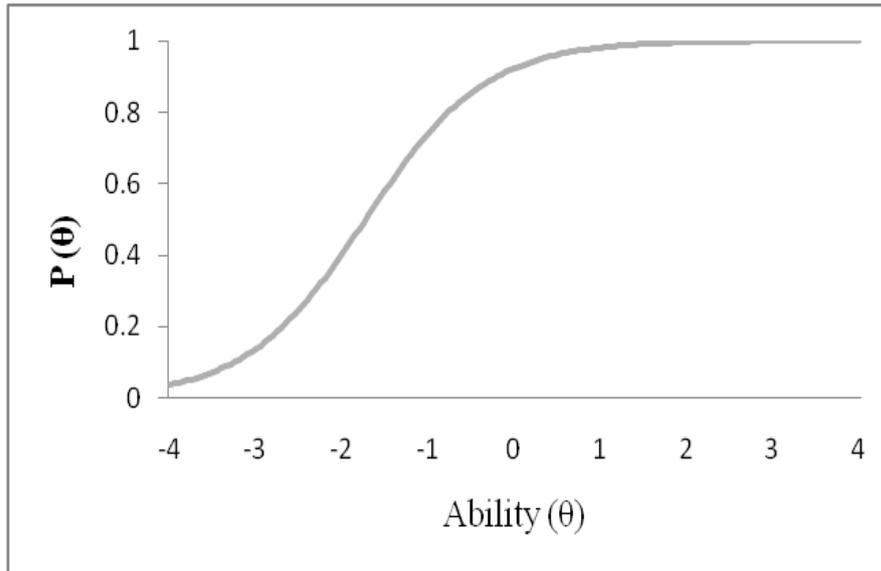
Figure 2.1. A Typical Item Characteristic Curve (ICC)

Where P(θ) is the probability that a randomly chosen examinee with ability θ answers a certain item correctly, and S-shape curves are ICCs with values between 0 and 1 over the ability scale of -4 ~ +4. This ICC specifies that as the level of the trait increases, the probability of a correct response to an item increases. IRT models contain different ICCs and/or the number of item parameters and ability parameters specified in the model (Hambleton et al., 1991, p.13).

2.15.3 Item and Test Information Functions of IRT

The item and test information functions of the IRT have applications in test construction, item selection, assessment of precision of measurement, comparison of tests, determination of scoring weights, and comparison of scoring methods (Hambleton & Swaminathan, 1985). Mathematical expression for item and test information functions differ from model to model depending on the number of parameters involved and type of responses involved.

(1) Item Information Function.

Item information functions can play an important role in test development and item evaluation (Hambleton et al., 1991).They display the contribution items make to ability estimation at points along the ability along the ability continuum. They present the item information function of an item as

$$I_i(\theta) = \frac{[P_i'(\theta)]^2}{P_i(\theta)Q_i(\theta)} \quad i = 1, 2, \dots, n$$

where, $I_i(\theta)$ is the information provided by item i at θ, $P_i'(\theta)$ is the derivative of $P_i(\theta)$ with respect to θ, $P_i(\theta)$ is the item response function and $Q_i(\theta) = 1 - P_i(\theta)$. According to the

above equation, if the amount of information is plotted against ability, the result is a graph of the information function such as that shown in Figure 2.2.
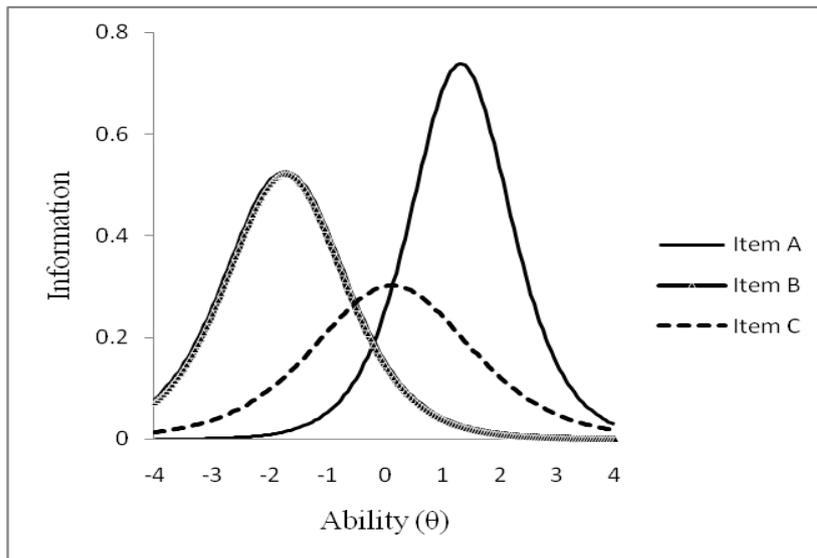
Figure 2.2 Typical Information Curves for Three Items

According to Figure 2.2, item A provides more information for assessing high- ability ($\theta = 1.5$) examinees than do items B and C; item B would be more useful in assessing the abilities for low-ability examinees, and item C would be useful for middle-ability examinees. Clearly, item information functions provide directions for judging the utility of test items and constructing tests.

(2) Test Information Function.

Hambleton & Swaminathan, (1985) presented the mathematical expression of the test information function for a test as

$$I(\theta) = \sum_{i=1}^{n} I_i(\theta) \quad i = 1, 2, \ldots, n$$

where $I(\theta)$ is the test information provided by n items. According to the above equation, the test information equal to the sum of the item information.
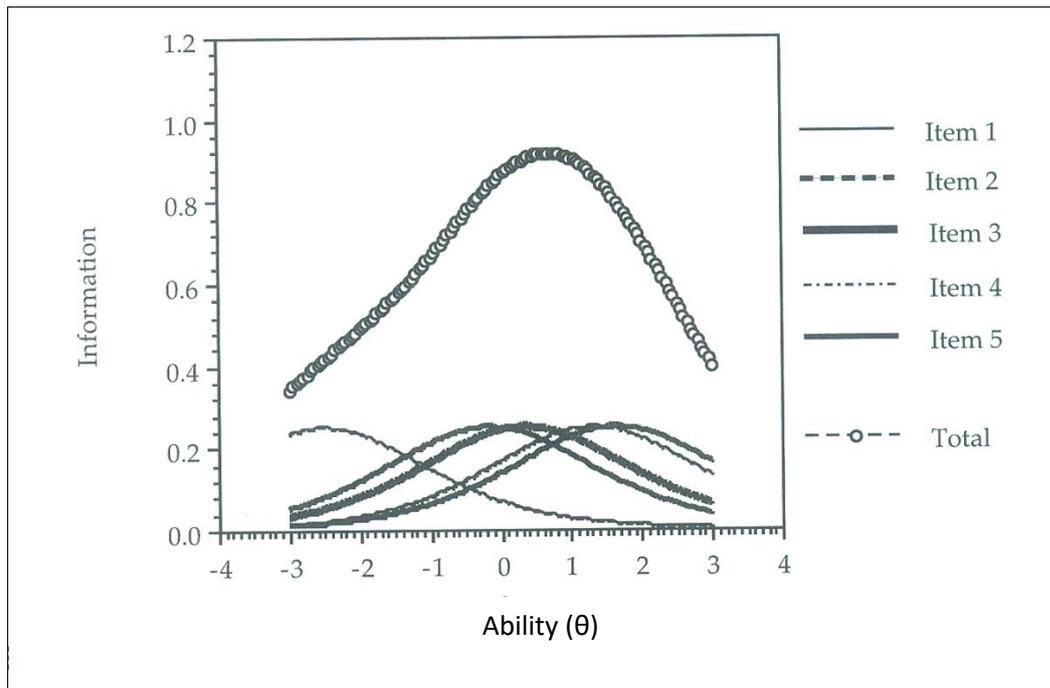
Figure 2.3 Information Curves of a Test and its Items

Figure 2.3 shows test information function (with circle line and express as Total) and item information functions of five items. According to the Figure, the test has a broad difficulty range of five items and it would be more useful for assessing abilities of the people from abilities range of (-1.5, +2.5).

The information function equations have the following properties:

- The steeper the slope, the greater the information.

- The smaller the item variance, the greater the information because the amount of information provided by a test at θ is inversely related to the precision with which ability is estimated at that point.

- Test information does not depend upon the particular combination of test items. The contribution of each test item is independent of the other items in the test.

- Smaller standard errors are associated with tests composed of items with difficulty parameters approximately equal to the ability parameter of the examinee.

(3) Target Information Function

The use of item information functions allows the test developer to produce a test that precisely fulfils any set of test specifications (Hambleton et al., 1991, p.101). They suggested to decide the shape of the desire test information function, termed the target information function, before test construction, and to fit test items to target information functions.

For a broad-range ability test (a norm-referenced test), the target information function should be fairly flat, reflecting the desire to produce a test that would provide equally precise ability estimate over the ability scale. For a criterion-referenced test with a cut-off score to separate masters and no masters, the desired target information function should be highly peaked near the cut-off score on the ability scale.

In the present study, because the social intelligence scale was constructed as a combined-task test to provide unique information for Myanmar teacher educators, it can be categorized as a norm-reference test of the social intelligence. According to Hambleton et al., to construct abroad-range ability test that meets the target, items with high discriminations, difficulties between -2 and +2, and low c values must be chosen. Therefore, a target information function was decided with reference to an example of their broad- range ability test procedure of Hambleton et al. (1991). It will show the maximum information function at mean of ability θ (0) in the ability range (-2, +2).

2.15.4 Popular Models of Item Response Theory

The three most well-known IRT models for dichotomous responses are-

(1) One-parameter logistic model or Rasch model (Rasch, 1960)

(2) Two-parameter logistic model (Birnbaum, 1968)

(3) Three-parameter logistic model (Birnbaum, 1968)

One-parameter logistic (1PL) model: Rasch (1960) was the first to develop the one-parameter logistic model. Where the Rasch model had a fixed slope of one for all items, the 1PL model only requires the slope to be equal for all items. In the one-parameter model, there are three typical assumptions that (1) only item difficulty (*b*) influences examinee performance, (2) all items are equally discriminating, and (3) examinees of very low ability have zero probability of correctly answering the item (Thissen & Orlando, 2001, cited in Aye Aye Aung, 2015).

Two-parameter logistic (2PL) model: The two parameter logistic model allows the slope or discrimination parameter (*a*) to vary across items instead of being constrained to be equal as in the one-parameter logistic or Rasch model. A student's probability of answering a question correctly is a function of the student's ability and item difficulty after taking into consideration the item discrimination. Items with steeper sloped trace lines have more discriminating power. In the two-parameter model, there are also three typical assumptions that (1) item difficulty and (2) item discrimination influence examinee performance, and (3) examinees of very low ability have zero probability of correctly answering the item.

Three-parameter logistic (3PL) model: The three-parameter logistic model can be obtained from the two-parameter model by adding a third parameter, denoted c_i which is called the pseudo-chance level parameter. It was developed in educational testing to extend the application of item response theory to multiple choice items that may elicit guessing (Reeve, nd, cited in Aye Aye Aung).

As explained the above, each of these models estimates an item difficulty parameter. The two-and three-parameter models also estimate an item discrimination parameter. Finally, three-parameter model includes a guessing parameter. In summary, depending on the types of assumptions underlying the item response models, different types of models can be built.

To sum up, using two parameter logistic model of item response theory (IRT), a social intelligence scale for Myanmar teacher educators will be developed in this study. Moreover, the related factors of social intelligence and those of job performance among teacher educators will be explored. Then, the relationship of social intelligence with job performance of teacher educators will be investigated in chapter 4.

References

Akinyemi, A. (1993). Job satisfaction among teachers in Ondo State secondary school. *Journal of Educational Leadership*, 29, 10-22.

Albrecht, K. (2004). *Social intelligence theory*. Retrieved October 4, 2016, from http://www.karlalbrecht. com/siprofile/siprofiletheory.html

Albrecht, K. (2005). *Social intelligence: The new science of success*. San Fransisco: Pfeiffer. Retrieved February 14, 2016, from http://www.karlalbrecht. Infodb/crisis.onnigeria09

Albrecht, K. (2009). Social Intelligence: The new science of success. *Personal excellence*, 10(12), pp.5.

Al-Ghoul, A. A. (1993). *Self-efficacy and social intelligence and their relationship to some of the emotional factors of teachers, educators and non-educators and their students' academic achievement*. Unpublished doctoral dissertation, Faculty of Education, University of Assiut.

Al-Qudra, M. S. (2000). *Social intelligence among the students of the Islamic University and its relationship to religiosity and some of the variables*. Unpublished master thesis, Faculty of Education, University of Islamic-Gaza.

Atiya, I., & Palwasha, J. (n.d.,). Teacher's job performance: The role of Motivation, *Abasyn Journal of Social Science*, 5(2).

Aye Aye Aung. (2014). *An assessment of emotional intelligence impact on teachers' job performance*. Unpublished doctoral dissertation, Yangon University of Education.

Benton, L. B. (2002). *Supervision and management*. New York: McGraw Hill.

Birman, B., Desimone, G, M., & Porter, A. (2000). Designing professional development that works. *Journal of Educational Leadership*, 57(8), 28-33.

Bloom, P. (2013). *Just babies: The origins of good and evil*. Crown. Retrieved April 4, 2016, from http://hdl.handle.net/10603/8343

Bosman, L. A. (2003). Correlates and outcomes of emotional intelligence in organizations. *Faculty of Economic and Building Sciences*. University of Port Elizabeth. 19-215.

Brown, J. (1992). *Definition of a profession: The authority of metaphor in the history of intelligence testing, 1890-1930*. Princeton, NJ: Princeton University Press.

Brown, L. T., & Anthony, R. G. (1990). Continuing the search for social intelligence. *Personality and individual differences,* 11(5), 463-470.

Burden, P. R., & Byrd, D. M. (2002). *Methods for effective teaching*. Boston, MA: Allyn and Bacon.

Buzan, T. (2002). *The power of social intelligence: 10 ways to tap into your social genius.* Published June 5th 2002 by Thorsons.

Calvin, W. H. (1996). *How brain think: The evolution of intelligence*. New York: Science Master. Retrieved September 19, 2014, from http://www.bradhambrick.com/what-is-emoitonal-maturity/

Cantor, N., & Kihlstrom, J. F. (1987). Social intelligence and cognitive assessments of personality. In R.S. Wyer & T.K. Srull (Eds), *Advances in social cognition.* Vol (2), 1-59.

Cheng, C., Chiu, C., Hong, Y., & Cheung, J. S. (2001). Discriminative facility and its role in the perceived quality of interactional experiences. *Journal of Personality,* 69(5), 765-786.

Cheng, Y. C., & Tsui, K. T. (1999). School organizational health and teacher commitment: A contingency study with multi-level analysis. *Educational Research and Evaluation,* 5, 249-268.

Cole, G. A. (1998). *Organization behaviour: Theory and practices*, London: Asford Colour Press.

Danforth, S., & Boyle, J. R. (2007). *Cases in behavior management.* Upper Saddle River, NJ: Merrill Prentice-Hall Inc.

Department of Educational Psychology. (2012). *Educational psychology*, BEd 3th Year. Yangon University of Education.

Dessler, G. (2005). *Human resource management*, Pearson, New Jersey.

Dincer, K. (2007). Educators' role as spiritually intelligent leaders in educational institutions. *International Journal of Human Sciences,* 4(1).

Dong, O., Koper, R. G., & Collaço, C. M. (2008). Social intelligence, self-esteem, and intercultural communication sensitivity. *Intercultural Communication Studies*. 17(2), 162-165.

Edwards, C. H. (2008). *Classroom discipline and management*. Hoboken, NJ: John Wiley and Sons.

Ei Yamin Soe Naing. (2013). *The powerful effect of equating method on the adequacy of mixed format test equating in non equivalent groups at upper primary level*. Unpublished master thesis, Yangon University of Eduation.

Fambrough, M. J., & Hart, R. K. (2008). Emotions in leadership development: A critique of emotional intelligence. *Advances in Developing Human Resources*. 10(5), 740-746.

Ford, M. E., & Tisak, M. S. (1983). A further search for social intelligence. *Journal of Educational Psychology*, 75, 196-206.

Fredrick, L. D., Deitz, S. M., Bryceland, J. A., & Hummel, J. H. (2000). *Behavior analysis, education, and effective schooling*. Reno, NV: Context Press.

Ganaie, M. Y., & Hafiz, M. (2015). A study of social intelligence and academic achievement of college students of district Srinagar, J&K, India. *The Journal of American Science.* 11(3).

Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. New York: Basic Books. Retrieved May 11, 2015, from http://books.google.com/books?id=4Do-bFrt9tUC

Gazzaniga, M. S., & Heatherton, T. F. (2007). *Psychological science*. New York: W.W. Norton & Company, Inc.

Goleman, D. (1995). *Emotional Intelligences*. New York. Bantam Books.

Goleman, D. (1997). *Emotional Intelligence*. New York: Bantam Books Inc.

Goleman, D. (2000). *The handbook of emotional intelligence.* San Franciso: Jossey-Bass.

Goleman, D. (2006). *Social intelligence: The new science of human relationships*. New York New York: Bantam Dell. http://www.pearsonassessments.com/NR/Assess_Focus_Spring_02.pdf

Goleman, D., & Boyatzis, R. E. (2008). Social intelligence and the biology of leadership. *Harvard Business Review*, 86(9), 74-81.

Greenspan, S. (1979). *Handbook of mental deficiency, psychologicaltheory and research*. Hillsdale, NJ: Erlbaum.

Grubaugh, S., & Huston, R. (1990). Establishing a classroom environment that promotes interaction and improved student behavior. *Clearing House*, 63(8), 375-378.

Gupta, R. K., Woodside, A., Dubelaar, C., & Bradmore, D. (2009). Diffusing knowledge-based core competencies for leveraging innovation strategies: Modeling outsourcing to knowledge process organizations (KPOs) in pharmaceutical networks. *Industrial Marketing Management*, 38, Issue 2pp, 219-227.

Habib, E., Adel, Z., & Azim, E. (1994). The study of relationship between social intelligence and organizational performance. *International Journal of Organizational Leadership*, 2(1).

Hambleton, R. K., & Swaminathan, H. (1985). *Item response theory: Principles and applications*. Boston: Kluwer

Hambleton, R. K., Swaminathan, H., & Rogers, H. J. (1991). *Fundamentals of item response theory*. Newbury Park, CA: Sage Publications, Inc.

Harris, B. (2007). *Supporting the emotional work of school leaders*. California: Paul Chapman Publishing.

Harslett, M., Harrison, B., Godfrey, J., Partington, G., & Richer, K. (1998). *Aboriginal and Islander education workers' perceptions of schooling*. Paper prepared for the Australian Association for Educational Research Conference, Adelaide.

Hawley, W. D., & Valli, L. (1999). The essentials of effective professional development: A new consensus. In L.

Hoepfner, R., & O'Sullivan, M. (1968). Social intelligence and I.Q. *Educational and Psychological Measurement*, 28, 339-344.

Hopkins, M. M., & Bilimoria, D. (2008). Social and emotional competencies predicting success for male and female executives. *Journal of Management Development*, 27(1), 13-35.

Hulin, C. L., & Judge, T. A. (2003). Job Attitudes. In: Borman, W. C., & Ilgen, D. R, & Klimoski, R. J. (Eds) *Handbook of Psychology* (pp. 255-276). Hoboken, New Jersy: John Wiley & Sons. Inc. https://is.muni.cz/el/1441/podzim2012/ SZk1025a/um/ Handbook_ Of_Psychology_-Personality_And_Social_Psychology Malestrom_. pdf

Hunt, T. (1928). The measurement of social intelligence. *Journal of Applied Psychology*, 12, 317-334.

Inayatullah, A., & Jahangir, P. (2012), Teachers job performance*: The role of motivation. Abasyn Journal of social science*, 5(2).

Jones, K., & Day, J. D. (1997). Discrimination of two aspects of cognitive-social intelligence from academic intelligence. *Journal of Educational Psychology*, 89(3), 486-497.

Joseph, C., & Lakshmi, S. S. (2010). *Social Intelligence, a key to success* (SSRN Scholarly Paper No. ID 1706610). Rochester, NY: Social Science Research Network. Retrieved from http://papers.ssrn.com/abstract=1706610

Keating, D. P. (1978). A search for social intelligence. *Journal of Educational Psychology,* 70, 218-223.

Kolski-Anderaco, A. (2010). *Social intelligence*. Smart Business Network Inc. kolskiandreacoa@upmc.edu or (412) 647-8728.

Kozmitzki, C., & John, O. P. (1993). The implct use of explicit conceptions of social intelligence. *Personality and Individual Differences*, 15, 11-23.

Landy, F. J. (2006). The long, frustrating, and fruitless search for social intelligence: *A cautionary tale. In* K.R. Murphy (Ed.), *A Critique of emotional intelligence: what are the problems and how can they be fixed?* (81-123). Mahwah, NJ: Lawrence Erlbaum.

Leigh, A., & Mead, S. (2005). Lifting performance of teachers. Policy Report, Progressive Policy Institute.

Lemlech, J. K. (1988). *Classroom management*. 2nd Edition. Longman Inc.: New York.

Lord, F. M., & Novick, M. R. (1968). Statistical theories of mental test scores. Reading, MA: Addison-Wesley.

Langguyuan-Kadtong, M. (2013). Work performance and job satisfaction among teachers. *International Journal of Humanities and Social Science,* 3(5).

Magida, A. (2006). Opening the doors of wonder: Reflections on religious rites of passage. University of California Press, Berkeley. http://www.loc.gov/catdir/ enhancements

Mali, P. (2005). *Improving total productivity.* New York: John Witey Press.

Malikow, M. (2005). Effective teacher study. *National Forum of Teacher Education Journal Electronic*, 16 (3E), 1-9.

Marlowe, H. A. (1986). Social intelligence: Evidence for multidimensionality and construct independence. *Journal of Educational Psychology*, 78, 52-58.

Marti, S. J. (2005). Autonomous interactive intermediaries: Social intelligence for mobile communication agents. Program in Media Arts and Sciences, Massachusetts Institute of Technology. P. 23.

Martinez, M. E. (2000). *Education as the cultivation of intelligence*, Landon: Lawrence Erlbaun Associates, Publishers.

Marulus, T. (2007). *A History of the I.Q. test: Psychology, Human& Social Behavior*. Retrieved June 11, 2008, from http://forum.stirpes.net/psychology-human-social-behavior/11664-history-i-q-test.html

Marzano, R. J., Marzano, J. S., & Pickering, D. (2003). *Classroom management that works: Research-based Strategies for Every Teacher*. Alexandria, VA: Association for Supervision and Curriculum Development.

McBer, H. (2000). *Research into teacher effectiveness: A model of teacher effectiveness*. Nottingham, England: Department of Education and Employment.

Mehrabian, A. (2000). Beyond IQ: Broad-based measurement of individual success potential or emotional intelligence. *Genetic Social and General Psychology Monographs*, 126(2), 133-240.

Mohit, D., & Parminder, K. (2015). Study of social intelligence and adjustment among pupil teachers in relation to their gender and locality. *International Journal of Applied Research,* 1(7), 90-93.

Moss, F. A., & Hunt, T. (1927). Are you socially intelligent? *Scientific American, 137*, 108-110.

Moss, F. A., Hunt, T., & Omwake, K. T. (1949). *Manual for the social intelligence test, Revised Form.* Washington, D.C.: Center for Psychological Service.

Moss, F. A., Hunt, T., Omwake, K. T., & Woodward, L. G. (1955). *Manual for the George Washington University Series Social Intelligence Test*. Washington, D.C.: The Center for Psychological Service.

Motowildlo, S. J. (2003). *Job performance*. In: Borman, W. C., & Ilgen, D. R, & Klimoski, R. J.(Eds) *Handbook of Psychology* (pp. 39-54). Hoboken, New Jersy: John Wiley & Sons. Inc. https://is.muni.cz/el/1441/podzim2012/SZk1025a/um/Handbook_Of_Psychology Personality_And_Social_Psychology Malestrom_ .pdf

Murata, A. (2008). Human error management paying emphasis on decision making and social intelligence. Forth International Workshop on Computational Intelligence & Application, Hiroshima University, Japan.

Nampa, C. (2006). *Supervision and teachers' performance in Catholic founded schools in Luwero District*. Unpublished master thesis, Makerere University, Kampala, Uganda.

Nanson, P. K. (2010). *Leadership styles and teacher performance in secondary schools in Nakaseke District*. Unpublished master thesis. Makerere University, Kampala, Uganda.

Naugle, K., Naugle, L. B., & Naugle, R. (2000). *Kirkpatrick·s evaluation model as a means of evaluating teacher performance. Education,* 121(1), 135-144.

Nwachukwu, C. C. (2006). *Management theory and practice.* Onitsha: Africana – Fep. Publishers.

Obilade, S. O. (1999). *Leadership qualities and styles as they relate to instructional productivity.* The Manager Ibadan: Department of Educational Management, University of Ibadan, 25-32.

Okeniyi, C. M. (1995). *Relationship between leadership problems and school performance in Oyo state secondary schools.* Unpublished master thesis, University of Ibadan. 57-82.

Parolini, J. L. (2005). Investigating the relationships among emotional intelligence, Servant Leadership Behaviors and Servant Leadership Culture. Servant Leadership Research Roundtable, http://www.regent.edu/acad/sls/publications/conference_ proceedings/ servant_ leadership_rou ndtable/2005/pdf/parolini_ invest.pdf

Prathima, H. P., & Kulsum, U. (2013). Relationship between social intelligence and mental health of secondary school teachers. A published research paper. Research Scholar, Department of Education, Bangalore University, Bangalore. *Paripex - Indian Journal of Research*, 2(11), 21-36.

Rai, R., & Singh, M. (2014). A study of social intelligence among college students in relation to their subject stream in Bijnor District. *International Journal of Languages, Education and Social Sciences (IJLESS),* Vol. 08, Issue 01.

Rao, D. B., & Kumar, D. N. (2004). *School teacher effectiveness*, New Delhi, Discovery Publishing House, pp. 89.

Rubina, H., Sadaf, T., & Masood, N. (2011). Personal and job related predictors of teacher stress and job performance among school teachers. *Pakistan Journal of Commerce and Social Sciences*, 5(2), 319-329.

Sackett, P. R., & Laczo, R. M. (2003). Job and work analysis. In W.C. Borman, D.R. Ilgen, and R.J. Klimoski (Eds.), *Handbook of psychology: Industrial and Organizational Psychology,* 12, 21–37), Hoboken, NJ: Wiley.

Sameer, B. M. (2007). Social intelligence and aggression among senior secondary school students: A comparative Sketcht. Published master thesis. A Central University New Delhi.

San San Hla. (2008). *Development of competency model for professional development of upper primary teachers in Yangon Division*. Unpublished doctoral dissertation. Yangon University of Education.

Schmitt, N., & Cortina, J. M., Ingerick, M. J., & Wiechmann, D. (2003). Personal selection and employee performance. In: Borman, W. C., & Ilgen, D. R, & Klimoski, R. J. (Eds) *Handbook of Psychology* (pp. 77-106). Hoboken, New Jersy: John Wiley & Sons. Inc. https://is.muni.cz/el/1441/podzim2012/ SZk1025a/um/Handbook_Of_Psychology_-_Personality_And_Social_Psychology __Malestrom_.pdf.

Silberman, M. (2000). *Peoplesmart: Developing your interpersonal intelligence.* San Francisco, CA: Berrett-Koehler Publishers Inc.

Silvera, D. H., Martinussen, M., & Dahl, T. I. (2001). The Tromso Social Intelligence Scale, a self-report measure of social Intelligence. *Scandinavian Journal of Psychloogy*, 42, 313-319.

Soleiman, Y. J., & Fatemeh, L. G. (2012). What is the relationship between spiritual intelligence and job satisfaction among MA and BA teachers? *International Journal of Business and Social Science, 3 (8).*

Sternberg, R. J. (1985). *Beyond IQ: A triarchic theory of human intelligence.* New York: Cambridge University Press.

Sternberg, R. J. (1988). *The triarchic mind: A new theory of intelligence.* New York: Viking.

Strang, R. (1930). Relation of Social Intelligence to Certain Other Factors. *Sch. & Soc., 32*, 268-272.

Taylor, E. H. (1990). The assessment of social intelligence. *Psychotherapy,* 27(3), 445-457.

Thorndike, E. L. (1920). Intelligence and its use. *Harper's Magazine,* 140, 227-235.

Thorndike, E. L., & Stein, S. (1937). An evaluation of the attemps to measure social intelligence. *The Psychological Bulletin, 34*(5), 275-285.

Thurstone, L. L. (1938). *Primary mental abilities*. Chicago: University of Chicago Press.

Turner-Bisset, R. A. (1999). The knowledge bases of the expert teacher. *British Educational Research Journal,* 25, 39-55.

Vernon, P. E. (1993). Some characteristics of the good judge of personality. *Journal of Social Psychology,* 4, 42-57.

Viswesvaran, C., & Ones, D. S. (2000). Perspectives on models of job performance. *International Journal of Selection and Assessment,* 8, 216-226.

Walker, R. E., & Foley, J. M. (1973). Social intelligence: Its history and measurement. *Psychological Reports,* 33, 839-864.

Wang, M. C., Haertel, G. D., & Walberg, H. J. (1993). Towards a knowledge base for school learning. *Review of Educational Research*, 63(3), 249-250.

Wechsler, D. (1958). *The measurement and appraisal of adult intelligence*. Baltimore: Williams & Wilkins.

Wedeck, J. (1947). The relationship between personality and psychological ability. *British Journal of Psychology*, 36, 133-151.

Weis, S., & Sus, H. M. (2005). Social intelligence: A review and critical discussion of measurement concepts. In R. Schulze & R. D. Roberts (Eds.), *An International Handbook of Emotional Intelligence,* 203-230, Gottingen: Hogrefe.

Woodrow, H. (1939). The common factors in 52 mental tests. Psychometrika, 4, 99-108.

Xavier, F. (2003). A study on social intelligence among arts and science college students. *Scholarly Research Journal for Humanity Science & Engligh Language*. Vol (2), Issue VII.

Yahyazadeh, S., & Lotfi, F. (2012). The relationship between social intelligence and job satisfaction among MA and BA teachers, *International Journal of Education Science,* 4(3), 209-213.

Zaccaro, S. J., Kem, C., & Bader, P. (2003). *Leader Traits and Attributes*. The Major Schools of Leadership, 05-Antonakis.qxd, 106-115.

Zirkel, S. (2000). *Social intelligence: The development and maintenance of purposive behavior – The Handbook of Emotional Intelligence.* San Francisco, CA: Jossey-Bass.

CHAPTER 3

Methodology

The main purpose of this study is to develop a social intelligence scale for Myanmar teacher educators by two parameter logistic model of item response theory (IRT). Then, this study sought to examine the impact of social intelligence on job performance of teacher educators. For these purposes of empirical study exploration, the eight research questions motivating this study should be expressed as follow:

1. What is the social intelligence level of teacher educators?

2. To what extent is the strength of dimensions involved in social intelligence scale among teacher educators?

3. What are the related factors of social intelligence among teacher educators?

4. What is the job performance level of teacher educators?

5. To what extent is the strength of dimensions involved in job performance among teacher educators?

6. What are the related factors of job performance among teacher educators?

7. Is there any significant relationship between social intelligence and job performance of teacher educators?

8. Does social intelligence act as the predictor of job performance of teacher educators?

This study explored a mixed method research design which is a procedure for collecting, analyzing and mixing both quantitative and qualitative data within a single study to understand a research problem. The research design for this study was descriptive research survey method. Social Intelligence Scale and Teacher Educators' Job Performance Questionnaire were used to measure teacher educators' social intelligence and job performance in quantitative study. A qualitative follow up study was conducted as the second phase of research by interview method and survey method with assessment rating questionnaires such as Supervisor's Assessment Rating Questionnaire, Colleagues' Assessment Rating Questionnaire, Students' Assessment Rating Questionnaire and Teacher Educators' Interview Form to ensure the findings of the quantitative results.

3.1 Sample of the Study

The participants for this study were selected from five regions and three states, Yangon Region, Mandalay Region, Sagaing Region, Ayeyawady Region, Bago Region, Shan State, Mon State and Kayin State were selected. The number of participated teacher

educators and their respective education universities and colleges are as shown in Table 3.1.

Table 3.1 Number of Participated Teacher Educators with Respect to the Selected Education Universities and Colleges

No.	Name of Education Universities and Colleges	Total
1	Yangon University of Education	105
2	Sagaing University of Education	111
3	University for the Development of National Races of the Union	167
4	Yankin Education College	91
5	Thingangyun Education College	78
6	Sagaing Education College	63
7	Mandalay Education College	56
8	Pathein Education College	90
9	Pyay Education College	90
10	Taunggyi Education College	89
11	Mawlamyine Education College	90
12	Hpa-an Education College	72
	Total	1102

3.2   Instruments for the Social Intelligence

3.2.1 Instrumentation of Social Intelligence Scale

In this study, social intelligence scale was mainly adapted from Tromso Social Intelligence Scale (TSIS) by Silvera, Martinussen, and Dahl (2001). The TSIS is a self-report instrument including 21 items. Each of the subscales comprises of 7 items. A 7-point Likert scale form was prepared for the items included in the scale. The minimum and maximum scores in the items are 1 and 7 respectively. The reliability coefficient for the total score calculated was .80. The TSIS measures intelligence on the base of three different subscales: Social Information Process (SIP), Social Skill (SS) and Social Awareness (SA).

Then, 40 items of this instrument were also adapted from Interaction Rating Scale Advanced (IRSA) by Anme (2014). Interaction Rating Scale Advanced (IRSA) is a 92-item instrument that assesses basic social competence for individuals over the age of 15. The Cronbach's alpha value was 0.89. One advantage of the IRSA is that evaluations of

interactions can be completed in a short period within normal, daily situations. The IRSA includes 6 subscales: self-control, expressivity, sensitivity, assertiveness, acceptance, and regulation. Each observed behavior is rated on a 5-point Likert scale where 1 is "not evident at all," 2 is "not clearly evident," 3 is "neutral," 4 is "evident," and 5 is "highly evident."

Moreover, among 28 items of Interpersonal Reactivity Index (IRI) developed by Davis (1980), 8 items which were culturally inappropriate for Myanmar teacher educators were eliminated. The remaining 20 items were included in this study. IRI is a 5-point Likert scale ranging from "Does not describe me well" to "Describes me very well". The internal consistency (Cronbach alpha) reliability coefficient was .80 for the whole scale. The measure has four subscales, each made up of 7 different items. These four subscales are: Perspective Taking, Empathic Concern, Personal Distress and Fantasy.

Furthermore, some items were adapted from the Revised Self-Monitoring Scale (RSMS) by Lennox and Wolfe in 1984. It consists of two subscales: social sensitivity and self-regulation. The RSMS is a 6-point Likert scale including certainly always false, generally false, somewhat false, somewhat true, generally true and certainly always true. The Cronbach's alpha for the RSMS was .82.

Finally, only 18 items were adapted from Interpersonal Relationships Questionnaire (IRQ) by Steinwachs (n.d.,). The IRQ is a self-report instrument including 117 items. The IRQ measures on the base of five different subscales: Assertion of needs, Feedback, Conflict, Interpersonal closeness and Emotional experience. The internal consistency coefficient of IRQ was 0.90.

Firstly, the social intelligence scale consisting 108 items (see Appendix B) in 13 subscales that are more relevant to teacher educators' social intelligence from all the above measures was translated to Myanmar version:

1. **Social Sensitivity** is the ability to read the partner's feelings and thoughts accurately,
2. **Self-Regulation** is the ability to work with the partner to develop a good relationship,
3. **Expressivity** is the ability to express his or her thoughts and feelings precisely,
4. **Assertiveness** is the ability to state his or her opinion or position clearly to others,
5. **Acceptance** is the ability to understand and respect the partner's opinion or position,
6. **Social Skill** is the ability to modify behaviors when enter in a new situation and the ability to get to know new people.

7. **Social Information Process** is the ability to understand and foresee others' feelings and behaviors as well as the ability to understand delivered messages in both verbally and nonverbally while being in relationship with others,

8. **Social Awareness** is the ability to be aware of one's and other's actions when in the relationship,

9. **Perspective Taking** is the ability to spontaneously adopt the psychological point of view of others,

10. **Empathic Concern** is the ability to assess other oriented feelings of sympathy and concern for unfortunate others,

11. **Personal Distress** is the ability to measure self-oriented feelings of personal anxiety and unease in tense interpersonal settings,

12. **Conflict** is the ability to describe how you identify and then deal with conflict that occurs between interactions with someone else,

13. **Closeness** is the ability to describe how you may disclose or talk about, yourself or your experiences with other people.

There are 12 items in social sensitivity, 7 items in self-regulation, 10 items in expressivity, 10 items in assertiveness, 10 items in acceptance, 7 items in social skill, 7 items in social information process, 7 items in social awareness, 7 items in perspective taking, 6 items in empathic concern, 7 items in personal distress, 10 items in conflict and 8 items in closeness before conducting expert review.

The response scale for each item is "Do not agree" and "Agree". After preparing the measuring scale, expert review was conducted for face validity and content validity by 11 experts from the Yangon University of Education, Sagaing University of Education, Yangon University and another two experts who have special knowledge in the field of educational psychology. According to the valuable advices of the experts, some items were modified. For item clarity, the wording and content of items were also revised in accordance with the result of expert review. Furthermore, the researcher administered a pilot study with 102 teacher educators and modified the item length and wordings from the result again.

3.2.2 Preliminary Test Administration of Social Intelligence Scale

Preliminary test administration was conducted in March, 2017. The test was done with a total sample of 102 teacher educators, 50 teacher educators were from Yangon University of Education and 52 teacher educators were from Hlegu Education College to test whether the wording of item statements and instructions had their clarity in Myanmar

version. The reliability analysis of the whole scale was done by calculating the internal consistency (Cronbach's Alpha) using SPSS (version 20).

Gaussian Fit to Ability Scores for Group: 1
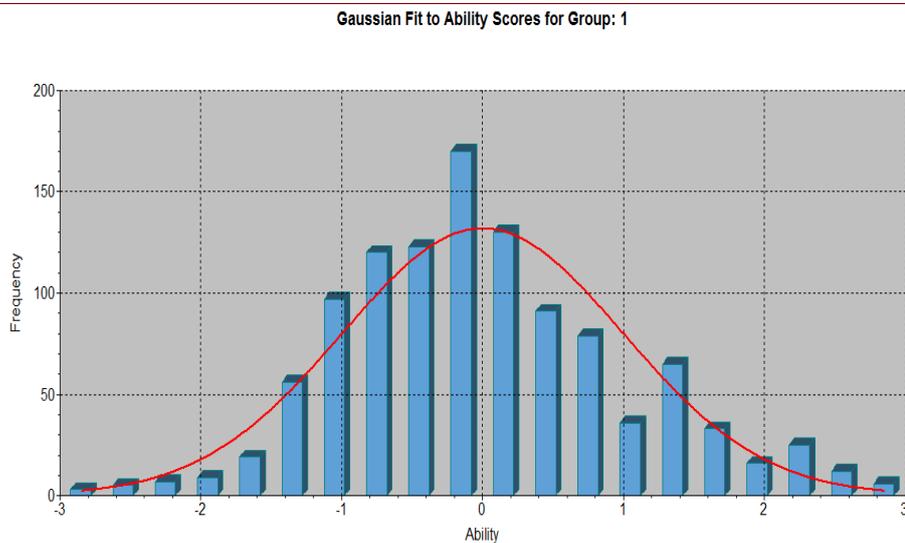
Figure 3.1 Frequency Distributions of Expected and Observed Data of Social Intelligence for One-Parameter

Gaussian Fit to Ability Scores for Group: 1
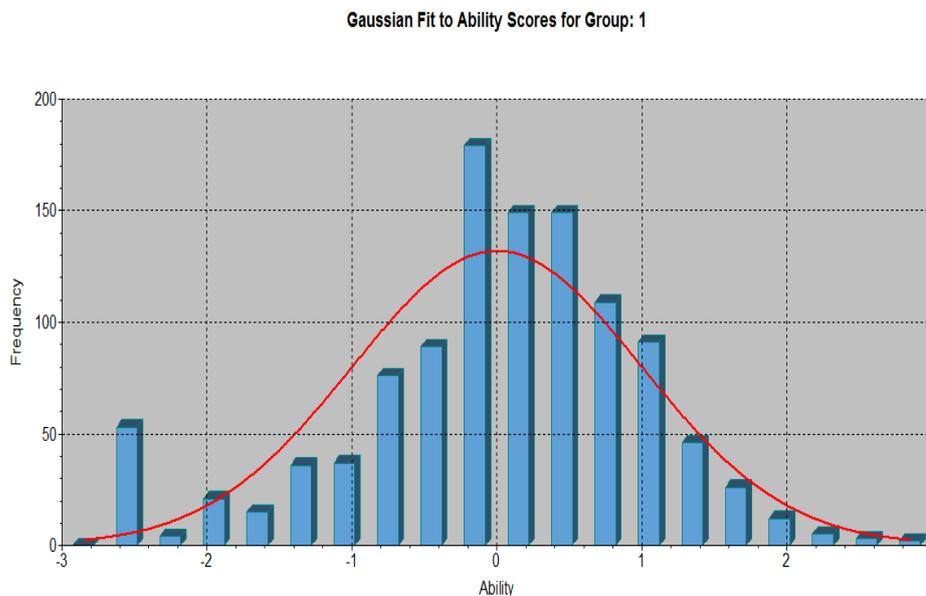
Figure 3.2 Frequency Distributions of Expected and Observed Data of Social Intelligence for Two-Parameter

Figure 3.1 and 3.2 showed that the distributions for the one-parameter and two-paramenter models were slightly different. The evidence was found that the test was unidimensional and that the fit of the one-parameter model was better than that of the two-parameter model. Therefore, one-parameter logistic model was used in judging

model-data fit. The item difficulty parameter with the help of one parameter logistic model was employed by using BILOG-MG 3.

Firstly, the 108 items were analyzed by using the BILOG-MG 3 Program. According to the result, difficulty parameter was obtained, applying one parameter logistic model. In the study, the difficulty parameter ranges from -3.02 to +1.9. The mean of the b value is -1.8. The internal consistency (Cronbach's Alpha) of the whole scale with 108 items was 0.79. After editing and modifying, totally 9 items which may assess low ability of SI were deleted and so that remain 99 items (see Appendix C) can be said to be more relevant to social intelligence scale. After that, Cronbach's alpha was run on the overall scale with 99 items and it was 0.81.

3.3 Instruments for the Teacher Educators' Job Performance

3.3.1 Instrumentation of Teacher Educators' Job Performance Questionnaire

In this study, teacher educators' job performance questionnaire was adapted from Teacher Performance Evaluation developed by Jackson Public School District in 2008. 20 items were selected from it. It is a 5- point Likert scale: 1 represented Strongly Disagree; 2 for Disagree; 3 for Neutral, 4 for Agree and 5 for Strongly agree. The Cronbach's alpha value was 0.89. There are five criteria of job performance: Productive teaching technique, Student achievement, Class management, Positive interpersonal relations and Responsibility.

In addition, Self-administered Questionnaire was developed by Margaret in 2010. It includes 23 items that consists of four subscales: Commitment, Planning, Teaching and Assessment. The internal consistency coefficient was 0.91. It is based on the 4-point Likert scale whereby: 1 represented Strongly Disagree; 2 for Disagree; 3 for Agree and 4 for Strongly agree. Commitment was described into six questions, Planning was described as conceptualized into eight questions while teaching was conceptualized into five questions and assessment was conceptualized into four questions. 20 items were adapted from this questionnaire.

Then, Teachers' Job Performance Self-rating Questionnaire (TJPSQ) was developed by Amin in 2013 to measure teachers' job performance. This questionnaire is comprised of 25 items. There are four factors of teachers' performance: Teaching skills, Management skills, Discipline and Regularity, and Interpersonal relations. The questionnaire was validated and the reliability coefficient alpha value 0.81 was obtained for TJPSQ using SPSS 17 version. The response scale is a 5-point Likert scale of never,

seldom, sometime, usually, and always. Among the 25 items, 19 items were adapted from this questionnaire.

Moreover, Teacher Competency Questionnaire was developed by San San Hla in 2008. It consists of 80 items. The participants were asked to respond to the questionnaire items through the use of 5-point Likert scale: 1 for never, 2 for rare, 3 for sometimes, 4 for often and 5 for always. The researcher adapted 21 items which are more relevant to job performance of teacher educators. The Cronbach's alpha value was 0.93. It has ten subscales: Being knowledgeable about the subject matter, Identifying individual differences, Using instructional strategies, Creating student learning environment, Organizing classroom, Using assessment strategies, Demonstrating professional responsibilities, Forming partnership within the school community, Using information and communication technology as well as Having reflective practice.

Finally, Teachers' Job Performance Questionnaire was developed by Aye Aye Aung in 2015. It consists of 75 items and open-ended question. The participants were asked to respond to the questionnaire items through the use of 5-point Likert scale: 1 for never, 2 for rare, 3 for often and 4 for always. 20 items were adapted from this questionnaire. It has three subscales: Positive Interpersonal Relationship/Professional Responsibility, Instruction/Learning Environment and Planning/Preparation. The Cronbach's alpha value was 0.94.

Firstly, Teacher Educators' Job Performance Questionnaire consists of 100 items in 6 dimensions (see Appendix E) which are more relevant to job performance of teacher educators from all the above measures was translated to Myanmar version. To express in detail, there are 19 items for Instruction, 14 items in the dimension of Planning and Preparation, 15 items in the dimension of Assessment, 24 items for Responsibility, 18 items in the dimension of Interpersonal Relationship and 10 items in the dimension of Classroom Environment before conducting the expect review. It is 4-point Likert scale ranging from strongly disagree=1 to strongly agree=4.

After preparing the measuring scale, expert review was conducted for face validity and content validity by nine experts of educational psychology and educational test and measurement from Yangon University of Education, Sagaing University of Education and another two experts who have special knowledge in the field of psychology. According to the advices of the experts, some items were modified and revised the item length and wordings. Furthermore, the researcher administered to 106 teacher educators from Yangon University of Education and Hlegu Education College as a pilot study.

3.3.2 Preliminary Test Administration of Teacher Educators' Job Performance Questionnaire

Preliminary test administration of job performance questionnaire was conducted in October, 2017. The test was administered to 106 teacher educators in Yangon University of Education and Hlegu Education College. The internal consistency (Cronbach's alpha) of the whole scale and each dimension was done by calculating with the help of SPSS (version 20).

Cronbach's alpha was run on the overall scale was 0.96. The internal consistency coefficients of Instruction, Planning/Preparation, Assessment, Responsibility, Interpersonal Relationship and Classroom Environment of job performance questionnaire are 0.90, 0.84, 0.88, 0.86, 0.87 and 0.81 respectively. It indicated that the job performance questionnaire of teacher educators can be surely used as the reliable research instrument for this study.

3.4 Instrumentations of the Assessment Rating Questionnaires

In order to get the detailed information about teacher educators' social intelligence and job performance, multi-dimensions technique was conducted. After preparing the questionnaires, the face validity and content validity of questionnaires were confirmed by nine experts from Yangon University of Education and other universities as the expert review. In 1st week of July, pilot study was done in Sagaing University of Education to test whether the wording of item statements and instructions had their clarity in Myanmar version. Therefore, Supervisor's Assessment Rating Questionnaire, Colleagues' Assessment Rating Questionnaire, Students' Assessment Rating Questionnaire and Teacher Educators' Interview Form were used in the qualitative study.

Supervisor's Assessment Rating Questionnaire was adapted from Supervisor Evaluation Form by Wong in 2014. The original scale includes 27 items that consisted of three subscales:

1. Professionalism,
2. Teamwork and
3. Leadership

It categorized 18 items that are 5-point Likert type and 9 items are open-ended questions. Out of 27 items, 20 items were selected. It was comprised of 18 items are 5-point Likert type and 2 items are opened ended questions. The internal consistency coefficient was 0.87.

Colleagues' Assessment Rating Questionnaire was adapted from Job Performance Evaluation Form by Middle Georgia State University in 2006. It comprises of 20 items which included four subscales:

1. Responsibility
2. Professional
3. Communication
4. Leadership

The internal consistency coefficient was 0.91. Among them, 14 items were selected with 5- point Likert type was adapted to the instrument.

Students' Assessment Rating Questionnaire was mainly adapted from Teacher Performance Evaluation System 2012-2013 developed by Stronge and Hindman in 2006. It consists of 12 items. All items which are more relevant to teacher educators' job performance were adapted from it. The internal consistency coefficient was 0.89. Then more, Student Questionnaire Reflection by Patrick in 2009 which consists of 20 items for 5-point Likert type. The internal consistency coefficient was 0.87. 17 items from this questionnaire were also added to this instrument. So, the modified Students' Assessment Rating Questionnaire included 29 items and the response scale of this instrument was 5-point Likert type. It comprised of four scales:

1. Teaching skill
2. Communication
3. Management
4. Opportunity

Teachers Educators' Interview Form was adapted from General Teachers' Interview Form that was developed by College of Education and Human Developmente (CEHD) in March 24, 2017. It consists of 49 items. The participants were asked to respond to the questionnaire items from the researcher. 15 items were adapted from this questionnaire (as cited in OECD, 2005).

Table 3.2 Instruments for Measuring Qualitative Study

No.	Questionnaires	Developers	Selected Items
1.	Supervisor's Assessment Rating Questionnaire	Daniel Wong in 2014	20 items
2.	Colleagues' Assessment Rating Questionnaire	Middle Georgia State University in 2006	14 items
3.	Students' Assessment Rating Questionnaire	Stronge & Hindman in 2006 and Patrick Ruff in 2009	29 items
4.	Teacher Educators' Interview Form	College of Education and Human Development (CEHD) in Mar 24, 2017.	15 items

3.5 Procedure

Firstly, literature review was made from related books, educational journals, thesis and internet to obtain required data**.** With reference to the several social intelligence and job performance questionnaires, the development of a measure of social intelligence scale and job performance questionnaire was preceded. After preparing the measuring scales, expert review was conducted for face validity and content validity by experts. According to the valuable advices of the experts, some items were modified.

And then, prior to conducting the major survey, a pilot study was administered to test whether the wording of item statements and instructions had their clarity in Myanmar version. After the pilot study, items which were not stable or consistent were modified or deleted. After checking the values of intercorrelation coefficient among the items, only 9 items were deleted in social intelligence scale.

With the intention of exploring the impact of teacher educators' social intelligence on their job performance, the permissions from Department of Higher Education, rectors from the selected education universities as well as principals from the selected education colleges were obtained to conduct the major survey study with research questionnaires. In this study, a total of 1102 teacher educators from three education universities and nine education colleges gave responses to Social Intelligence Scale that comprised of 99 items (see Appendix C) and Teacher Educators' Job Performance Questionnaire that consisted of 100 items (see Appendix E). The actual data were collected from December 2017 to January 2018.

Data were collected by the questionnaire survey method. And the analyses were conducted by using Statistical Package for Social Science (SPSS) and BILOG-MG 3 software. With respect to the Social Intelligence Scale, 74 items out of 99 items were eliminated after analyzing several steps of the factor analysis. Then, the resultant 25 items (see Table 4.1) were used in this study. The whole scale of Social Intelligence Scale that consisted of 25 items (see Appendix D) indicated satisfactory internal consistency with Cronbach's alpha of 0.92. If the whole scale is classified into four dimensions such as Social Information Process, Social Awareness, Acceptance and Social Skill, the internal consistency values of each scale are 0.87, 0.71, 0.86 and 0.78, respectively. Thus, it was evident that Social Intelligence Scale (SIS) has high reliability to measure teacher educators' social intelligence.

In Teacher Educators' Job Performance Questionnaire, the responses of 1102 teacher educators upon 100 items were analyzed by the use of confirmatory factor analysis first. By taking out 13 items, the communalities were all above 0.2 and factor analysis was conducted with 87 items (see Table 4.4). The internal consistency of the whole Teacher Educators' Job Performance Questionnaire that comprised of 87 items (see Appendix F) is 0.96. As the scale is classified into four dimensions such as Instruction, Responsibility, Planning/Assessment and Interpersonal Relationship and their internal consistency values are 0.91, 0.89, 0.86 and 0.94, respectively. Thus, it was evident that all the scales used in this study have high reliability.

According the results of quantitative study, the four groups such as high SI and high JP, high SI and low JP, low SI and high JP as well as low SI and low JP were identified and they were assessed again by using the multi-dimensional technique as the follow up study. The three teacher educators of each group were randomly chosen as participants for the in-depth qualitative study so that altogether 12 teacher educators were observed with interview. And then, each teacher educator is evaluated by a respective supervisor, assessed by two colleagues and observed by ten students. So, altogether 12 selected teacher educators, 12 supervisors, 24 colleagues and 120 students participated in the qualitative study.

References

Amin, M., Rahmatullah, S., Muhammad, A., & Malik, A. A. (2013). Teacher' job performance at secondary level in Khyber Pakhyunkhwa, Pakistan. *Gomal University Journal of Research,* 29(2).

Anme, T. (2014). Validity and reliability of the interaction rating scale advanced (IRSA) as an index of social competence development. *Public Health Research,* 4(1), 25-30.

Aye Aye Aung. (2014). *An assessment of emotional intelligence impact on teachers' job performance.* Unpublished doctoral dissertation, Yangon University of Education.

Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology, 10*, 85.

Jackson Public School. (2008). Teacher Performance Evaluation. Retrieved July 8, 2017, from : http://www.rrojasdata bank. Infodb/crisis.onnigeria09.pdf.

Lennox, R. D., & Wolfe, R. N. (1984). Self-monitoring scale. *Journal of Personality and Social Psychology*, 46(6).

Margaret, N. (2010). *Influence of the teachers' professionalism on the teacher performance in Busiro country secondary schools, Wakiso district*. Unpublished master thesis. Makerere University.

Middle Georgia (2006). *Internship supervisor evaluation form*. State university: school of information technology. Retrieved January 12, 2016, from http://books.google.com/books?id=4Do-bFrt9tUC

OECD. (2005). *Teaching and learning international survey (TALIS): Teacher questionnaire.* International Project Consortium: International Association for the Evaluation of Education of Educational Achievement (IEA), the Netherlands IEA Data Processing and Research Center (IEA DPC), Germamy.

Patrick, R. (2009). Teacher performance evaluation system 2012-2013. Mecklenburg Country Public School. Virginia.

San San Hla. (2008). *Development of competency model for professional development of upper primary teachers in Yangon Division*. Unpublished doctoral dissertation. Yangon University of Education.

Silvera, D. H., Martinussen, M., & Dahl, T. I. (2001). The Tromso social intelligence scale, a self-report measure of social intelligence. *Scandinavian Journal of Psychloogy*. 42, 313-319.

Steinwachs, J. (n.d.,). Interpersonal Relationships Questionnaire (IRQ). Retrieved May 3, 2015, from http://www.pearsonassessments.com/NR/.../Assess_Focus_ Spring_ 02.pdf

Stronge, J. H., & Hindman, J. L. (2006). Teacher performance evaluation handbook. Stronge and Associate Educational Consulting, LLC. Retrieved March 23, 2010, from http://www.Bedford.K12.va.us/teforms

Wong, D. (2014). Field education supervisor evaluation form. Tyndale University. Tyndale University. Retrieved June 11, 2017, from http://www.karlalbrecht.com/siprofile /siprofiletheory.html

CHAPTER 4

Data Analysis and Results

After developing the required instruments of Social Intelligence Scale, Teacher Educators' Job Performance Questionnaire, Supervisor's Assessment Rating Questionnaire, Colleagues' Assessment Rating Questionnaire, Students' Assessment Rating Questionnaire and Teacher Educators' Interview Form and applying these for data collection in chapter 3, differences in teacher educators' social intelligence and job performance were investigated. Moreover, the most appropriate social intelligence scale for Myanmar teacher educators was developed by using two parameter logistic model of item response theory (IRT). Furthermore, this study investigated whether the factors such as gender, marital status, age and professional specialization are related or not with teacher edcuators' social intelligence and job performance. Then, the correlation and multiple regression of teacher educators' social intelligence and their job performance were further explored. By conducting the statistical analysis, findings and results are discussed in the following section of this chapter.

4.1 The Confirmatory Factor Analysis for Social Intelligence Scale (SIS)

Confirmatory factor analysis was used to establish the thirteen dimensions of the Social Intelligence Scale (SIS); social sensitivity, self-regulation, expressivity, assertiveness, acceptance, social skill, social information process, social awareness, perspective taking, empathetic concern, personal distress, closeness and conflict. The reliability coefficients were largely acceptable for these thirteen dimensions derived from Social Intelligence Scale (Alpha=0.81).

In this study, the Kaiser-Meyer-Olkin measure of sampling adequacy was 0.877; it was above the recommended value of 0.7 that is indicating sufficient items for each factor. Then, Bartlett's Test of Sphericity was significant (p < .000) which means that the variables are highly correlated enough to provide a reasonable basic for factor analysis. The four factors also have eigenvalues greater than 1.0, which is a common criterion for a factor to be useful.

Principal axis factor analysis with varimax rotation was conducted to assess the underlying structure for the 99 items of the SIS. For the first time, thirteen factors such as social sensitivity, self-regulation, expressivity, assertiveness, acceptance, social skill, social information process, social awareness, perspective taking, empathetic concern, personal distress, closeness and conflict were requested. Using varimax rotation means

that the final factors will be as uncorrelated as possible with each other. As a result, the information explained by one factor is independent of the information in the other factors.

Although the four factor eigenvalues were greater than 1.0 and the true communalities were larger than 0.20 after the extraction, the loading of the four factors was scattered. Throughout this analysis process, items with initial values of less than 0.2 and those without loading were discarded. After doing several steps, 74 items out of 99 items were eliminated because they had low or no loadings with any other factors. By taking out 74 items, the communalities were all above 0.2; it indicated that the relation between each item and other items is satisfactory. Given these overall indicators, factor analysis was conducted with 25 items.

Table 4.1 Factor Loading for the Rotated Factors of Social Intelligence Scale

		Factors				Communality
		1	**2**	**3**	**4**	
Social Information Process	Item 79	.636				.412
	Item 44	.597			.105	.376
	Item 7	.589		.115		.366
	Item 58	.577	.162			.368
	Item 90	.553			.145	.328
	Item 66	.552				.327
	Item 32	.511				.328
	Item 13	.458	.170			.280
	Item 54	-.434	.374	.261		.411
Social Awareness	Item 80		.716			.517
	Item 55		.657	.237		.497
	Item 67		.612			.377
	Item 72		.607		.114	.379
	Item 45		.528	.208		.340
	Item 43		.445			.294
Acceptance	Item 26			.637		.417
	Item 88		.175	-.590		.381
	Item 96			.572		.333
	Item 86			.554		.370
	Item 77	.220		.538	.166	.327
	Item 94			-.535		.390
Social Skill	Item 31				.777	.627
	Item 19	.145			.771	.622
	Item 39				.620	.443
	Item 42			.182	.450	.306
Eigenvalues		7.017	2.484	2.269	2.046	
% of variance		12.07	9.93	9.08	8.18	

After extraction, some of the factors were retained and some were dismissed. After rotation, the first factor accounted for 12.07% of the variance, the second factor accounted for 9.93% of the variance, the third factor accounted for 9.08% of the variance and the fourth factor accounted for 8.18% of the variance. Table 4.1 displays the factor loadings for the rotated factors and communalities based on principal axis analysis with varimax rotation for Social Intelligence Scale.

According to the result of Table 4.1, it was verified that most of the social information process items, two items of social skill and one item of personal distress were grouped into factor 1 and it was named as social information process that has nine items. In the second factor, most of the social awareness items, one item of social skill and one item of closeness were loading into factor 2 and this factor was assigned as social awareness and it includes six items. In the third factor, three items of acceptance, two items of closeness and one item of assertiveness were assigned as acceptance. In the fourth factor, three items of social skill and one item of acceptance were assigned as social skill.

Examination of the scree plot was shown in Figure 4.1. The first factor was much larger than subsequent factors in term of eigenvalue magnitude; eigenvalue of successive factors drop off quite drastically. Four factors were retained within the sharp descent, before eigenvalue level off. Based on the plot, it appears only four factors should be interpreted.
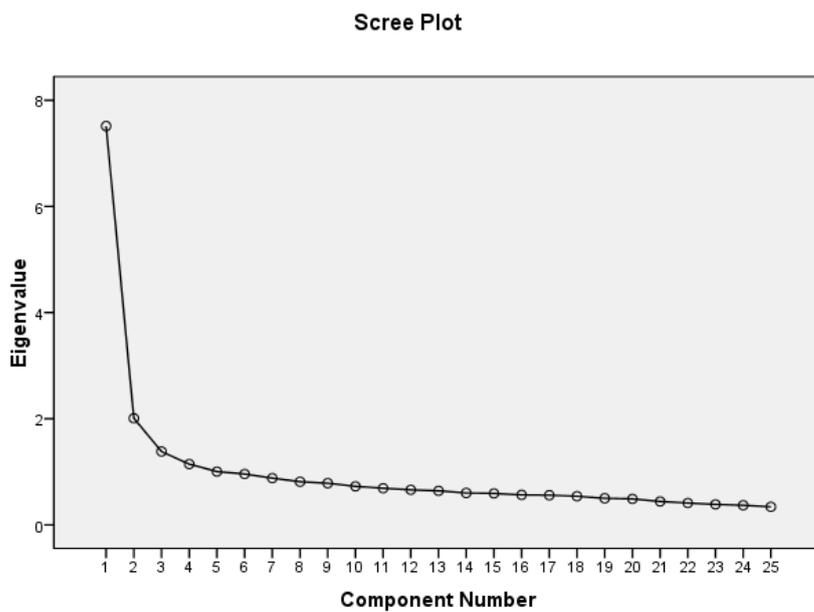
Figure 4.1 Scree Plot of Eigenvalues for Items of the Social Intelligence Scale

4.2 Check the Assumption of Unidimensionality

In order to apply an IRT analysis, assumption of unidimensionality should be held. To investigate this assumption, a principal factor analysis was conducted. The values of eigenvalue 1, 2, 3, 4, 5, 6, 7 were 7.02, 2.48, 2.27, 2.05, 1.49, 1.14, 1.08 and so on and thus eigenvalue 1 was larger enough than other eigenvalues to determine that the test data satisfy the assumption of unidimensionality. It can be said that the test data satisfy the assumption of local independence. Therefore, the test items were unidimentional.
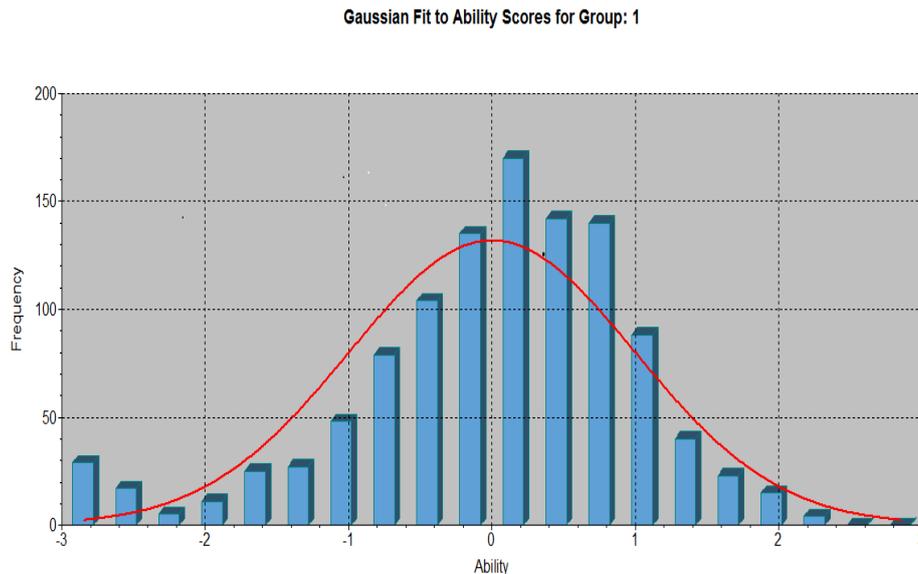
Figure 4.2 Frequency Distributions of Expected and Observed Data for Social Intelligence Scale

According to the Figure 4.2, the evidence is clear that substantial improvements in fit are obtained with the more general models, with the two-parameter model (2PL) fitting the data very well. The expected and observed data for the 2PL model are nearly identical. Therefore, 2PL model was employed by using BILOG-MG 3.

4.3 Item Parameter Estimation

Item parameter and ability parameters were estimated by BILOG-MG 3 Software Package (Zimowski, Muraki & Bock, 2003) which is capable of large-scale production applications with unlimited numbers of items of respondents. The Social Intelligence Scale was analyzed by 2PL model in this study, so there was no c or guessing parameter for these items. In Table 4.2, item parameters a and b of 25 items were estimated and the obtained parameter estimates of each item respectively are presented.

Table 4.2 Estimates of Item Parameters for 25 items of the Social Intelligence Scale

Item	Discrimination (*a*)	SE	Difficulty (*b*)	SE
1	0.75	0.06	-0.06	0.05
2	0.78	0.07	1.40	0.05
3	0.56	0.05	1.25	0.05
4	0.50	0.04	-0.25	0.08
5	0.51	0.05	-0.02	0.07
6	0.62	0.06	1.35	0.05
7	0.83	0.07	1.67	0.01
8	0.61	0.05	0.56	0.07
9	0.51	0.05	-0.31	0.08
10	0.67	0.07	1.83	0.01
11	0.90	0.07	0.86	0.06
12	0.66	0.07	1.88	0.06
13	0.33	0.04	0.31	0.03
14	0.65	0.06	1.54	0.01
15	0.71	0.06	0.58	0.04
16	0.67	0.05	-0.39	0.06
17	0.50	0.05	1.14	0.04
18	0.58	0.05	1.62	0.01
19	0.58	0.05	0.88	0.09
20	0.62	0.05	-0.05	0.06
21	0.95	0.08	0.79	0.05
22	0.84	0.07	1.34	0.09
23	1.05	0.08	0.73	0.06
24	0.92	0.08	0.68	0.06
25	0.37	0.04	0.35	0.04

From the above result, it was found that the item discrimination parameter (*a*) estimates range from 0.33 (item 13) to 1.05 (item 23) and the mean of these estimates is 0.67. So, it is concluded by a consideration of their discrimination indices, the items are fairly good items to provide appropriate discrimination or information for the whole test. On the other hand, the items with the difficulty (*b*) values within -2 to +2 were expected

to be selected (Nu Nu Khaing, 2011). In this study, the variability of parameter (*b*) value was from -0.39 (item 16) to 1.88 (item 12) and the mean of the estimates is 0.84 and thus, it is concluded that the test is fairly difficult (see Table 4.3).

Table 4.3 Mean, Standard Deviation, Maximum and Minimum Values of Discrimination and Difficulty Parameters

	Parameters	
	Discrimination (*a*)	Difficulty (*b*)
Mean	0.67	0.84
Standard Deviation	0.18	0.75
Maximum	1.05	1.88
Minimum	0.33	-0.39

4.4 Item Characteristic Curves and Item Information Curves

The item characteristic curve (ICC) serves as the foundation of item response theory. ICC also summarizes much of the information conveyed by item analysis and suggests how this information might be used to understand the relationship between the attribute being measured and test responses (Crocker & Algina, 1986). The higher the item discrimination, the more peaked the information function will be, thus, higher discriminations parameters provide more information about individuals whose ability (θ) lie near the item's difficulty value. The following figure illustrates the item characteristics curves (ICCs) for 25 items of the test.
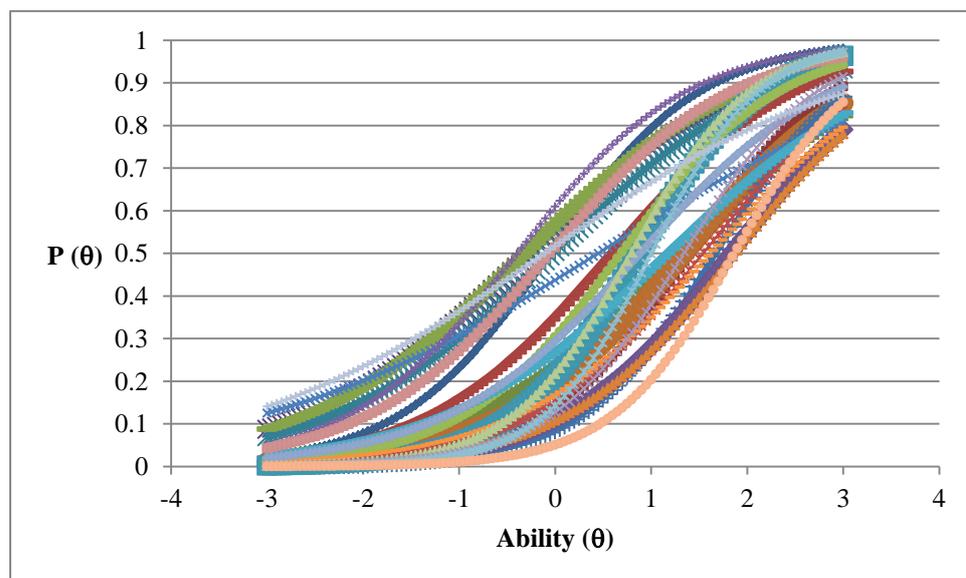
Figure 4.3 Item Characteristics Curves for the Test with 25 items

85

4.5 Test Characteristic Function and Test Information Function

The test characteristic curve (TCC) for the 25-items test was graphed to learn the peculiarities of the test as a measuring instrument (see Figure 4.4). The TCC shows how test scores on the test are related to the ability θ of the examinee (Hambleton, Swaminathan & Roger, 1991). The TCC is a true score (τ) of an examinee with ability θ in IRT.
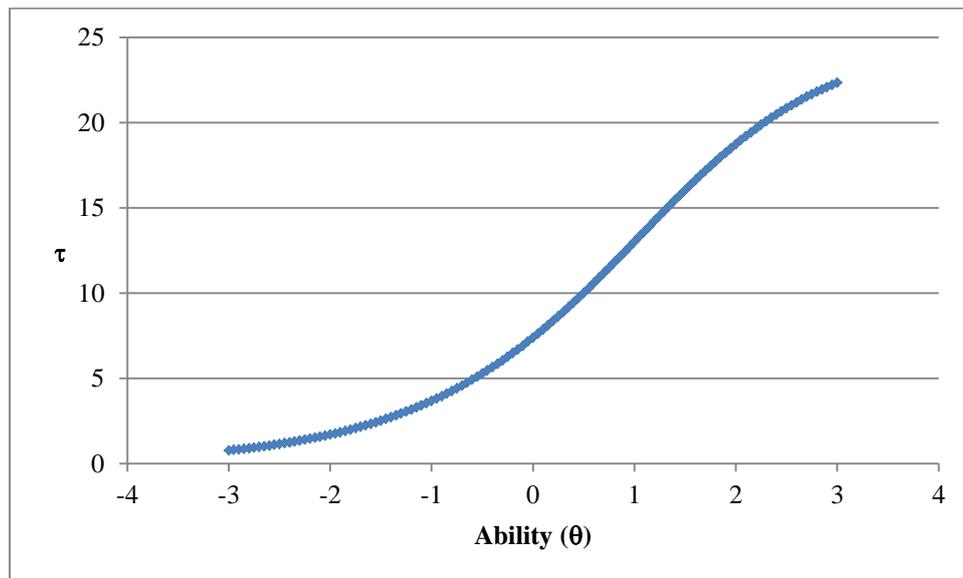
Figure 4.4 Test Characteristic Curve for the Test with 25 items

According to Figure 4.4, it was observed that the test is discriminating well among examinees with the range of ability level -1 to +3 appropriately. So, it was observed that above range of ability level -1 to +3 is neither too steep nor too smooth. To be precisely the maximum amount of information obtained from the test, test information function curves was drawn (Figure 4.5). In IRT, the information function is used to know standard error of the test and its reliability. The standard error of the test is the inverse of the square root of information, thus, the greater information causes the smaller the standard error and the greater the reliability (DeMars, 2010). Figure 4.5 illustrated the test information curve (TIC) of the 25 items test and SE is the standard error of estimation.

The TIC shows that the test has smaller standard errors across the ability scale from -1 to +3, and larger standard error at the low and high ends of the scale. According to the Figure 4.5, the maximum amount of information I (θ) = 7.51 is at θ = 1.1. Ability estimates are more precise across the ability scale from -1 to +3 than at the low and high ends of the scale. Therefore, it was concluded that this test composed of 25 items could be suitable for teacher educators whose social intelligence was θ = 1.1. However, smaller standard errors are associated with highly discriminating items for which the correct

answers cannot be obtained by guessing (Hambleton et al., 1991, p.95, cited in Nu Nu Khaing, 2011).
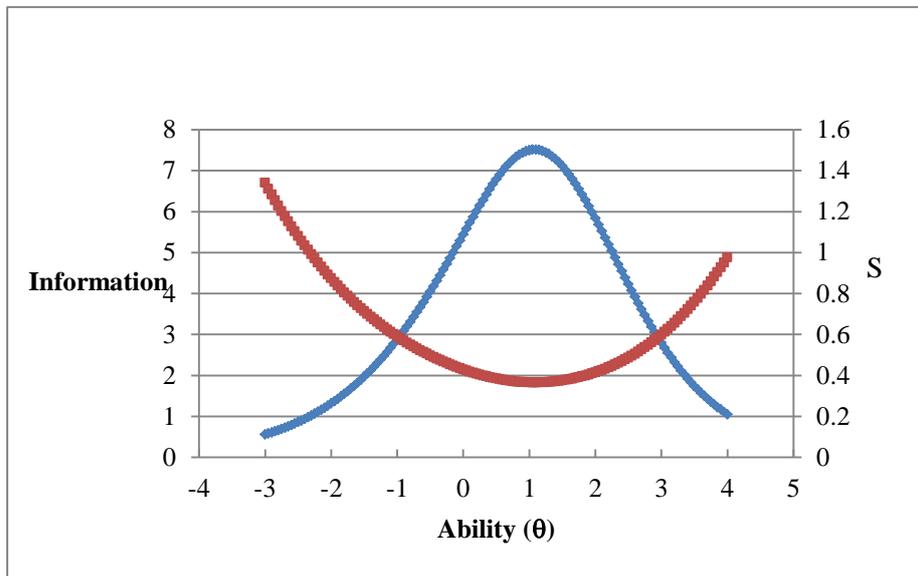
Figure 4.5 Test Information Curve for the Test with 25 items

4.6 The Confirmatory Factor Analysis for Teacher Educators' Job Performance

The responses of 1102 teacher educators upon 100 items were analyzed by the use of confirmatory factor analysis. The reliability coefficients were largely acceptable for each of the six dimensions of the teacher educators' job performance derived (Alpha=0.96). In this study, the Kaiser-Meyer-Olkin measure of sampling adequacy was 0.949; it was above the recommended value of 0.7 that is indicating sufficient items for each factor. Then, Bartlett's Test of Sphericity was significant (p< .000) which means that the variables are highly correlated enough to provide a reasonable basic for factor analysis.

Throughout this analysis, items with initial values of less than 0.2 and without loading were discarded. After doing several steps, 13 items out of 100 items were eliminated because they had low or no loadings with any other factors. By taking out 13 items, the communalities were all above 0.2; it indicated that the relation between each item and other items was satisfactory. Given these overall indicators, factor analysis was conducted with 87 items.

Table 4.4 Factor Loading for the Rotated Factors of Job Performance Questionnaire

		Factors				Communality
		1	**2**	**3**	**4**	
Instruction	Item 95	.560	.225		.167	.457
	Item 98	.555				.414
	Item 87	.553				.342
	Item 84	.539				.405
	Item 93	.531			.175	.354
	Item 96	.520	.224		.148	.346
	Item 85	.502		.196		.476
	Item 94	.501	.115			.338
	Item 86	.501		.473		.361
	Item 71	.495	.159			.374
	Item 79	.488				.406
	Item 66	.479				.295
	Item 61	.461		.281		.295
	Item 89	.444				.361
	Item 100	.441				.310
	Item 81	.435				.249
	Item 7	.418				.310
	Item 24	.414				.213
	Item 29	.391				.304
	Item 80	.386				.295
	Item 36	.384				.330
	Item 48	.375				.401
	Item 88	.356				.244
	Item 37	.350				.309
	Item 13	.341		.225		.317
	Item 15	.332				.244
	Item 28	.323				.250
Responsibility	Item 74		.574			.346
	Item 69		.573	.181		.385
	Item 99	.131	.569			.444

	Item					
	Item 58		.559			.332
	Item 97	.183	.559	.161		.371
	Item 75		.550		.141	.325
	Item 52		.512		.113	.278
	Item 51		.509			.403
	Item 63		.500			.378
	Item 78		.499			.470
	Item 47		.472			.391
	Item 43		.471	.155		.355
	Item 41		.453			.361
	Item 54		.432	.399		.417
	Item 40		.429			.208
	Item 44		.426			.408
	Item 34		.414			.213
	Item 90		.405			.356
	Item 70		.347			.312
	Item 46		.343			.343
	Item 59		.331			.250
Planning / Assessment	Item 33			.338	.113	.249
	Item 76			.533		.435
	Item 49			.525		.316
	Item 9		.181	.379		.237
	Item 50			.442		.381
	Item 45	.202		.387		.256
	Item 39			.427		.300
	Item 57			.544		.460
	Item 67			.518	.223	.354
	Item 10			.509		.284
	Item 73			.499		.395
	Item 38		.291	.488		.387
	Item 62			.484		.380
	Item 72			.481		.334
	Item 3		.179	.474		.260

	Item 55			.466		.430
	Item 56			.463		.369
	Item 27			.449		.372
	Item 77			.421	.256	.341
	Item 82			.408		.347
	Item 68			.388		.328
	Item 60	.213		.381	.178	.233
	Item 91			.368		.277
	Item 20			.367		.366
	Item 30			.367		.243
	Item 53		.279	.360		.366
	Item 22		.298	.326		.232
	Item 83			.324		.238
	Item 19	.189		.306		.219
	Item 26			.296		.264
	Item 21			.344		.209
Interpersonal Relationship	Item 92		.197		.398	.308
	Item 17				.618	.474
	Item 16				.564	.439
	Item 23	.145			.471	.364
	Item 11				.449	.259
	Item 14				.376	.251
	Item 6		.250		.364	.373
	Item 5			.264	.309	.201
Eigenvalues		22.483	4.196	2.619	2.209	
% of variance		25.842	4.822	3.011	2.540	

Principal axis factor analysis with varimax rotation was conducted to assess the underlying structure for the 100 items of teacher educators' Job Performance Questionnaire. At first, four factors such as instruction, assessment, responsibility and interpersonal relationship dimensions were requested and assigned as instruction that had 27 items. According to varimax rotation, responsibility, planning/preparation and interpersonal relationship are loading in the second factor which was renamed responsibility and comprised 21 items. Assessment, planning/preparation and

responsibility were loading into factor 3 and this factor was assigned as planning/assessment which included 31 items. Finally, two factors were requested as interpersonal relationship and responsibility were renamed interpersonal relationship that comprised 8 items.

4.7 Transformation from Ability Scaled Scores to IQ Scaled Scores

There are two types of scores on IQ scores: raw and scale scores. Raw scores are equal to the number of questions or items participants answer correctly, whereas scaled scores are final scaled versions of raw scores. Raw scores are definitely easier to calculate than scaled scores but a scaled score is a score that has been adjusted and converted to a standardized scale.

According to the testing process, firstly we have raw scores of social IQ scales. Then, the raw scores were converted into the scaled scores (ability (θ) scaled score and IQ scaled score) in order to interpret fairly and accurately compared and ensure that people who tool a more difficult test are not penalized and people who took a less difficult test are not given an unfair advantage. According to IRT test developing process, the ability (θ) scaled scores have been converted because they are expressed with decimal, plus sign and minus sign that are difficult to understand by people who are not expert in testing field. Therefore, they are converted into IQ scaled scores (see Appendix K). The standardized IQ scaled score has a mean of 100 and standard deviation of 15. To transform the IQ scaled score, the multiplication of the ability (θ) scaled score and standard deviation (15) and then added to mean (100). It follows that

IQ score = ability score $\times$ 15 + 100

After the ability (θ) scaled scores transformed to the corresponding IQ scaled scores, descriptive statistics of teacher educators' social intelligence were done.

4.8 Descriptive Statistics of Social Intelligence for Teacher Educators

After that, descriptive statistics of teacher educators' social intelligence was examined. Teacher educators' social intelligence was measured by Social Intelligence Scale which included four dimensions: social information process, social awareness, acceptance and socil skill. The descriptive statistics corresponding to dimensions of social intelligence were reported in the following table.

Table 4.5 Descriptive Statistics of Teacher Educators' Social Intelligence

Variables	Mean	SD
Social Information Process	111.45	21.64
Social Awareness	119.91	14.97
Acceptance	108.20	19.76
Social Skill	103.39	26.41
Social Intelligence	119.23	15.73

Social Intelligence Scale (SIS) consisted of 25 items and it was divided into four dimensions. According to the results of Table 4.5, the mean value of Social Intelligence was 119.23 and standard deviation was 15.73. So, it may be concluded that Myanmar teacher educators had high level of social intelligence because the mean score of teacher educators' social intelligence we above average according to the IQ score ranges.

Moreover, the mean score for social awareness was the highest among the four dimensions of social intelligence. It can be assumed that teacher educators have the highest ability to be aware of one's and other's action when in the relationship. However, the mean score for social skill was the lowest among the four dimensions of social intelligence. It can be concluded that teacher educators tend to be weak in ability to modify behaviours when enter in a new situation and the ability to get to know new people. Specific information can be seen in Figure 4.6.
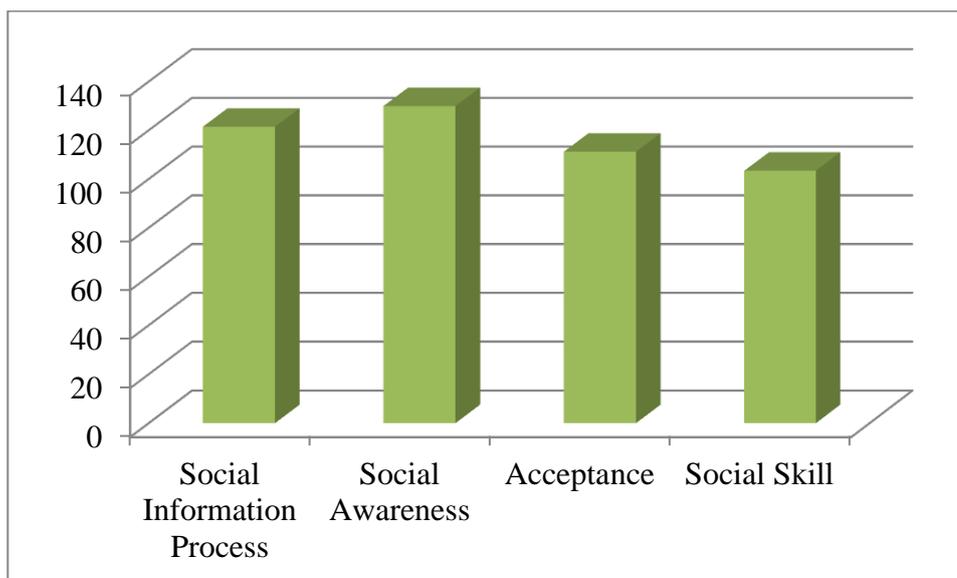
Figure 4.6 Mean Comparisons for Dimensions of Social Intelligence

4.9 Comparison of Teacher Educators' Social Intelligence by Gender

This study tried to investigate how teacher educators differ in social intelligence by gender because males and females were not same in their nature. Descriptive analysis revealed the differences in means and standard deviations of social intelligence by gender. The mean scores of male and female teacher educators were reported in Table 4.6.

Table 4.6 showed the mean comparison for social intelligence between males and females. It was observed that the mean score of female teacher educators were slightly higher than that of male teacher educators in social intelligence. In other words, female teacher educators seemed to be better than male teacher educators in social intelligence level. Figure 4.7 showed the mean comparison of teacher educators' social intelligence by gender.
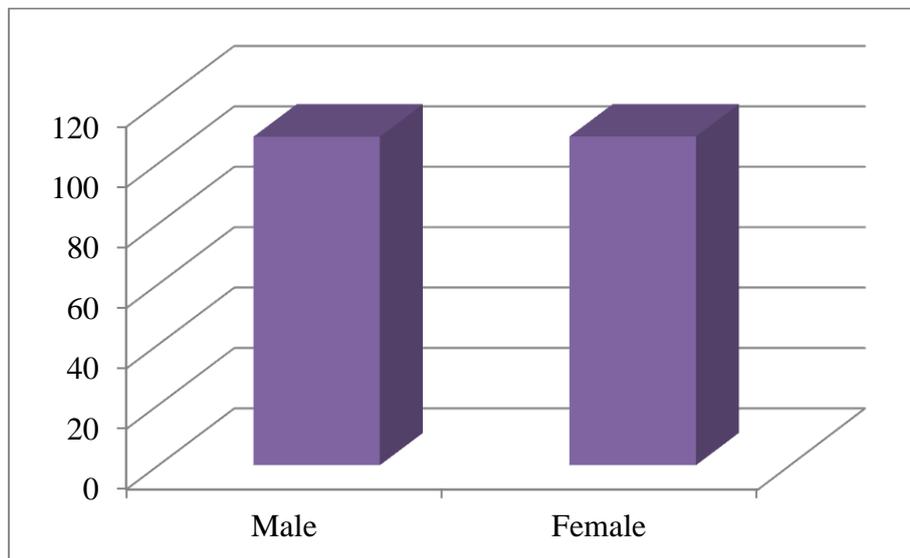
Figure 4.7 Mean Comparisons of Teacher Educators' Social Intelligence by Gender

As independent sample t-test was used to analyze the data in order to determine if a significant difference existed in social intelligence by gender (see Table 4.6). According to the result of table, there was no significant difference in teacher educators' social intelligence by gender. So, it can be said that gender is not a related factor of social intelligence among the teacher educators.

Table 4.6 The Result of Independent Sample *t*-test for Social Intelligence by Gender

Variable	Gender	Mean	*t*	*df*	Sig (2-tailed)	Mean Difference
Social Intelligence	Male	108.74	-.057	1100	.955	-.073
	Female	108.81				

4.10 Comparison of Teacher Educators' Social Intelligence by Marital Status

In order to test whether teacher educators were different in social intelligence with respect to marital status, descriptive analysis was conducted. It was observed that the mean score of married teacher educators was higher than that of single teacher educators in social intelligence. Figure 4.8 showed the mean comparisons of social intelligence by marital status.
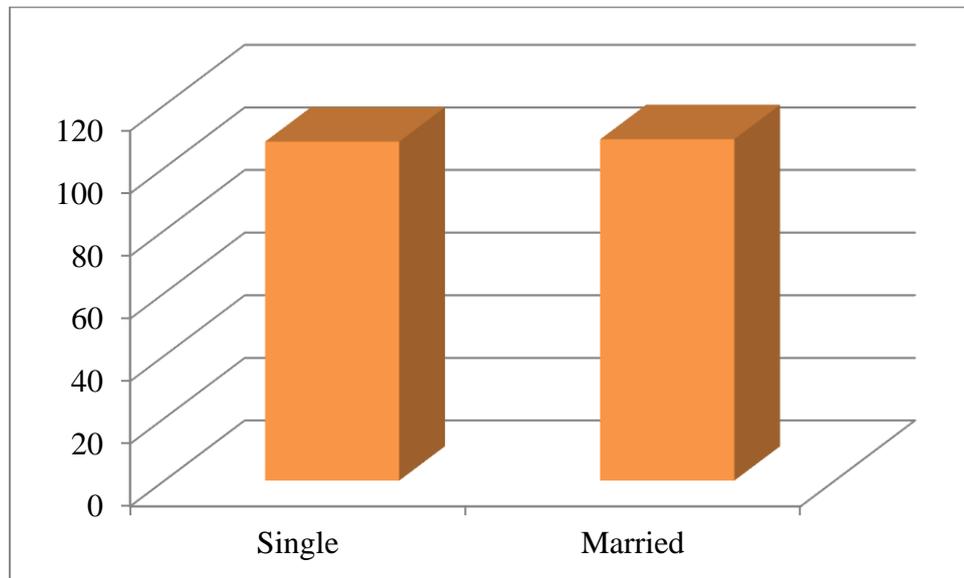
Figure 4.8 Mean Comparisons of Teacher Educators' Social Intelligence by Marital Status

To obtain the more detailed information of social intelligence by marital status, independent sample t-test was executed again. The result of independent sample t-test indicated that there was no significant difference by marital status in social intelligence (see Table 4.7). This finding was consistent with the result of Parto, Shahram & Taghi (2013) research. This result showed that the differences by marital status with these variables were not significant ($P>0.05$).

Table 4.7 The Result of Independent Sample t-test for Social Intelligence by Marital Status

Variable	Marital Status	Mean	t	df	Sig (2-tailed)	Mean Difference
Social Intelligence	Single	108.30	-.84	1092	.397	-.778
	Married	109.07				

4.11 Comparison of Teacher Educators' Social Intelligence by Age

By using the descriptive statistics, the teacher educators' social intelligence by their age was examined. Based on the results of Table 4.8, it was observed that the mean score of younger teacher educators (21 years to 30 years) was the highest in social intelligence. Younger teacher educators seem to be more socially intelligent than older teacher educators.

Table 4.8 Descriptive Statistics for Social Intelligence by Age

Variable	Age	N	Mean	SD
Social Intelligence	21yrs- 30yrs	184	111.30	12.81
	31yrs- 40yrs	161	109.26	12.85
	41yrs- 50yrs	378	108.35	15.68
	51yrs- 60yrs	379	106.60	16.00
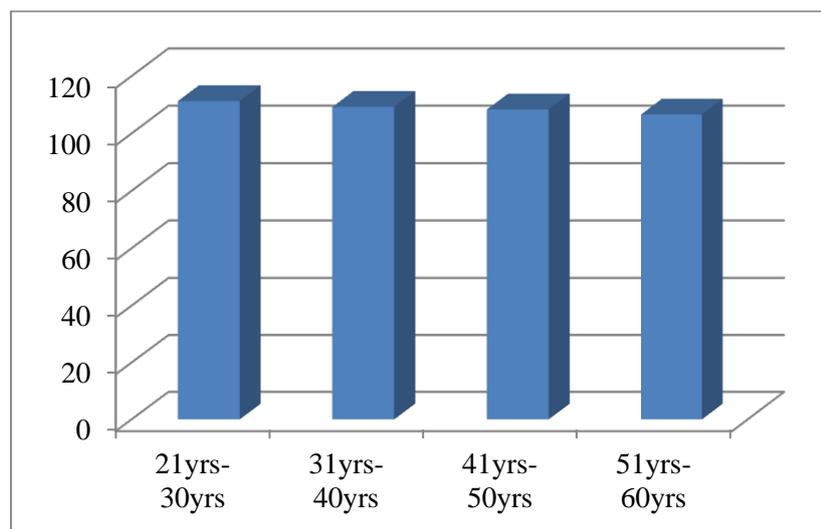
Figure 4.9 Mean Comparisons of Teacher Educators' Social Intelligence by Age

To make the confirmation of the significant difference of teacher educators' social intelligence by age group, one way analysis of variance was executed. The following table showed ANOVA result of mean comparison for social intelligence by age. According to the result of Table 4.9, there was significant difference in teacher educators' social intelligence by age group at 0.01 level.

Table 4.9 ANOVA Table of Mean Comparison for Social Intelligence by Age

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3362.641	3	1120.880	5.283**	.001
Within Groups	232978.168	1098	212.184		
Total	236340.809	1101			

** The mean difference is significant at the 0.01 level.

For making mean comparisons among age group, Tukey HSD comparison procedure was again employed and the main effect for different age on teacher educators' social intelligence was interpreted by using multiple comparison method (see Table 4.10). It can be seen that the mean score of teacher educators in youngest age group (21 years to 30 years) were higher than that of teacher educators in oldest age group (50 years to 60 years) in social intelligence at 0.01 level.

Table 4.10 Result of Tukey HSD Multiple Comparison for Social Intelligence by Age

Variable	(I) Experience	(J) Experience	Mean Difference (I-J)	Sig
Social Intelligence	21yrs -30yrs	51yrs- 60yrs	4.71**	.001

**The mean difference in significant at the 0.01 level.

As the social intelligence scale comprised of four dimensions such as social information process, social awareness, acceptance and social skill, the items were analyzed by dimensions of social intelligence. Table 4.11 showed that the means and standard deviations for the dimensions of teacher educators' social intelligence by age group. The mean values of teacher educators in the youngest group were found to be the highest in all dimensions of social intelligence.

Table 4.11 Descriptive Statistics for Dimensions of Social Intelligence by Age

Dimensions of SI	Age	N	Mean	SD
Social Information Process	21yrs- 30yrs	184	108.85	19.52
	31yrs- 40yrs	161	107.23	17.34
	41yrs- 50yrs	378	105.11	18.93
	51yrs- 60yrs	379	104.40	17.88
Social Awareness	21yrs- 30yrs	184	118.27	29.29
	31yrs- 40yrs	161	117.85	26.02
	41yrs- 50yrs	378	116.17	28.39

	51yrs- 60yrs	379	110.11	26.83
	21yrs- 30yrs	184	104.21	10.21
Acceptance	31yrs- 40yrs	161	103.97	10.52
	41yrs- 50yrs	378	104.16	11.35
	51yrs- 60yrs	379	103.83	10.86
	21yrs- 30yrs	184	108.92	32.58
Social Skill	31yrs- 40yrs	161	103.63	23.29
	41yrs- 50yrs	378	104.27	24.84
	51yrs- 60yrs	379	100.94	22.10

To understand thoroughly the significant differences of teacher educators' social intelligence by age, the one-way ANOVA was calculated. According to the results of Table 4.12, it can be seen that there was significant difference in social information process, social awareness and social skill by age at 0.001 level. It can be interpreted that the social intelligence of younger teacher educators was better than that of older ones in social information process, social awareness and social skill.

Table 4.12 ANOVA Result for Dimensions of Social Intelligence by Age

Dimensions of SI		Sum of Squares	df	Mean Square	F	Sig.
Social Information Process	Between Groups	6505.685	3	2168.562	6.327***	.000
	Within Groups	376331.02	1098	342.742		
	Total	382836.70	1101			
Social Awareness	Between Groups	14637.790	3	4879.263	6.327***	.000
	Within Groups	846744.79	1098	771.170		
	Total	861382.58	1101			
Acceptance	Between Groups	27.793	3	9.264	.080	.971
	Within Groups	127470.94	1098	116.094		
	Total	127498.74	1101			
Social Skill	Between Groups	19127.444	3	6375.815	9.349***	.000
	Within Groups	748778.63	1098	681.948		
	Total	767906.08	1101			

*** The mean difference is significant at the 0.001 level.

To obtain more detailed information in age group had the differences, the Post-Hoc Test carried out by Tukey method. It can easily be seen from these results (see Table 4.13). With regard to the social information process and social awareness, the mean percentage of the teacher educator in 21yr – 30yr group was significantly higher than that of the other two groups (31yr-40yr and 51yr-60yr). With regard to social skill in SIS, the mean percentage of teacher educator in youngest group (21yr – 30yr) was significantly higher than that of others group.

Table 4.13 Result of Tukey HSD Multiple Comparison for Dimensions of Social Intelligence by Age

Dimensions of SI	(I) Experience	(J) Experience	Mean Difference (I-J)	Sig
Social Information Process	21yrs- 30yrs	31yrs- 40yrs	4.39*	.043
		51yrs- 60yrs	6.56***	.000
Social Awareness	21yrs- 30yrs	31yrs- 40yrs	6.588*	.043
		51yrs- 60yrs	9.840***	.000
Social Skill	21yrs- 30yrs	31yrs- 40yrs	8.293**	.006
		41yrs- 50yrs	7.645**	.008
		51yrs- 60yrs	10.984***	.000

Note: *   The mean difference is significant at .05 level

    **   The mean difference is significant at .01 level

    ***   The mean difference is significant at .001 level

4.12 Comparison of Teacher Educators' Social Intelligence by Professional Specialization

In Education Universities and Colleges, there are two main specializations: pedagogic majors such as Educational Theory, Educational Psychology and Methodology and non-pedagogic majors such as Physics, Chemistry, etc. In order to test whether teacher educators were different in social intelligence with respect to professional specialization, the descriptive statistic for social intelligence of teacher educators from different professional specialization were compared (see Table 4.14).

According to the table, the mean scores of teacher educators in pedagogic majoring were higher than that of teacher educators in non-pedagogic majoring. Thus, it can be said that the teacher educators in pedagogic majoring seem to be more socially intelligent than teacher educators in non-pedagogic majoring. Specific information can be seen in the following figure.
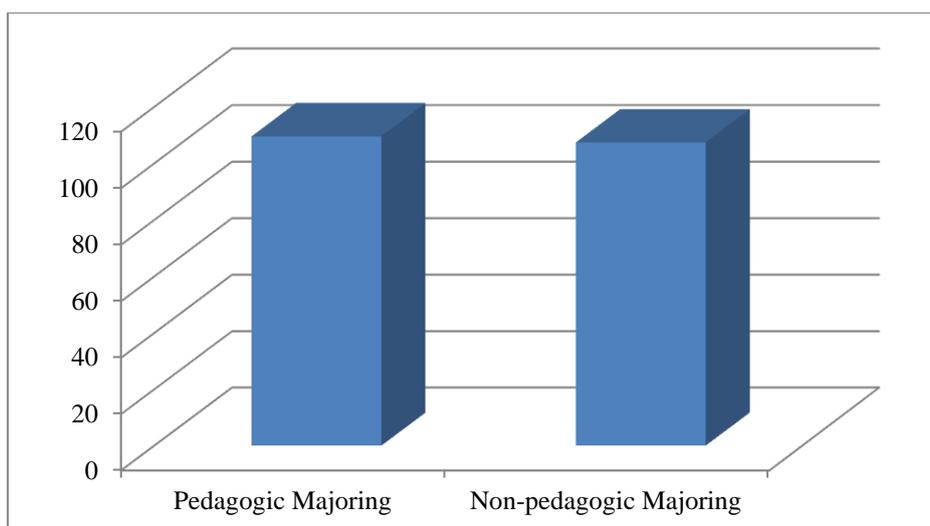
Figure 4.10 Mean Comparisons of Teacher Educators' Social Intelligence by Professional Specialization

To obtain more detailed information with respect to professional specialization, independent sample t-test was conducted. According to the result of independent sample t-test, there was significant difference in social intelligence at 0.05 level by professional specialization. It can be said that the social intelligence of teacher educators in pedagogic majoring were higher than that of teacher educators in non-pedagogic majoring.

Table 4.14 The Result of Independent Sample *t*-test of Social Intelligence by Professional Specialization

Variable	Professional Specialization	Mean	*t*	*df*	Sig (2-tailed)	Mean Difference
Social Intelligence	Pedagogic Majoring	109.56	1.99	1100	.04	2.14
	Non-pedagogic Majoring	107.42				

In order to test whether teacher educators are different in dimensions of social intelligence by their professional specialization, descriptive analysis was done and the result revealed the differences in mean scores of the social intelligence. The mean value of teacher educators in pedagogic majoring was higher than that of teacher educators in non-pedagogic majoring in all dimensions of social intelligence.

Table 4.15 The Result of Independent Sample *t*-test for Dimensions of Social Intelligence by Professional Specialization

Dimensions of SI	Professional Specialization	Mean	*t*	*df*	Sig (2-tailed)	Mean Difference
Social Information Process	Pedagogic Majoring	105.03	.45	1100	.652	.733
	Non-pedagogic Majoring	104.29				
Social Awareness	Pedagogic Majoring	107.54	.48	1100	.651	1.100
	Non-pedagogic Majoring	106.44				
Acceptance	Pedagogic Majoring	106.38	2.90	1100	.004	2.716
	Non-pedagogic Majoring	103.67				
Social Skill	Pedagogic Majoring	105.69	.24	1100	.806	.565
	Non-pedagogic Majoring	105.12				

To obtain more detailed information for dimensions of social intelligence by professional specialization, independent sample *t*-test was executed again. The result of independent sample *t*-test indicated that there was no significant difference by professional specialization except acceptance dimension which was significant difference at 0.01 level in social intelligence. It can be said that teacher educators in pedagogic majoring had more than those in non-pedagogic majoring in acceptance dimension.

4.13 Descriptive Statistics of Job Performance for Teacher Educators

Myanmar teacher educators' job performance was measured by Teacher Educators' Job Performance Questionnaire which included 87 items and divided into four dimensions such as instruction, responsibility, planning/assessment and interpersonal relationship. Since the number of items included in each dimension of job performance was not the same, the mean scores were transformed to the corresponding mean percentages. The descriptive statistics corresponding for dimensions of job performance were reported and shown in Table 4.16.

Table 4.16 Descriptive Statistics of Teacher Educators' Job Performance

Variables	Mean (%)	SD
Instruction	76.04	8.88
Responsibility	87.12	8.26
Planning /Assessment	79.24	8.91
Interpersonal Relationship	76.09	10.39
Job Performance	79.84	7.85

Based on the descriptive statistics shown in Table 4.16, the mean percentage of teacher educators' job performance was 79.84 and standard deviation was 7.85. Therefore, Myanmar teacher educators' job performance can be said to be rather high and satisfactory. Moreover, the mean percentage of teacher educators' job performance in responsibility was the highest among the four dimensions. It is of great pride that the teacher educators in this study are likely to take full responsiblity for their profession. Visual presentation of this result was shown in Figure 4.11.
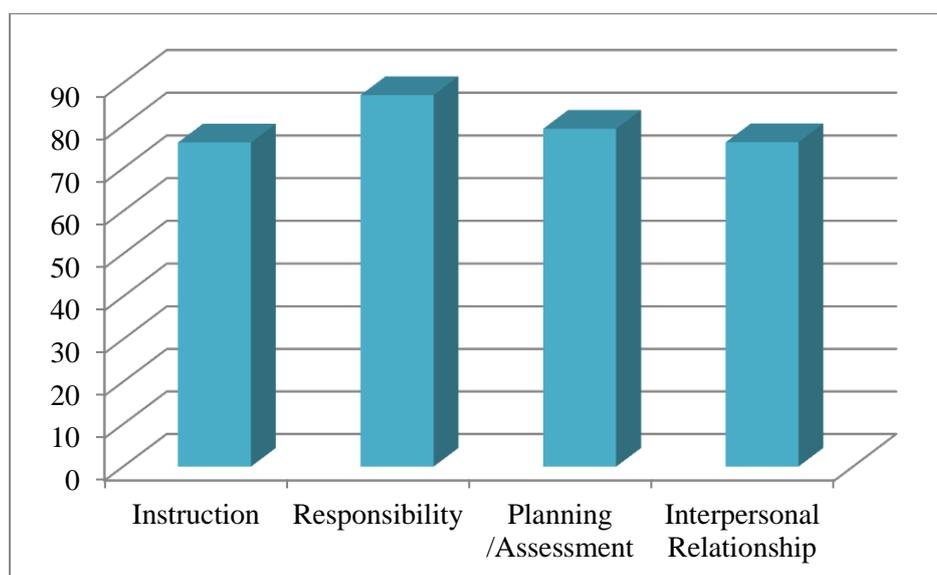
Figure 4.11 Mean Percentages Comparisons of Dimensions of Teacher Educators' Job Performance

4.14 Comparison of Teacher Educators' Job Performance by Gender

To find out the differences between the teacher educators' job performance by gender, descriptive analysis was made. The mean values of male and female teacher educators for job performance were reported in Table 4.17. According to the results of table, the mean

score of female teacher educators was higher than that of male teacher educators in job performance. Specific information can be seen in the following figure.
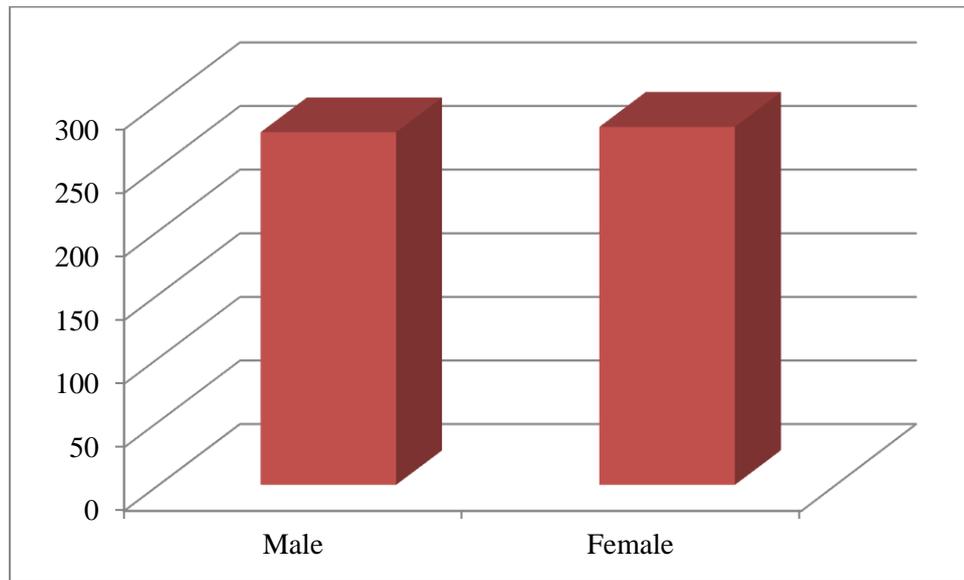
Figure 4.12 Mean Comparisons of Teacher Educators' Job Performance by Gender

To obtain the more detailed information for particular aspect, the independent sample t-test was used to examine whether these differences were significant or not. According to the result of Table 4.17, there was significant difference in job performance by gender. It can be said that the female teacher educators were higher than male teacher educators in job performance.

Table 4.17 The Result of Independent Sample *t*-test for Job Performance by Gender

Variable	Gender	Mean	*t*	*df*	Sig (2-tailed)	Mean Difference
Job Performance	Male	277.27	-1.77	1100	.04	-4.22
	Female	281.49				

So as to observe clearly the significant difference for dimensions of job performance by gender, descriptive statistics and independent sample t-test were executed again. The result of independent sample t-test indicated that there was significant difference in instruction dimension of job performance questionnaire by gender at 0.01 level. It may be concluded that female teacher educators were better than the male teacher educators in instruction dimension of job performance (see Table 4.18).

Table 4.18 The Result of Independent Sample *t*-test for Dimensions of Job Performance by Gender

Dimensions of JP	Major	Mean (%)	*t*	*df*	Sig (2-tailed)	Mean Difference
Instruction	Male	75.61	3.878	1100	.000	2.984
	Female	78.63				
Responsibility	Male	87.24	.188	1100	.851	.136
	Female	87.10				
Planning/ Assessment	Male	79.60	.545	1100	.586	.423
	Female	79.18				
Interpersonal Relationship	Male	76.88	1.010	1100	.313	.914
	Female	75.96				

4.15 Comparison of Teacher Educators' Job Performance by Marital Status

Table 4.19 showed the mean comparisons of teacher educators' job performance by marital status. In order to test whether teacher educators are different in job performance with respect to marital status, descriptive statistics was conducted. It was observed that the mean score of single teacher educators was higher than that of married teacher educators in job performance. Visual presentation of this result was shown in Figure 4.13.
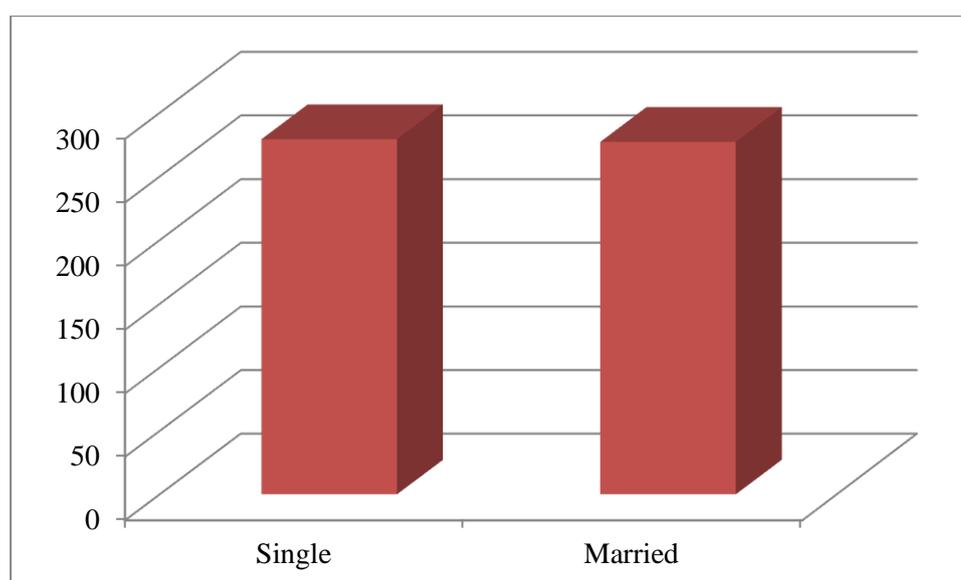
Figure 4.13 Mean Comparisons of Teacher Educators' Job Performance by Marital Status

Table 4.19 The Result of Independent Sample t-test for Job Performance by Marital Status

| Variable	Marital Status	Mean	t	df	Sig (2-tailed)	Mean Difference
Job Performance	Single	279.20	1.21	1092	.227	2.07
	Married	277.13				

An independent sample t-test was applied to analyze the data in order to determine if a significant difference existed in job performance by marital status (see Table 4.19). The result of an independent sample t-test by marital status revealed that there was no significant difference in job performance by marital status.

4.16 Comparison of Teacher Educators' Job Performance by Age

Interestingly, the sources of mean differences were found among the four age groups. In order to test whether teacher educators were different in job performance by their age group, descriptive analysis was done. It was apparent that older teacher educators showed better job performance than younger teacher educators (see Table 4.20). The mean scores of older groups (41 years - 50 years and 51 years - 60 years) were slightly higher than those of younger group (21 years - 30 years and 31 years - 40 years) in job performance. Visual presentation of this result was shown in Figure 4.14.

Table 4.20 Means and Standard Deviations for Job Performance by Age

Variable	Age	N	Mean	SD
Job Performance	21 yrs- 30 yrs	184	275.68	25.486
	31 yrs- 40 yrs	161	276.99	29.201
	41 yrs- 50 yrs	378	278.52	27.086
	51 yrs- 60 yrs	379	279.84	27.891
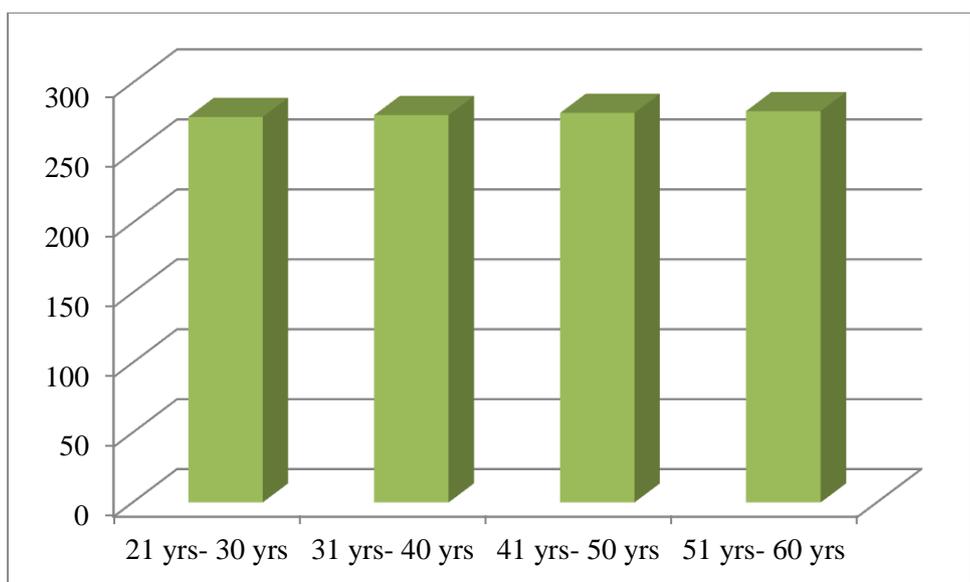
Figure 4.14 Mean Comparisons of Teacher Educators' Job Performance by Age

Next, one way analysis of variance was undertaken for further detailed analysis. To find out this difference significantly, ANOVA was executed. According to the result of Table 4.21, there was no significant difference in job performance by age group.

Table 4.21 ANOVA Table of Mean Comparison for Job Performance by Age

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	213.667	3	71.222		
Within Groups	67702.218	1098	61.660	1.155	.326
Total	67915.885	1101			

4.17 Comparison of Teacher Educators' Job Performance by Professional Specialization

To examine the job performance of teacher educators, descriptive analysis revealed the differences in means and standard deviations of job performance by professional specialization in Table 4.22. It was clearly seen that the mean score of teacher educators in pedagogic majoring was higher than that of teacher educators in non-pedagogic majoring. Figure 4.15 showed the mean comparisons of teacher educators' job performance by professional specialization.

105
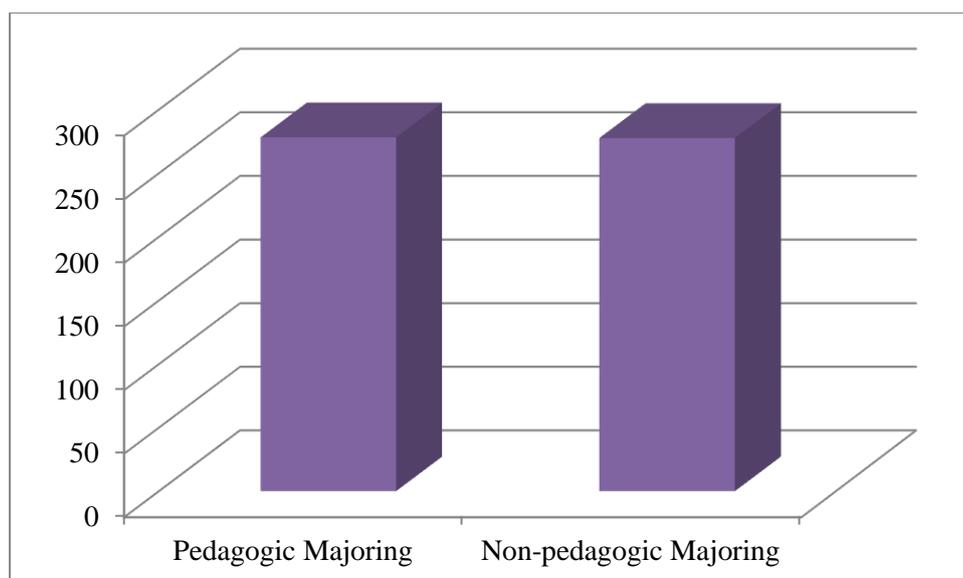
Figure 4.15 Mean Comparisons of Teacher Educators' Job Performance by Professional Specialization

Table 4.22 The Result of Independent Sample *t*-test for Job Performance by Professional Specialization

Variable	Professional Specialization	Mean	*t*	df	Sig (2-tailed)	Mean Difference
Job Performance	Pedagogic Majoring	278.16	.261	1100	.794	.46
	Non-pedagogic Majoring	277.70				

To obtain more detailed information for difference of professional specialization, independent sample t-test was conducted. According to the result of independent sample t-test, there was no significant difference in job performance by professional specialization.

4.18 Correlation Between Social Intelligence and Job Performance

Concerning interrelations between social intelligence and job performance, Table 4.23 showed that teacher educators' social intelligence is positively correlated with their job performance. It can be clearly seen that teacher educators' social intelligence was moderately correlated with their job performance (r= .343*, $p < 0.01$).

Table 4.23 Pearson Correlation for Social Intelligence and Job Performance of Teacher Educators

	SI	SIP	SA	Ac	SS	JP	I	R	PA	IR
SI	1.00	.931**	.931**	.753**	.844**	.343**	.231**	.262**	.251**	.293**
SIP		1.00	.894**	.632**	.723**	.232**	.266**	.217**	.228**	.241**
SA			1.00	.541**	.494**	.172**	.200**	.245**	.232**	.189**
Ac				1.00	.421**	.231**	.245**	.202**	.176**	.141**
SS					1.00	.276**	.281**	.249**	.235**	.163**
JP						1.00	.904**	.850**	.911**	.747**
I							1.00	.668**	.756**	.639**
R								1.00	741**	.529**
PA									1.00	**.641
IR										1.00

SI = Social Intelligence, SIP = Social Information Process, SA = Social Awareness, Ac=Acceptance, SS = Social Skill, JP = Job Performance, I = Instruction, R = Responsibility, PA = Planning/Assessment, IR = Interpersonal Relationship

4.19 Regression Analysis for Prediction of Teacher Educators' Job Performance

Table 4.24 Regression Analysis for Prediction of Job Performance

	B	β	t	R	R^2	Adj R^2	F
Significant Predictor of JP	183.57						
SI	0.252	0.281	9.69	0.281	0.097	0.087	93.98***

*** $\rho < 0.001$
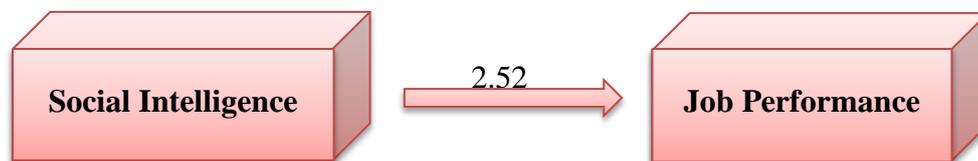
Figure 4.16 Model of Social Intelligence and Job Performance

A simple linear regression analysis was calculated for predicting teacher educators' job performance based on their social intelligence. Regression analysis revealed that the model significantly explained job performance, F = 93.98, p = 0.000 that show to determine whether the model is a good fit for the data according to the p-value. R^2 for model was 0.097 and adjusted R^2 was 0.087. A value of 0.087 indicates that 8.7% of

variance can be predicted from social intelligence. Table 4.24 displays the intercept, unstandardized regression coefficients (B), standardized regression coefficients β for model. According to the result, social intelligence contributed 8.7 % of the variance to job performance. According to Cohen (1998), this is a medium effect.

Job Performance = 183.57 + 0.252 SI

According to the result of multiple regressions analysis described in Table 4.25, the model of SI dimensions: social information process, social awareness, acceptance and social skill, and overall job performance was developed (see Figure 4.17).

Table 4.25 Multiple Regression Analysis Summary for Dimensions of Social Intelligence at their Job Performance

	B	**β**	**t**	**R**	**R^2**	**Adj R^2**	**F**
Constant	82.90						
Social Skill (SS)	0.896	0.118	3.256	0.288	0.83	0.081	10.600***
Social Awareness (SA)	0.691	0.201	5.555				

*** $\rho < 0.001$

The results revealed that teacher educators' social skill and social awareness were significantly related with their overall job performance. Social skill appeared to be the strongest predictor of job performance and social awareness appeared to be the second strongest predictor of job performance.

Job Performance = 82.9 + 0.896 SS + 0.691 SA

These findings support that the teacher educators' job performance were closely related with their social skill and social awareness. So, it may be interpreted that the better the teacher educators' social skill and social awareness in social intelligence, the higher the job performance of teacher educators will be.
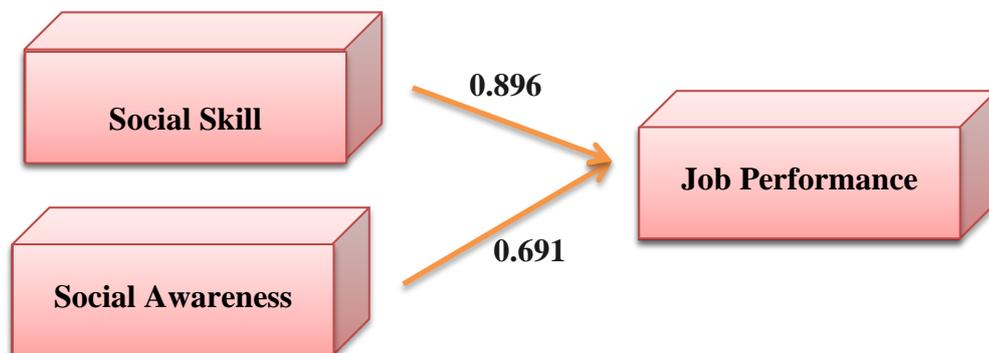
Figure 4.17 Predictive Models of Dimensions of Social Intelligence on Job Performance of Teacher Educators

In order to test the predictive contribution of the SI dimensions to job performance dimensions: instruction, responsibility, planning/assessment and interpersonal relationship, the multiple regressions analysis was undertaken. When the data was tested with multiple regression model before the analyses were made, the model data check was calculated. The results of regression analysis on instruction dimension point out one predictor that met the criteria to entry in the equation. Social intelligence dimension, social skill, contributed maximum to the prediction of instruction dimension. The multiple R for this predictor is .39 and adjusted $R^2 = 0.063$ (F = 41.64, p<.001), which means that social skill accounted for 6% of variance in the criterion variable.

$$\text{Instruction} = 77.02 + 0.46 \text{ SS}$$

Table 4.26 Regression Analysis for Prediction of Instruction Dimension of Job Performance

	B	**β**	**t**	**R**	**R^2**	**Adj R^2**	**F**
Constant	77.02						
Social Skill (SS)	0.46	0.191	6.45**	0.391	0.063	0.063	41.64***

*** $\rho < 0.001$ ** $\rho < 0.01$

Moreover, the adjusted $R^2 = 0.052$ is achieved thus it could be said that 5% of chances in responsibility dimension could be explained through the variable of social intelligence. Regarding the amount of resulted nonstandard coefficient from the regression in order to predict the responsibility dimension through social intelligence the regression equation is written as followed:

$$\text{Responsibility} = 85.67 + 0.21 \text{ SS} + 0.26 \text{ A}$$

Table 4.27 Regression Analysis for Prediction of Responsibility Dimension of Job Performance

	B	**β**	**t**	**R**	**R^2**	**Adj R^2**	**F**
Constant	85.67	0.21	0.220				
Social Skill (SS)	0.21	0.220	7.473*	0.231	0.154	0.052	51.209***
Acceptance (A)	0.26	0.69	3.246**				

* $\rho < 0.05$

** $\rho < 0.01$

*** $\rho < 0.001$

Likewise, social skill and acceptance could contribute to planning/assessment dimension, F= 37.55, p < 0.001 and explained for 4% (adjusted R^2) of the variance in planning/assessment dimension. This is also medium effect (Cohen, 1998, cited in Warmbrod, 2001). The resultant model for planning/assessment dimension can be described as in the following equation concerned with social skill and acceptance.

Planning /Assessment = 78.37+ 0.36 SS + 0.45 A

Table 4.28 Regression Analysis for Prediction of Planning/Assessment Dimension of Job Performance

	B	β	t	R	R²	Adj R²	F
Constant	78.37						
Social Skill (SS)	0.36	0.188	6.324*	0.193	0.04	0.035	37.55***
Acceptance (A)	0.45	0.065	2.179*				

* ρ < 0.05

*** ρ < 0.001

The result of multiple regression analysis pointed that two dimensions of SI, social skill and acceptance, made a significant predictive contribution to interpersonal relationship dimension, F = 28.34 , p < 0.001, and explained for 6.7% (adjusted R^2) of the variance in interpersonal relationship. The result of multiple regressions analysis was described in Table 4.29 and the resultant model for interpersonal relationship dimension can be described as in the following equation concerned with social skill and acceptance.

Interpersonal Relationship = 75.02 + 0.65 SS + 0.61 A

Table 4.29 Regression Analysis for Prediction of Interpersonal Relationship Dimension of Job Performance

	B	β	t	R	R²	Adj R²	F
Constant	75.02						
Social Skill (SS)	0.65	0.165	5.51**	0.170	0.029	0.067	28.34***
Acceptance (A)	0.61	0.063	2.09**				

*** ρ < 0.001

** ρ < 0.01

It was found that though there was a positively relationship between all dimensions of teacher educators' social intelligence and their job performance. Therefore, it can be concluded that when teacher educators' social intelligence increases their job performance increase and when teacher educators' social intelligence decreases their job

performance decreases. Moreover, social awareness and social skill have greater effect on overall job performance while social skill dimension in social intelligence has a significant effect on all dimensions of job performance whereas acceptance dimension has a greater effect on three dimensions of social intelligence apart from instruction dimension.
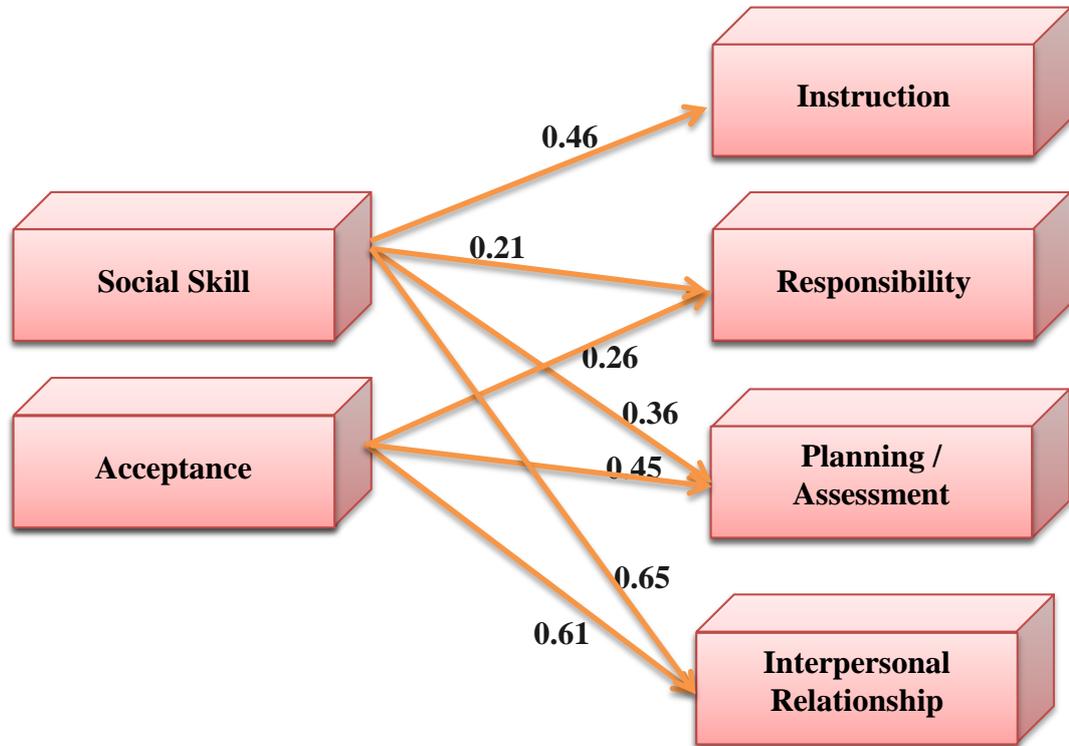
Figure 4.18 Predictive Power of Dimensions of Social Intelligence on Dimensions of Job Performance

References

Cohen, J. (1998). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ:Erlbaum.

Crocker, L. M., & Algina, J. (1986). *Introduction to classical and modern test theory*. New York: Holt, Rinehart and Winston.

DeMars, K. J. (2010). *Nonlinear orbit uncertainty prediction and rectification for space situational awareness*. Unpublished doctoral dissertation, The University of Texas at Austin.

Hambleton, R. K., Swaminathan, H., & Rogers, H. J. (1991). *Fundamentals of Item Response Theory*. Newbury Park, CA: Sage Publications, Inc.

Hambleton, R. K., & Swaminathan, H. (1985). *Item Response Theory*: *Principles and Applications*. Boston: Kluwer.

Kamalpreet, K. T. (2013). A study of social and emotional intelligence of secondary school teachers. *International Journal of Behavioral Social and Movement Sciences*. Vol:02.

Lord, F. M. (1980). *Applications of item response theory to practical testing problems*. New Jersey: Lawrence Erlbaum Associates, Inc.

Nu Nu Khaing., Yamada, T., & Ishii, H. (2011). Developing two equivalent spatial ability tests for Myanmar middle school students. *Bulletin of the Graduate School of Education and Human Development,* Nagoya University Press, 8(1), 49-67.

Parto, E., Shahram, A., & Taghi, A. H. (2013) Relationship between social intelligence with effective influence among physical education expertise in Isfahan education organizations. *World Applied Sciences Journal*. 28(12).

Warmbrod, J. R. (2001). Conducting, interpreting and reporting quantitative research. Paper presented at the Pre-session, National Agricultural Education Research Conference, New Orleans, LA.

Zimowski, M., Muraki, E., Mislevy, R. J., & Bock, R. D. (2003). BILOG-MG 3: Item analysis and test scoring with binary logistic models. Chicago, IL: Scientific Software. [Computer software.]

CHAPTER 5

Qualitative Study

A follow up program of qualitative study was conducted to investigate factors affect teacher educators' social intelligence and job performance. Moreover, it provides to know more complete and detail information of teacher educators' social intelligence and job performance.

5.1 Participants of the Qualitative Study

In follow up study, using the quantitative data results, teacher educators' social intelligence and their job performance can be divided into the three groups such as high group, moderate group and low group. Based on the descriptive analyses of social intelligence and job performance, teacher educators with scores above the (+1) standard deviation from the sample mean were identified as the high group and teacher educators with scores below the (-1) standard deviation were identified as the low group. And then, teacher educators with scores between +1 and -1 standard deviation were identified as the moderate group. To know which social intelligence levels associate with which job performance levels, cross-tabulation was calculated in Table 5.1.

Table 5.1 Cross-tabulation for Levels of Social Intelligence and Job Performance

		Job Performance Level			Total
		High	Moderate	Low	
Social Intelligence Level	High	36	88	16	140
	Moderate	139	554	110	803
	Low	14	113	32	159
Total		189	755	158	1102

Afterwards, teacher educators in this study were identified into four groups such as high SI and high JP, low SI and low JP, high SI and low JP and low SI and high JP were selected again. The three teacher educators of each group were randomly chosen as participants for the in-depth qualitative study so that altogether 12 teacher educators were firstly selected. And then, each teacher educator is evaluated with the multi-dimensional technique in qualitative study.

The number of participants for the corresponding education universities and education colleges in the qualitative study is presented in the following Table 5.2.

Table 5.2 Number of Participants in Qualitative Study

Name of Education Universities and Colleges	No. of Teacher Educators	No. of Supervisors	No. of Colleagues	No. of Students
Yangon University of Education	4	4	8	40
Sagaing University of Education	3	3	6	30
Thingangyun Education College	1	1	2	10
Mandalay Education College	2	2	4	20
Sagaing Education College	2	2	4	20
Total	12	12	24	120

5.2 Instruments

To assess the more detailed information of teacher educators' social intelligence and job performance, multi-dimensional technique was used in the qualitative study. Supervisor's Assessment Rating Questionnaire was adapted from Supervisor Evaluation Form and it was developed by Wong in 2014. Colleagues' Assessment Rating Questionnaire was adapted from Job Performance Evaluation Form was developed by Middle Georgia State University in 2006. Students' Assessment Rating Questionnaire was mainly adapted from Teacher Performance Evaluation System 2012-2013 was developed by Stronge & Hindman in 2006 and then from Student Questionnaire Reflection by Patrick in 2009. Teacher Educators' Interview Form was adapted from Teachers' Interview Form was developed by College of Education and Human Development (CEHD) in 2017. Thus, all the instruments were needed to translate in spite of having certain probable grammatical changes. However, the original structure of the responses was retained as much as possible. Interview with target teacher educators were conducted purely in Myanmar language.

5.3 Administration of the Pilot Study

After preparing the questionnaire, some items were modified; wording and content of items were also revised in accordance with supervision of the academic supervisor. Some overlapped and inappropriate items were removed and the wordings and content of items were also revised after conducting the expert validity. Then, in 1st week of July, pilot study was done in Sagaing University of Education to test whether the wording of item statements and instructions had their clarity in Myanmar version. In the pilot study, the following people were administered.

- 5 supervisors for Supervisor's Assessment Rating Questionnaire,

- 20 teacher educators for Colleagues' Assessment Rating Questionnaire

- 75 prospective teachers for Students' Assessment Rating Questionnaire

- 25 teacher educators for Teacher Educators' Interview Form

Based on the pilot study, internal consistency (Cronbach's Alpha) of the Supervisor's Assessment Rating Questionnaire was 0.89, internal consistency of the Colleagues' Assessment Rating Questionnaire was 0.91 and internal consistency of the Students' Assessment Rating Questionnaire was 0.85. According to the advices of the participants in pilot study, some items in Teacher Educators' Interview Form were modified and revised the item length and wordings.

5.4 Results of Qualitative Data

This section presents the results of the qualitative conducted with the respective supervisors, colleagues and students to support teacher educators' social intelligence and job performance completely. This program aimed to probe into which factors influenced the level of teacher educators' social intelligence and job performance. In the qualitative study, the respective supervisors, colleagues and students were asked to assess and reflect on the social intelligence and job performance of the target teacher educators with questionnaires.

The following excerpts can best represent the information.

ID   - 1

Gender   - Female

Age   - 48

Designation   - Lecturer

Degree   - Bachelor

Group   - High SI and High JP

According to the interview result with her, she chose teaching profession because of her hobby. For her, arguing with other people is just wasting time and she avoids taking criticism personally. Her supervisor stated that she is ever ready to participate in social activities outside the school and never reluctant to cooperate in teamwork. Her commitment to the assigned tasks is remarkable. Her colleagues also agreed that she is very pro-active, friendly and sociable. She can facilitate communication with her principal, colleagues and pupils. Moreover, she can accept apologies and apologize when she was wrong. Once a week, she takes time to collaborate with her colleagues sharing knowledge and experiences in their respective class so as to promote their competency. According to her students' assertive responses, she exerts her effort in teaching by using appropriate teaching aids which fix student's level and thus can make student's interest arouse.

ID   - 2

Gender   - Female

Age   - 32

Designation   - Assistant Lecturer

Degree   - Master Degree

Group   - High SI and High JP

In the interview result, she chose teaching profession due to her hobby. Her supervisor agreed that she is a socially competent person and she demonstrates a genuine interest in their fellow workmates. She is also highly self-motivated, self-driven, and self-disciplined in her work. So, it cannot be denied that she is very keen to participate not only in school activities but also extends her cooperation with community, leading social affairs. According to her colleagues' responses, she is able to get along with other people and joins in cooperative work with everybody. She is capable of balancing her workload and relaxation. She never seems to be stressful and can adjust with other people in any social situation, showing high emotional control. Moreover, she can handle with difficult and unmotivated students. Therefore, she is successful with students.

ID   - 3

Gender   - Female

Age   - 55

Designation   - Lecturer

Degree   - Post-graduated

Group   - Low SI and Low JP

She thinks that the modern workplace is full of demands and deadlines and has to perform under pressure showing high level of stress. Her supervisor conceded that she never wants to promote professional development, lacking interest to attend the refresher courses, workshops and seminars concerning with her profession and cannot create more attractive teaching methods for her students in spite of being a well experienced teacher. To say simply, her instructional approach does not meet the needs of students and they seem to be unmotivated to learn in her class. Moreover, she hardly discuss with her colleagues about teaching experience. She cannot establish good rapport with her students. Her students said that she is very weak in classroom management and cannot conduct interactive teaching. Engaging in professional development programs and to practice more social relationships are of almost importance to her better job performance.

ID   - 4

Gender   - Female

Age   - 58

Designation   - Lecturer

Degree   - Bachelor

Group   - Low SI and Low JP

She is also one of the teacher educators in low SI and low JP group. According to the interview results with her, she chose teaching profession due to her parents' expectation. So, she is not interested in and enthusiastic about teaching and professional development. She thinks knowledge of ICT is not necessary because she will retire soon. Her supervisor stated that she hardly attends seminars, conferences and training workshops to upgrade her career. Moreover, she ever rarely reads professional literature and never tries to keep up with the challenges of ICT. Her workmates asserted that she hardly participates in school activities since she is very weak in cooperation with the principal, colleagues and her students. She is not used to discussing with her colleagues so as to improve her teaching. According to her students' assertive responses, she always used to teach traditional teaching method.

ID   - 5

Gender   - Male

Age   - 27

Designation   - Tutor

Degree   - Master

Group   - High SI and Low JP

He admitted that he chose teaching profession under the pressure of his parents and relatives. Moreover, despite a teacher educator, he has no publications at all. He perceived that such performance is just waste of time and energy. His supervisor agreed that he is able to adapt his behavior to meet the requirements of any situation. However, he infrequently attends the conferences, seminars and workshops. Moreover, he does not devote most of his time at work. He is not punctual and even never informs to the supervisor that he would be late or absent. His workmates said that he never looks stressful and always wears sweet smile on his face when speaking with people. He is not interested in school activities and collaboration with others concerning his profession. Furthermore, he seldom discusses with his colleagues about lessons so as to improve his teaching. However, he has good relationship with his students and colleagues, as well. His students agreed that he is never punctual.

ID   - 6

Gender   - Female

Age   - 34

Designation   - Assistant Lecturer

Degree   - Master

Group   - High SI and Low JP

She is a member of high SI and low JP group. In the interview, she conceded that she is always busy with household works and devotes most of her time for her family. Moreover, she is very much annoyed and stressful about the heavy workload. However, she gets involved in social activities for students' physical and mental development. Even though, she is a teacher educator is rather weak in subject knowledge and research work, as well. Furthermore, she seldom attends the professional workshop, seminars and other capacity development programs. Her colleagues mentioned that her class is always noisy and messy because she cannot handle classroom disruptions effectively. Moreover, she never discusses with her colleagues to improve teaching. But, she is very affectionate to her students and has good relationship with her pupils, supervisor and others.

ID   - 7
Gender   - Female
Age   - 35
Designation   - Assistant Lecturer
Degree   - PhD
Group   - Low SI and High JP

According to the interview results with her, she adimitted that she is not very adaptable to different people and different situations because it is too hard for her to change her behavior. Her supervisor argued that she seems to be very patient but rarely vocalizes friendliness. She fulfills other duties or responsibilities very nicely apart from teaching and her assigned activities on time. Moreover, her colleagues asserted that although she does not like to keep in touch with her pupils, there is no doubt that she is an efficient teacher. She well recognizes individual differences of students and tries to match her teaching with their capabilities. She is generally well-organized and prepared for class. Moreover, she maintains discipline in her class and is very clever and skillful in classroom management. She cooperates with her colleagues in any work and consults with them for solving the class problems. Furthermore, it is not denied that her creativity is amazing and can apply varieties of updated teaching methods that can reduce students' boredom according to her students' responses.

ID   - 8
Gender   - Female
Age   - 42
Designation   - Assistant Lecturer
Degree   - PhD
Group   - Low SI and High JP

She is also one of the teacher educators with low SI and high JP. She asserted that she is not interested in her students and other people. According to her supervisor's assertiveness, she is very enthusiastic in school work. Moreover, she has a sound professional attitude toward teaching. She is also a self-starter, resourceful, and displays great initiative in teaching. She always voluntarily undertakes remedial teaching that effective teaching may require. Furthermore, she actively participates in every activity outside the university. She always pays attention to accuracy, details about her work and effectively performs assignments. Agreeing with her colleagues, she can never show self-assertiveness to express her idea and differencing opinion. Moreover, she always finds it

too hard to control her emotion and easily shows the change of her feelings through facial expressions. She uses a variety of student activities during the class time. She also motivates her students to take part in school activities.

According to the qualitative result, it has been observed that there are some important factors for teacher educator's social intelligence and job performance. In high SI and high JP group, it was found that they had high interpersonal relationship and adaptability. The teacher educators from low SI and low JP group were weak in interpersonal relationship and hardly cooperate with others. For the teacher educators from high SI and low JP, they adimitted teaching profession is not their hobby. So, they are not interested in teaching profession and they chose it various reasons. Therefore, they also feel annoyed a lot of workload and feel stress. Moreover, the teacher educators from low SI and high JP, it was observed that high JP had high teaching skill and commitment.

References

Gini, G. (2006). Adolescence. *Journal of Adolescence*. 29. 307-312.

Landy, F. J. (2006). The long, frustrating, and fruitless search for social intelligence: *A cautionary tale. In* K.R. Murphy (Ed.), *A Critique of emotional intelligence: what are the problems and how can they be fixed?* (pp.81-123). Mahwah, NJ: Lawrence Erlbaum.

Livergood, N. (2013). *Social intelligence*: *A new definition of human intelligence*. Retrieved August 24, 2017, from http://www.hermes-press.com/socint4.htm

Middle Georgia (2006). *Internship supervisor evaluation form*. State university: school of information technology. Retrieved January 12, 2016, from http://books.google.com/books?id=4Do-bFrt9tUC

Patrick, R. (2009). Teacher performance evaluation system 2012-2013. Mecklenburg Country Public School. Virginia.

Stronge, J. H., & Hindman, J. L. (2006). Teacher performance evaluation handbook. Stronge and Associate Educational Consulting, LLC. Retrieved March 23, 2010, from http://www.Bedford.K12.va.us/teforms

Wong, D. (2014). Field education supervisor evaluation form. Tyndale University. Tyndale University. Retrieved June 11, 2017, from http://www.karlalbrecht.com/siprofile /siprofiletheory.html

CHAPTER 6

Conclusion, Discussion and Recommendation

6.1 Conclusion and Discussion

The main purpose of the present study is to develop a social intelligence scale for Myanmar teacher educators by two parameter logistic model of item response theory (IRT). Moreover, this study is to explore the strength of teacher educators' social intelligence by four dimensions: social information process, social awareness, acceptance and social skill, and job performance by four dimensions: instruction, responsibility, planning/assessment and interpersonal relationship. Then, the social intelligence and job performance of teacher educators were analyzed by gender, age, marital status and professional specialization. Finally, the relationship of social intelligence with job performance of teacher educators will be investigated and how teacher educators' social intelligence impact on their job performance was analyzed.

A total of 1102 teacher educators from three education universities and nine education colleges took part in this study. Social Intelligence Scale, Teacher Educators' Job Performance Questionnaire, Supervisor's Assessment Rating Questionnaire, Colleagues' Assessment Rating Questionnaire, Students' Assessment Rating Questionnaire and Teacher Educators' Interview Form were used as research instruments.

In this study, a Social Intelligence Scale for Myanmar teacher educators was developed by the use of two parameter logistic model of item response theory (IRT). Firstly, according to the confirmatory factor analysis of social intelligence scale, 74 items out of 99 items were eliminated because they had communality values of less than 0.2. Therefore, factor analysis was conducted with 25 items that consisted of four dimensions: social information process, social awareness, acceptance and social skill.

It was found that the obtained test information curve functioned only from the range of -1 to +3. Therefore, it can be said that this scale more precisely assesses the teacher educators with high SI level. It could be suitable for teacher educators whose social intelligence ability ($\theta = 1.1$). It is concluded by a consideration of their discrimination indices, the items are fairly good items to provide appropriate discrimination or information for the whole test. According to the value of item difficulty, it is concluded that the test is fairly difficult.

According to the confirmatory factor analysis of job performance questionnaire, 13 items out of 100 items were eliminated because their communality values were below 0.2

so they were not considered for factorial structure determination. Item loading values above 0.2 was taken into consideration for factor allocation. Therefore, factor analysis was conducted with 87 items that comprised of four dimensions: instruction, responsibility, planning/assessment and interpersonal relationship.

As the results of descriptive statistic of the whole social intelligence, it can be seen that teacher educators in this study have high level of social intelligence. It can be concluded that Myanmar teacher educators have high ability to get along well others and to cooperate with other people. Among the four dimensions of social intelligence scale, social awareness was the highest that it can be assumed that teacher educators have the highest ability to comprehend and appropriately react to both broad problems of society and interpersonal struggles and to being aware of other people. Whereas social skill was found to be the weakest among social intelligence dimensions, it can be concluded that teacher educators tend to be weak in ability to modify behaviours when enter in a new situation and the ability to get to know new people.

Observing social intelligence in gender, marital status, age, and professional specialization were analyzed. An independent sample t-test result by gender indicated that there was no significant difference between male and female teacher educators in social intelligence. This result was consistent with international data Kamalpreet (2013) found that there was no significant difference in social intelligence of male and female secondary school teachers. Moreover, these results were also consistent with Parto, Shahram, and Taghi (2013) who found no significant differences by gender and experience with social intelligence. However, this finding was inconsistent with Birknerova, Frankovsky, and Zbihlejova (2013) who found significant differences between male's and female's social intelligence. To be specific, male had higher level of social skill than female, and also demonstrated that male had higher level of social awareness than female.

According to the result of independent sample t-test, there was no significant difference by marital status of teacher educators. This finding determined a same result from other researchers Joshua (2014) which reported that there was no significant difference between single and married teachers in social intelligence. However, Sultana (1983) found that there was a significant difference in social intelligence between single and married teachers; married teachers were found to be higher in social intelligence.

When social intelligence was examined across age group, it was observed that younger teacher educators were higher socially intelligent than older ones based on the ANOVA

result. Next, specific dimensions of social intelligence were examined across age group and it was found that the teacher educators in the youngest group (21yr - 30yr) were better than the other two groups (31yr-40yr and 51yr-60yr) in social information process and social awareness. With regard to social skill, the teacher educators in youngest group (21yr - 30yr) were better than the other groups. Naturally, it is not a surprised fact that younger teacher educators were more active and sociable than older teacher educators. Moreover, these results were consistent with Promsri (2014) who revealed statistically significant differences among teachers in different age groups in relation to social intelligence. The result showed that younger teachers had high social intelligence than older teachers.

An independent sample t-test result of social intelligence by professional specialization indicated that teacher educators in pedagogic majoring seem to be more socially intelligent than those in non-pedagogic majoring. According to each dimension, teacher educators in pedagogic majoring were higher in acceptance dimension than those in non- pedagogic majoring. This result was new finding in this field. It can be concluded that the teacher educators in pedagogic majoring are likely to have the ability to understand and respect the other's opinion or position.

In addition, teacher educators' job performance was also examined. According to the mean percentage, it can be concluded that Myanmar teacher educators' job performance seem to be satisfactory and how well teacher educators perform their duties. Remarkably, among the four dimensions of job performance, responsibility dimension was the highest and it can be seen that Myanmar teacher educators were duty-conscious or recognized their obligation to satisfactorily perform or complete a task that must fulfill.

Despite no difference in job performance with regard to marital status, age group and professional specialization, only gender distinctly influence on teacher educators' job performance. According to the independent sample t-test result, female teacher educators have higher job performance than males. It can be said that gender is an important factor to determine the teacher educators' job performance. This finding is consistent with the study of Green (2005) in which there were significant gender-based differences in job performance on various dimensions. Next, specific dimensions of social intelligence were examined by gender. It can be seen that female teacher educators have higher than male teacher educators in instruction dimension of job performance. So, it may be concluded that the female teacher educators were much more competent in their practice of teaching than the males.

According to the results of independent sample t-test by marital status, there was no significant difference between single and married teacher educators in job performance. This result was inconsistent with Padmanabhan and Magesh (2016) who found that there was significant difference between marital status and level of performance of employees at 0.01 level. It was found that single teachers showed better job performance.

ANOVA results of mean comparisons for job performance by age group indicated that there was no significant difference in job performance. This result was consistent with the international study of Nanson (2010) explored that there is no significant difference by employees' age. Moreover, an independent sample t-test result by professional specialization revealed that there was no significant difference between teacher educators in pedagogic majoring and non- pedagogic majoring with regard to four dimensions and overall job performance.

Again, correlation and multiple regression analyses were conducted to find out the relation and impact of social intelligence and job performance of teacher educators. The correlation value indicated a moderate positive relationship between the two variables, social intelligence and job performance. This finding was consistent with the study of Lathesh and Vidya (2018) in which there is a positive and significant relationship between social intelligence and employees' job performance.

According to the multiple regression analyses, the results revealed that social intelligence was moderate predictor for job performance of teacher educators. Moreover, social skill dimension had first and direct predictive contribution to teacher educators' overall job performance. Besides, social awareness dimension was also a second predictor of teacher educators' overall job performance. Specifically, out of four dimensions of social intelligence, social skill can be said to be a moderate predictor of all dimensions of job performance. Besides, acceptance dimension was also a moderate predictor for responsibility, planning/assessment and interpersonal relationship in job performance.

Next, a follow up qualitative study was conducted to make confirmation of social intelligence and job performance of teacher educators. According to the quantitative analysis, the four groups of teacher educators such as High SI and High JP, Low SI and Low JP, High SI and Low JP and Low SI and High JP were classified and three teacher educators from each group were selected as the participants in qualitative study. It was done by questionnaire survey, interview and formal conversation with selected teacher educators.

According to the interview result, it has been observed that there are some crucial factors for teacher educator's social intelligence and job performance. In high SI and high JP group, it was found that they had high interpersonal relationship and adaptability. It can be interpreted that they have a good relationship and multidimensional social adjustment, i.e, they can adjust with their supervisor, colleagues, students and also others. Needless to say, socially intelligent individuals are likely to succeed at communicating, thus making people feel better in the occupational environment. People with higher social intelligence tend to lead healthier, happier, more productive lives and have better job performance.

The teacher educators from low SI and low JP group had weak in interpersonal relationship and hardly cooperate with others. In any organizations, the employees who have weak in social intelligence do not exhibit confidence in social situations and demonstrate a bogus interest in their fellow workmates. It is not surprising that leaders with low social intelligence tend to be unaware of and rarely understand emotional information about others that can inversely affect their job performance, resulting low job satisfaction for themselves. Therefore, no one can deny that interpersonal relationship dimension is crucial factor for job performance of teacher educators as well as any other superintendents.

In the result of descriptive statistic by age group, there was significant difference in social intelligence whereas there was no significant difference in job performance of teacher educators. However, according to the result of qualitative study, age is also another important factor to be considered. In this study, 70% of sample teacher educators were over 40 years old and 35% of sample teacher educators were over 50 years of age. Therefore, to say simply, one-third of teacher educators were of old age. It is not surprising that they are not willing to make an effort in their job because they are getting to reach the retirement age. For them, their long teaching experience of over 30 years makes them get bored or exhausted in teaching profession.

For the teacher educators from high SI and low JP, it was found that they are not interested in teaching profession which is not their own choice. They easily get annoyed by a lot of workload and feel stressful. So, without doubt, no other factors can have negative impact on job performance of teacher educators than the lack of interest and teaching aptitude.

Next, for the teacher educators from low SI and high JP, it was observed that high JP had high instruction and commitment. Although they had low SI, they are used to

applying updated teaching techniques, together with perfect lesson preparation, can organize, manage their classroom and having high sense of commitment to assigned tasks. That's why they were assessed by their supervisors, colleagues and students that their job performance level was high. It highlights that effective teaching techniques and commitment should be considered for teacher educators' job performance.

Therefore, it was found that interest or hobby, adaptability, teaching skill, commitment, classroom management and interpersonal relationship with others were more important factors for improving the job performance of teacher educators.

6.2 Recommendations

Education is seen as the means by which national goals can be achieved. Human resource development plays a large part in building a modern developed nation through education. In other word, no one can be educated and outstanding without the effort of teachers. Teachers are an important factor in determining the quality of education that students receive. The ultimate goal of every educational institute is to provide better quality of education to their students and that totally depends upon the people who have to impart knowledge to students. As the future of a nation depends on the hands of nowadays students, the responsibility of a teacher is sky-high (Aye Aye Aung, 2014). So, their performance is of utmost importance to the organization.

Therefore, effective job performance of a teacher is essential for improvement of educational system as whole (Yusoff, 2013). The World Book Encyclopedia (1994) gives the importance of teachers' performance in terms of helping people gain knowledge needed to be responsible citizens. Because of the importance of teachers, the way they perform their duties is a matter of great concern to everyone. Moreover, the success of any school depends on the quality, skills, knowledge and commitment of the teaching staff. Owolabi (2006) says that there is no one who has more potential for touching the personal, social and intellectual lives of children than do caring and dedicated teachers (cited in Yusoff, 2013).

Moreover, there is little doubt that "people skills" – ability to communicate effectively, to manage social interactions and social relationships – are critical for today's successful leaders. Nowadays, being recognized as community leaders, in addition to teaching competency, soft skills such as high social skills and better communication skills are indispensable for teacher educators who will be reliable not only for students but for the whole society. Therefore, social intelligence and job performance can be targeted for assessment and development and can be an important component of a leadership

development program. Most of the research evidence suggests that social intelligence and job performance are both related to leader effectiveness. To conceptualize these critical leader abilities, this study draws on early research on social intelligence and job performance in psychology, and demonstrates how a social intelligence and job performance framework both relates to and can play a role in the development of effective workplace leaders. So, this research was designed to assess the impact of social intelligence on teacher educators' job performance.

Based on the findings and conclusions, this study highlights the teacher educators' social intelligence and job performance, resultantly, in uplifting and developing a good and healthy society through quality education. So the following strongly recommendations can be made based on the findings of this study;

1. The Social Intelligence Scale (SIS) could be used by any universities, institutions, colleges and organizations in assessing their employees' social competence. Especially, it was the most suitable for teacher educators.

2. The Social Intelligence Scale (SIS) could be used by superintendents in discovering the social competencies of their teacher educators. This scale helps them develop a better and healthy working and social environment for the teacher educators.

3. Development of instructional materials and modules based on social intelligence could be devised by using the characteristics of the teacher educators and students under each level of social skill. This will help to enhance the interpersonal relationship of teacher educators and their students.

4. Supervisors need to learn how to work with resistants and blockers strengthening their satisfaction with much recognition for their effort, providing more opportunities to take part in capacity building training programs that can excel teacher educator's job performance together with high social intelligence.

5. Conducting continuous professional development program for teacher educators is of urgent need in order to develop their social competencies, to update their knowledge and to enhance their job performance.

6. Since social learning is more complex than cognitive learning, training in social competencies for the successful development of social intelligence in organisations should be undertaken according to specific guidelines.

7. The practical implications of this study may help organizations to improve the social intelligence level of teacher educators to have good performance in order to enhance the educational system.

8. It also recommends that in order to extend teacher educators' knowledge and communication skill, they need to be encouraged to visit international seminars, workshops and conferences as well as there should be regular programmes through which teacher educators are educated on the value of behaving professionally and also for the purpose of their professional development.

9. Guidance and counseling center should be established in all educational universities and colleges to orient teacher educators to develop social intelligence and job performance.

6.3 Suggestions

Findings of this study highlight that superintendent as leaders should maintain or create a healthy social climate in organization to enhance better job performance among teacher educators by dwelling more on human behavior. The training perhaps could emphasize on social competence that create healthy job performance.

According to the achieved results, it can be suggested more attention need to be devoted on those social skill and social awareness dimensions among social intelligence scale which have the greatest effect on overall organizational performance. Unfortunately, teacher eductors' social skill was the weakest among the dimensions according to the descriptive analysis result. Actually, human beings are sociable creatures and have developed many ways to communicate with messages, thought and feelings with others. Additionally, educators must communicate well to effectively collaborate with colleagues and update supervisors on student progress. Therefore, the administrators must be reflection and consideration on this dimension.

The second variable or factor that companies also need to pay attention to is social awareness. It is the ability to comprehend and appropriately react to both broad problems of society and interpersonal struggles. In fact, in this study, it is satisfactory in that social awareness dimension was found to be the highest in all social intelligence dimensions. Hence, to maximize organizational performance, superintendents need to direct their attention to invest more on enhancing social skill and social awareness of teacher educators. Directing attention to social skill and social awareness can increase happiness, satisfaction and give a better outlook on life.

Furthermore, more relationships can also help to reduce the negative effects of stress and boost the self-esteem that lead to improve organizational performance. It is suggested that in order to achieve organizational efficiency not only the teacher educators should be

trained on the teaching skills but also on the interpersonal skills to facilitate interaction and communicate with others and understand each other.

Social intelligence can be learned, nourished and developed through education or training (Gardner, 1983; Harris, 2007; Goleman, 1995). Therefore, it is exactly the time to implement nation-wide capacity building training programs facilitated by international collaboration whenever needed. The next section discusses limitations and further research emanating from this study.

6.4 Limitations of the Study

There are some research limitations and several extended studies that can be further undertaken. Firstly, according to the test information function curve, it was found that the test composed of 25 items could be suitable for teacher educators whose social intelligence ability ($\theta = 1.1$) range is from -1 to +3, but it cannot discriminate well for the teacher educators who have higher ability levels (above $\theta = +3$) and lower ability levels (below $\theta = -1$). With these items, it may not provide enough information to the participants of the teacher educators' social intelligence. It is still necessary to fill more easy items and to arrange them from the difficult items to easy items across the ability scale, until the test information function range -3 to +3 is achieved.

Furthermore, as a cross-sectional study, inference related to causality is equivocal. Longitudinal design is more desirable, however, due to scarcity of time and resources such design is impossible for this study. This study is cross sectional study which measures differences at one time among different groups of individuals. Therefore, it does not reflect individual changes over time. The results in age may have the effect of cross sectional study's drawbacks. In comparing the age, longitudinal study is more appropriate in a study of social intelligence and job performance of teacher educators.

Thirdly, in this study, to measure the teacher educators' social intelligence and job performance, questionnaire survey was used in quatitative study. Then, questionnaire survey and interview method were used in qualitative study. To obtain the more detail information, observation checklists should be used in a follow up study but it cannot be used in this study because of time and situations. Therefore, the further researcher should use the observation checklists to get more validate information.

Moreover, the proportion of male and female participants involved in this study was not equal because of the very low percentage of male teacher educators in the education universities and colleges. To examine the gender related difference, equal sample size was desirable.

130

Finally, a number of 1102 teacher educators from three education universities and nine education colleges were selected from Yangon Region, Mandalay Region, Sagaing Region, Bago Region, Ayeyarwady Region, Shan State, Mon State and Kayin State participated in this study. It will be necessary to replicate with larger sample size from different regions and states that would be more representative so that the more generalized, reliable and valid research results would be achieved.

6.5 Further Research

Further research studies may dress these limitations through the use of longitudinal designs. Longitudinal studies would enable researchers to measure whether changes in social intelligence are associated with changes in job performance or vice versa. In addition, the demographic variables were limited only four variables including gender, marital status, age group, and professional specialization. Other variables such as education level, employment level, experience, etc. should be investigated. More demographic variables might give sound and fruitful information of the sample teacher educators.

As this study was performed among teacher educators, the results cannot be generalized to those from other occupational environments. More representative and more homogeneous sample should participate both in the quantitative and qualitative studies. Moreover, as only three education universities and nine education colleges under department of higher education were used in this study for data collection, the results cannot be compared with the universities under other ministries (For example, University of Medicine, University of Myanmar Marine etc.). Therefore, further studies should be carried out for other universities and higher institutions. Furthermore, comparing private and public organizations is also recommended as a further study.

As job performance depends on the hobby and interest of teacher educators, the further study should investigate the relationship between job performance and interest of teacher educators. Moreover, social intelligence is defined as the ability to get along with others, and make them to cooperate effectively to achieve the goal, and part of interpersonal skill. Aditya (1997) explained that leadership is rooted in a social context and social intelligence is a required trait for leaders. Therefore, the further study should examine the relationship between social intelligence and management or leadership styles of teacher educators.

This study highlighted the necessity to conduct an experimental research design where some teacher educators are exposed to SI development training programs while the others

are not, and their job performances before and after training are compared. Apart from these, further research should explore whether there would be additional mediation or moderators, or not, affecting the relationship between social intelligence and job performance.

References

Aditya, R. (1997). The social scientific study of leadership: Quo Vadis? *Journal of Management*, 23, 409-474.

Aye Aye Aung. (2014). *An assessment of emotional intelligence impact on teachers' job performance.* Unpublished doctoral dissertation, Yangon University of Education.

Birknerova, Z., Frankvsky, M., & Zbilejova, L. (2013). Social intelligence in the context of personality traits of teachers, *American International Journal of Contemporary Research,* 7(7), 11-17.

Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. New York: Basic Books. Retrieved May 11, 2015, from http://books.google.com/books?id=4Do-bFrt9tUC

Goleman, D. (1995). *Emotional Intelligences*. New York. Bantam Books.

Green, C., Jegadeesh, N., & Tang, Y. (2005). Gender and job performance: Evidence from Wall Street. *Financial Analysis Journal,* 65(6).

Harris, B. (2007). *Supporting the emotional work of school leaders*. California: Paul Chapman Publishing.

Joshua, K. (2014). The effects of Age on social and emotional intelligence and the surprising implications for business leaders. *Journal of Business*, 45(2).

Kamalpreet, K. T. (2013). A study of social and emotional intelligence of secondary school teachers. *International Journal of Behavioral Social and Movement Sciences*. Vol:02.

Lathesh, K. R., & Vidya, D. A. (2018). A study on social intelligence and its impact on employee performance of insurance sectors in Mysuru City. *International Journal of Mechanical Engineering and Technology (IJMET)*, 9(1).

Nanson, P.K. (2010). *Leadership styles and teacher performance in secondary schools in Nakaseke District*. Unpublished master thesis. Makerere University, Kampala, Uganda.

Owolabi, J. (2006). Educational planning. Kampala: Makerere University.

Padmanabhan, L., & Magesh, R. (2016). Difference between employees' marital status and performance level in IT industry. *Imperial Journal of Interdisciplinary Research*. 2(6).

Parto, E., Shahram, A., & Taghi, A. H. (2013). Relationship between social intelligence with effective influence among physical education expertise in Isfahan education organizations. *World Applied Sciences Journal*. 28(12).

Promsri, C. (2014). An empirical study on social intelligence of Thai employees in a private organization. *Proceedings of Eurasia Business Research Conferenc. Nippon Hotel, Istanbul, Turkey.*

Sultana, M. (1983). Synthetic studies in the field of heterocyclic chemistry. *Journal of hertercyclic chemistry.* 26(5), 1167-1513.

Yusoff, K. A. (2013). Job stress, performance and emotional intelligence in Academia, *Journal of Basic & Applied Science Resesearch*, 3(6), 1-8.

ပညာရေးတက္ကသိုလ်/ ကောလိပ် ဆရာ၊ဆရာမများအား အကူအညီတောင်းခံလွှာ

ဤမေးခွန်းလွှာသည် ပညာရေးတက္ကသိုလ်/ ကောလိပ်ရှိ ဆရာ၊ဆရာမများ၏ **Social Intelligence Level** နှင့် **Job Performance Level** ကို သိရှိရန်ပြုစုထားသော မေးခွန်းလွှာဖြစ်ပါသည်။ မေးခွန်းလွှာမှရရှိလာသော သုတေသနဆိုင်ရာအချက်များကိုလည်း ဤသုတေသနလုပ်ငန်းအတွက်သာ အသုံးပြုမည်ဖြစ်၍ ဆရာ၊ဆရာမများ၏ အမည်နှင့် အကြောင်းအရာများကို ဖော်ထုတ် ရေးသားမည်မဟုတ်ပါ။ ဤမေးခွန်းလွှာကို ဖြေဆိုခြင်းအားဖြင့် မည်သူ့အပေါ်တွင်မျှ ထိခိုက်နစ်နာမှု လုံးဝမရှိစေရကြောင်း တာဝန်ယူပါသည်။ သို့ဖြစ်ပါ၍ ဆရာ၊ဆရာမတို့၏ အခြေအနေမှန်ကို အမှန်အတိုင်း ဖြေကြားပေးစေလိုပါသည်။ မေးခွန်းများ အားလုံးကို ဖြေဆိုကူညီပေးပါရန် မေတ္တာရပ်ခံအပ်ပါသည်။

ကူညီဆောင်ရွက်ပေးမှုအတွက် အထူးကျေးဇူးတင်ပါသည်။

သုတေသီ

ဒေါက်တာနိုင်နိုင်မော်	မဆုမြတ်အေး
ကျမ်းကြီးကြပ်သူ	၃-ပါရဂူပညာစိတ်- ၄
ပါမောက္ခ၊ ဌာနမှူး	ပညာရေးစိတ်ပညာအထူးပြု
ပညာရေးစိတ်ပညာဌာန	ရန်ကုန်ပညာရေးတက္ကသိုလ်
ရန်ကုန်ပညာရေးတက္ကသိုလ	

ကိုယ်ရေးအချက်အလက်

၁။ အမည် ------------------------------

၂။ ကျား/ မ ------------------------------

၃။ အသက် ------------------------------

၄။ အိမ်ထောင်ရှိ/ မရှိ ☐ ရှိ ☐ မရှိ

၅။ ပညာအရည်အချင်း ☐ Ph.D (Edn:) ☐ Ph.D (Academic)

☐ M.Ed ☐ M.A/ M.Sc

☐ B.Ed ☐ BA/B.Sc

☐ PGTD ☐ PGDMA ☐ ELT

☐ PPDT ☐ DTED ☐ Others -------------

၆။ ကျောင်းအမည် --------------------

၇။ လက်ရှိရာထူး ☐ ပါမောက ☐ တွဲဖက်ပါမောက္ခ ☐ ကထိက

☐ လက်ထောက်ကထိက ☐ နည်းပြ/ သရုပ်ပြ

၈။ စုစုပေါင်းလုပ်သက် ------------------------------------

၉။ လက်ရှိကျောင်းသို့ ရောက်သော ခုနှစ် -----------------------------------

၁၀။ မိမိ၏ အထူးပြုဘာသာရပ် ------------------------------

၁၁။ လက်ရှိသင်ကြားနေသည့်ဘာသာရပ် -----------------------------------

၁၂။ အမြဲတမ်းနေရပ်လိပ်စာ --

Social Intelligence Scale (108 items)

ဆရာ၊ ဆရာမများ၏ သဘောထားနှင့် ကိုက်ညီသောအဖြေကို အမှန်ခြစ်(✔)၍ ဖော်ပြပါ။

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါသည်
၁	ကျွန်ုပ်သည် လက်ဟန်ခြေဟန်နှင့် မျက်နှာအမူအယာ ပြောင်းလဲခြင်းဖြင့် သင့်တော်သော တုန့်ပြန်မှုကို ဖော်ပြတတ်သည်။		
၂	အခြေအနေအမျိုးမျိုး၊ လူအမျိုးမျိုးနှင့် ကိုက်ညီအောင် ကျွန်ုပ်၏ အပြုအမူကို လိုက်ပြောင်းရန်မှာ ခက်ခဲလှပါသည်။		
၃	ကျွန်ုပ်၏ ခံစားမှုများကို မိတ်ဆွေအား ဖွင့်ပြောပြတတ်သည်။		
၄	ကျွန်ုပ်၏ ဆုံးဖြတ်ချက်များကို စကားလုံးနှင့်သာမက အပြုအမူဖြင့်ပါ ဖော်ပြနိုင်သည်။		
၅	ကျွန်ုပ်သည် မိတ်ဆွေ၏ အားထုတ်မှုများ၊ အောင်မြင်မှုနှင့် အပြုအမူများ အပေါ်ချီးမွမ်းဂုဏ်ပြုလေ့ရှိသည်။		
၆	မရင်းနှီးသော သူစိမ်းများ၏ ဝန်းကျင်တွင် နေထိုင်ရခြင်းသည် ကျွန်ုပ်အတွက် ယုံကြည်မှု မရှိသလိုခံစားရသည်။		
၇	ကျွန်ုပ်သည် အခြားသူများ၏ အပြုအမူကို ကြိုတင်ခန့်မှန်းတတ်သည်။		
၈	ကျွန်ုပ်ကိုယ်တိုင် သတိမထားမိ�’ဘဲ အခြားသူများကို မကြာခဏ ထိခိုက်အောင် ပြုလုပ်တတ်သည်။		
၉	အခြားသူများ၏ နေရာမှ ခံစားကြည့်ရန်မှာ ကျွန်ုပ်အတွက် တစ်ခါတစ်ရံ ခက်ခဲလှသည်။		
၁၀	ကျွန်ုပ်လောက်ကံမကောင်းသူများအပေါ် ကြင်နာသနားတတ်သည်။		
၁၁	ရုတ်တရက်ရင်ဆိုင်ရသော အရေးပေါ်အခြေအနေများတွင် ကျွန်ုပ်သည် စိုးရိမ်ကြောင့်ကြပူပန်တတ်သည်။		
၁၂	ကျွန်ုပ်သည် အခြားသူများနှင့် သဘောထား ကွဲလွဲသည့်အခါ စိတ်မသက်မသာ ဖြစ်ရသည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါသည်
၁၃	ကျွန်ုပ်သည် အခြားသူများ၏ အတွေ့အကြုံကိုမေးမြန်းရန် သင့်တော်သော အချိန်ကောင်းကိုသိသည်။		
၁၄	မိတ်ဆွေကစကားဖြင့်ပြောလျှင် ကျွန်ုပ်သည် စကားဖြင့်သာ ပြန်လည် တုန့်ပြန် ပြောဆိုတတ်သည်။		
၁၅	အခြေအနေကိုသိလိုက်သည်နှင့် တစ်ပြိုင်နက် ကျွန်ုပ်၏အပြုအမူများကို လိုက်လျောညီထွေပြောင်းလဲရန် လွယ်ကူသည်။		
၁၆	ကျွန်ုပ်သည်မိတ်ဆွေထံမှ အကူအညီနှင့် နှစ်သိမ့်မှုများကိုရယူရန် ကြိုးစား တတ်သည်။		
၁၇	ကျွန်ုပ်၏ထင်မြင်ယူဆချက်ကို မိတ်ဆွေအား ဖွင့်ဟပြောပြတတ်သည်။		
၁၈	ကျွန်ုပ်သည် မိတ်ဆွေ၏ ပျော်ရွှင်မှုအပေါ် ပြုံးပြ၍ဖြစ်စေ၊ လက်ခုပ်တီး၍ ဖြစ်စေ ထပ်တူဝမ်းသာကြောင်း ပြသလေ့ရှိသည်။		
၁၉	ကျွန်ုပ်သည် ပထမဆုံးတွေ့ဆုံရသောသူများ နှင့် လူမှုပတ်ဝန်းကျင်တွင် လိုက်လျောညီထွေနေထိုင်နိုင်သည်။		
၂၀	ကျွန်ုပ်၏ အပြုအမူများသည် သူတပါးအား မည်သို့ခံစားသွား စေနိုင်ကြောင်း သိသည်။		
၂၁	လူတို့၏အပြုအမူကို ကြိုတင်ခန့်မှန်း၍ မရနိုင်ကြောင်း ကျွန်ုပ်သိသည်။		
၂၂	ကျွန်ုပ်သည် ဆုံးဖြတ်ချက်တစ်ခုကို မချမီ အခြားသူများ၏ မတူညီသော အမြင်များကိုထည့်သွင်းစဉ်းစားလေ့ရှိသည်။		
၂၃	တစ်ခါတစ်ရံ ကျွန်ုပ်သည် အခက်အခဲဖြစ်နေသော သူများအပေါ် စိတ်မကောင်းမဖြစ်တတ်ပါ။		
၂၄	ကျွန်ုပ်သည် အလွန်အမင်းစိတ်လှုပ်ရှားသည့်အခါတွင် ကူညီသူမဲ့သည်ဟု တစ်ခါတစ်ရံ ခံစားရသည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါသည်
၂၅	ကျွန်ုပ်သည် အခြားသူများနှင့် အငြင်းပွားရသည့်အခါတွင် အကြောင်း အရင်းကို နားလည်သဘောပေါက်တတ်ပါသည်။		
၂၆	မိမိနှင့်ရင်းနှီးသောသူများ၏ လျှို့ဝှက်ချက်ကို ထိန်းပေးရန်လိုအပ်သည်ဟု ခံစားရသည်။		
၂၇	မိတ်ဆွေက စကားဖြင့်ပြောခြင်းကို ကျွန်ုပ်က အပြုအမူဖြင့် အလိုက်သင့် ကိုက်ညီအောင် တုန့်ပြန်တတ်သည်။		
၂၈	လူမှုဆက်ဆံရေးနယ်ပယ်တွင် အခြေအနေအရ ကျွန်ုပ်၏ အပြုအမူများကို လိုအပ်သလို ပြောင်းလဲနေထိုင်တတ်သည့် စွမ်းရည်ရှိသည်။		
၂၉	ကျွန်ုပ်၏ ဖြစ်ချင်သောဆန္ဒများကို မိတ်ဆွေအား ခြေဟန်လက်ဟန်ဖြင့် ပြတတ်သည်။		
၃၀	ကျွန်ုပ်သည် ကွဲပြားသော ရပ်တည်ချက်နှင့် ထင်မြင်ယူဆချက်များကို ဖွင့်ဟပြောဆိုတတ်သည်။		
၃၁	ကျွန်ုပ်သည် မိတ်ဆွေ၏ စိတ်မချမ်းမြေ့ဖွယ်ခံစားမှုအပေါ် နှုတ်ဖြင့်ဖြစ်စေ၊ အမူအယာဖြင့်ဖြစ်စေ ကိုယ်ချင်းစာနာကြောင်း ပြသလေ့ရှိသည်။		
၃၂	ကျွန်ုပ်သည် လူမှုပတ်ဝန်းကျင်အသစ်သို့ ရောက်ရှိသွားသောအခါနှင့် မရင်းနှီးသောသူစိမ်းများနှင့် စတင်တွေ့ဆုံသည့် အခါများတွင် အဆင်ပြေစွာနေတတ်သည်။		
၃၃	ကျွန်ုပ်သည် အခြားသူများ၏ခံစားချက်ကိုနားလည်သည်။		
၃၄	ကျွန်ုပ်သည် အခြားသူများ၏ ရွေးချယ်မှုများကို နားလည်ရန် ခက်ခဲသည်ဟု မကြာခဏ ခံစားရသည်။		
၃၅	ကျွန်ုပ်သည် တစ်ခါတစ်ရံ မိတ်ဆွေသူငယ်ချင်းများ၏ နေရာတွင် ဝင်ရောက်ခံစားကြည့်ပြီး သူတို့အပေါ်တွင်ပို၍ နားလည်နိုင်ရန် ကြိုးစား သည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါသည်
၃၆	ကျွန်ုပ်သည် အသုံးချခံရသူတစ်ချို့အား တွေ့သည့်အခါ ထိုသူတို့အား ကာကွယ်စောင့်ရှောက်ပေး လိုစိတ်ဖြစ်ပေါ်မိသည်။		
၃၇	တစ်စုံတစ်ယောက် စိတ်ထိခိုက်နေသည်ကိုတွေ့သည့်အခါတိုင်း ကျွန်ုပ်နှင့် မဆိုင်သလို အေးအေးဆေးဆေး နေတတ်သည်။		
၃၈	တစ်စုံတစ်ယောက်က ကျွန်ုပ်အား စိတ်ဆိုးနေသောအခါ ထိုသူစိတ်ဆိုး ရသောအကြောင်းအရင်းကို နားမလည်ပါ။		
၃၉	ကျွန်ုပ်၏ အတွေ့အကြုံများကို မည်သူ့ကိုမျှ မပြောခြင်းသည် အကောင်းဆုံး ဖြစ်သည်ဟုခံစားရသည်။		
၄၀	မိတ်ဆွေက အမူအယာဖြင့်ဖော်ပြသည့်အခါ ကျွန်ုပ်သည် မည်သို့မျှ မတုံ့ပြန်ဘဲ ထိုသူတို့ကို ကြည့်ရှုကြည့် နေလိုက်သည်။		
၄၁	မိမိရောက်ရှိနေသော မည်သည့်အခြေအနေမျိုးတွင်မဆို လိုအပ်ချက်နှင့် အံဝင်ခွင်ကျဖြစ်စေရန် ကျွန်ုပ်၏အပြုအမူများကိုညှိယူနေထိုင်တတ်သည်။		
၄၂	မိတ်ဆွေကကျွန်ုပ်အပေါ် ဂရုဏာစိတ် ရှိမရှိကို ဖျက်ခနဲ ကြည့်လိုက်ရုံဖြင့် သိသည်။		
၄၃	ကျွန်ုပ်၏မတူညီသော အမြင်များကို ခြေဟန်လက်ဟန် အမူအယာများဖြင့် ဖော်ပြတတ်သည်။		
၄၄	ကျွန်ုပ်သည် မိတ်ဆွေ၏စကားအပေါ် ချစ်ခင်နှစ်လိုဖွယ် တုန့်ပြန်ပြောဆို လေ့ရှိသည်။		
၄၅	အခြားသူများနှင့် အဆင်ပြေစွာဆက်ဆံနေထိုင်ရန်မှာ ကျွန်ုပ်အတွက် ခက်ခဲလှပါသည်။		
၄၆	ကျွန်ုပ်သည် အခြားသူများ၏ ဖြစ်ချင်သောဆန္ဒကိုနားလည်သည်။		
၄၇	ကျွန်ုပ်တွေးထင်သည့်အတိုင်း ပြောမိသည့်အခါ အခြားသူများသည် မကြာခဏ သည်းမခံနိုင်ဘဲ ဒေါသဖြစ်ကြသည် ဟုထင်သည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါသည်
၄၈	ကျွန်ုပ်မှန်သည်ဟု သေချာလျှင် အခြားသူများ၏ အငြင်းပွားမှုကို အချိန်ကုန်ခံ၍ နားမထောင်တော့ပါ။		
၄၉	အခြားသူများ၏ ကံဆိုးမှုများက ကျွန်ုပ်အတွက် မည်သည့်အနှောက် အယှက်မှ မဖြစ်စေပါ။		
၅၀	စိတ်တင်းကြပ်ရသော အခြေအနေများသည် ကျွန်ုပ်အား ခြောက်ခြား စေသည်။		
၅၁	ပေါင်းသင်းဆက်ဆံရေးတွင် စိတ်သ�‌ဘောထားချင်းမတိုက်ဆိုင်ကြောင်း ဖော်ပြရခြင်းသည် အကျိုးရှိသည့် အချိန်အခါလည်း ရှိတတ်သည်ဟု ခံစားရသည်။		
၅၂	အခြားသူများနှင့် ရင်းနှီးကျွမ်းဝင်သော ဆက်ဆံရေးသည် ကျွန်ုပ်အတွက် အရေးကြီးသည်ဟု ခံစားရသည်။		
၅၃	မိတ်ဆွေက အပြုအမူ (သို့မဟုတ်) ကိုယ်ဟန်အမူအယာဖြင့်ပြလျှင် ကျွန်ုပ်သည် စကားဖြင့် တုန့်ပြန်ပြောဆိုတတ်သည်။		
၅၄	မိမိအတွက် အကျိုးရှိမည့် ကိစ္စကိုပင်လျှင် ဦးစားပေးဆောင်ရွက်ရန် ခဲယဉ်းသည်။		
၅၅	ကျွန်ုပ်၏ ခံစားချက်အပြောင်းအလဲကို မျက်နှာအမူအရာဖြင့် ဖော်ပြ တတ်သည်။		
၅၆	ကျွန်ုပ်သည် စကားနှင့်ဖြစ်စေ ကိုယ်အမူအယာနှင့်ဖြစ်စေ ၂ မျိုးလုံးဖြင့် ဖော်ပြပြောဆိုတတ်သည်။		
၅၇	ကျွန်ုပ်သည် မိတ်ဆွေကစကားပြောသည်ကို ပြုံး၍နားထောင်လေ့ရှိသည်။		
၅၈	အခြားသူများအကြောင်းကို ကောင်းကောင်းသိနားလည်ရန် ကျွန်ုပ် အတွက် အချိန်များစွာယူရသည်။		
၅၉	အခြားသူများသည် တစ်စုံတစ်ရာပြောရန်မလိုဘဲ ကိစ္စများကို အဆင်ပြေ ပြီးမြောက်အောင် ကြိုးစားကြသည်ကို ကျွန်ုပ်နားလည်သည်။		

141

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါသည်
၆၀	အခြားသူများ၏ အပြုအမူသည် ကျွန်ုပ်အား မကြာခဏ အံ့အားသင့် စေသည်။		
၆၁	ကိစ္စတိုင်းတွင် အမြင်နှစ်ဖက်ရှိသောကြောင့် နှစ်ဖက်မျှကြည့်၍ ဆုံးဖြတ် သင့်သည်ဟု ကျွန်ုပ်ယုံကြည်သည်။		
၆၂	မမျှတစွာဆက်ဆံခံနေရသော လူတစ်ချို့အပေါ်တွင် ကျွန်ုပ်သည် တစ်ခါတစ်ရံ မသနားတတ်ပါ။		
၆၃	ကျွန်ုပ်သည် အရေးပေါ်အခြေအနေများကို ထိထိရောက်ရောက် ကိုင်တွယ် ဖြေရှင်းနိုင်သည်။		
၆၄	ကျွန်ုပ်သည် အခြေအနေနှင့် အချိန်အခါကို မကြည့်ဘဲ အငြင်းပွား လိုသောစိတ်ဖြစ်တတ်သည်။		
၆၅	ကျွန်ုပ်၏ အကြောင်းများကို အခြားသူများအား မပြောပြလိုပါ။		
၆၆	မိတ်ဆွေ၏ အပြုအမူ (သို့မဟုတ်) ကိုယ်ဟန်အမူအယာများကို ကျွန်ုပ်သည် စကားနှင့်ဖြစ်စေ၊ မျက်နှာအမူအယာနှင့်ဖြစ်စေ၊ လှုပ်ရှားမှု တစ်ခုနှင့်ဖြစ်စေ ပြုမူတုန့်ပြန်တတ်သည်။		
၆၇	ကျွန်ုပ်နှင့် ပေါင်းသင်းဆက်ဆံနေသော လူများ၏အထင်ကြီးလေးစားမှုကို ရလို၍ ကျွန်ုပ်၏အပြုအမူများကို ထိန်းချုပ်နိုင်စွမ်းရှိသည်။		
၆၈	ကျွန်ုပ်သည် စကားပြောဆိုရာတွင် ပြုံးပြုံးရယ်ရယ်ဖြင့် ပြောတတ်သည်။		
၆၉	ကျွန်ုပ်၏ ထင်မြင်ယူဆချက်များကို မိတ်ဆွေ၏ နားလည်နိုင်စွမ်း ပေါ်မူတည်၍ ရှင်းပြလေ့ရှိသည်။		
၇၀	ကျွန်ုပ်သည် မိတ်ဆွေပြောဆိုသော စကားနှင့် အပြုအမူများအပေါ် အမြဲခေါင်းငြိမ့်၍ တုန့်ပြန်လေ့ရှိသည်။		
၇၁	ကျွန်ုပ်သည် သူစိမ်းများနှင့် အဆင်ပြေစွာ ပြောဆိုဆက်ဆံတတ်သည်။		
၇၂	ကျွန်ုပ်၏အပြုအမူများကို သူတစ်ပါးက မည်သို့တုန့်ပြန်မည်ကို ကြိုတင် ခန့်မှန်းနိုင်သည်။		

142

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါသည်
၇၃	အခြားသူများသည် ကျွန်ုပ်အား အကြောင်းအရင်းကို ရှင်းပြခွင့်မပေးဘဲ ကျွန်ုပ်အပေါ်တွင် စိတ်ဆိုးကြသည်။		
၇၄	ကျွန်ုပ်သည် တစ်စုံတစ်ယောက်ကို မနှစ်မြို့သည့်အခါ တခဏမျှ ထိုသူ၏နေရာတွင် ဝင်၍နေကြည့်နိုင်ရန် ကြိုးစားသည်။		
၇၅	ကျွန်ုပ်သည် နှလုံးသား နူးည့ံသော လူတစ်ယောက်ဖြစ်သည်။		
၇၆	အရေးအပေါ်အခြေအနေများတွင် ကျွန်ုပ်၏စိတ်ကို ထိန်းချုပ်ရန် ခက်ခဲလှသည်။		
၇၇	ကျွန်ုပ်သည် အငြင်းပွားစေနိုင်သည့် အရာမှန်သမျှကို ဖြစ်သည့်နည်းဖြင့် ရှောင်ရှားလိုသည်။		
၇၈	အခြားသူများနှင့် စကားပြောသည့်အခါ စိတ်တင်းကြပ်မှုကိုခံစားရသည်။		
၇၉	မိတ်ဆွေ၏ မျက်နှာအမူအယာပြောင်းလဲမှုကို သတိထားမိလျှင် ကျွန်ုပ်သည် စကားဖြင့်တုန့်ပြန်ပြောဆို တတ်သည်။		
၈၀	ကျွန်ုပ်၏အမူအယာ အပြောအဆိုများသည် လက်ရှိအခြေအနေနှင့် ကိုက်ညီမှုမရှိဟု ခံစားရသည့်အခါ ပြောင်းလဲရန် ဝန်မလေးပါ။		
၈၁	ကျွန်ုပ်သည် တစ်ဖက်လူနှင့် မျက်လုံးချင်းဆုံအောင် ကြိုးစား လုပ်ယူလေ့ရှိသည်။		
၈၂	ကျွန်ုပ်သည် ညွှန်ကြားချက်များနှင့် ယူဆချက်များကို ဒွိဟမဖြစ်စေဘဲ ရှင်းရှင်းလင်းလင်း ပြတ်ပြတ်သားသား ဖော်ပြတတ်သည်။		
၈၃	ကျွန်ုပ်သည် မိတ်ဆွေက စကားပြောဆိုနေစဉ်တွင် ကြားဖြတ်၍ ပြောဆိုခြင်းမျိုး မပြုလုပ်ပါ။		
၈၄	ကျွန်ုပ်သည် စကားပြောရမည့် ခေါင်းစဉ်နှင့်အကြောင်းအရာကောင်းကို ရှာတွေ့ရန် ခက်ခဲလှသည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါသည်
၈၅	ကျွန်ုပ်သည်အခြားသူများ၏ မျက်နှာအမူအယာနှင့် ကိုယ်အမူအယာများ ကိုကြည့်ရှုခြင်းဖြင့် ၎င်းတို့၏ ဆိုလိုချက်ကို နားလည်နိုင်သည်။		
၈၆	ကျွန်ုပ်၏လုပ်ရပ်အပေါ် အခြားသူများ၏တုန့်ပြန်မှုများက ကျွန်ုပ်အား မကြာခဏ အံ့အားသင့်စေသည်။		
၈၇	တစ်စုံတစ်ယောက်အားမဝေဖန်ခင် ထိုသူ၏နေရာတွင် ဝင်၍ ခံစားကြည့် ရန်ကြိုးစားလေ့ရှိသည်။		
၈၈	အရေးပေါ်အခြေအနေတစ်ခုတွင် အလွန်အမင်း အကူအညီလိုအပ်နေသူ များအားမြင်လျှင် ကျွန်ုပ်ကိုယ်တိုင်က စိတ်ယိမ်းယိုင်ပြိုလဲသွားပါသည်။		
၈၉	ကျွန်ုပ်သည် အခြားသူများနှင့် အငြင်းပွားမှုကို ဖြေရှင်း၍ ပြန်လည် အဆင်ပြေချင်သည်။		
၉၀	အခြားသူများအား ကူညီပံ့ပိုးပေးခြင်းသည် အကောင်းဆုံးသော လုပ်ရပ်ဟု ထင်မြင်မိသည်။		
၉၁	ကျွန်ုပ်သည် မိတ်ဆွေ၏ မျက်နှာအမူအယာပြောင်းလဲမှုကို သတိထား မိသည့်အခါ ထိုသူများကို မတုန့်ပြန်ဘဲကြည့်နေလိုက်သည်။		
၉၂	ကျွန်ုပ်စကားပြောသည့်အခါ မိတ်ဆွေထံမှ တုန့်ပြန်မှုရအောင် ကြိုးစား တတ်သည်။		
၉၃	ကျွန်ုပ်၏ထင်မြင်ယူဆချက်များကို ကျိုးကြောင်းဆီလျော်စွာ ဖော်ပြတတ် သည်။		
၉၄	မိတ်ဆွေ၏ အမြင်အပေါ် တစ်စိတ်တစ်ပိုင်း (သို့) အပြည့်အဝ လက်ခံကြောင်းကို သင့်လျော်သည့် အမူအယာဖြင့် ဖော်ပြလေ့ရသည်။		
၉၅	အငြင်းပွားနေစဉ် အခြားသူများနှင့်မိမိကြား ရင်းနှီးမှုပိုလာသည်ဟု ခံစား ရသည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါသည်
၉၆	သူတစ်ပါးက အကူအညီလိုအပ်နေမှန်းသိသော်လည်း ကျွန်ုပ်သည် အနည်းအကျဉ်းသာ ကူညီလိုစိတ်ရှိသည်။		
၉၇	ကျွန်ုပ်သည်မိတ်ဆွေ၏ မျက်နှာအမူအယာပြောင်းလဲမှုပေါ်မူတည်၍ မိမိဘက်မှ ထုတ်ဖော်၊ ပြောဆို ဆောင်ရွက်ပေးသည်။		
၉၈	ကျွန်ုပ်သည် အကြောင်းအရာအချက်အလက်များရယူရန် အခြားသူ၏ မျက်နှာကို သေချာကြည့်၍ အကဲခတ် တတ်သည်။		
၉၉	ကျွန်ုပ်သည် မိတ်ဆွေ၏အတွေးအခေါ်များကို နားလည်ကြောင်း ပြပြီးမှသာ ကျွန်ုပ်၏ ကိုယ်ပိုင်စိတ်ကူးကို ဖော်ပြတတ်သည်။		
၁၀၀	ကျွန်ုပ်သည် မိတ်ဆွေကစကားပြောဆိုပြီး ၅ စက္ကန့်အတွင်း ပြုံးပြခြင်း (သို့မဟုတ်) မျက်မှောင်ကြုတ်ခြင်းများကို ပြုလုပ်တတ်သည်။		
၁၀၁	မိမိသဘောထားနှင့် တိုက်ဆိုင်မှုမရှိလျှင်တောင် မိတ်ဆွေ၏ သဘောထား ကိုလက်ခံပေးလေ့ရှိသည်။		
၁၀၂	အငြင်းပွားနေစဉ်အချိန်အတွင်းတွင် ကျွန်ုပ်သည် တဖက်သားအား စိတ်ကသိကအောက်ဖြစ်စေရန် တမင်တကာပြုလုပ်တတ်သည်။		
၁၀၃	တစ်ဖက်လူက မျက်လုံးချင်းဆုံ၍စကားပြောဆိုလျှင် ကျွန်ုပ်သည်လည်း ထိုသူ၏မျက်နှာ (သို့မဟုတ်) မျက်လုံးကို ကြည့်၍ပြောသည်။		
၁၀၄	ကျွန်ုပ်၏ခံစားချက်များကို စကားလုံးများအပြင် အပြုအမူများနှင့် တွဲ၍ဖော်ပြလေ့ရှိသည်။		
၁၀၅	ကျွန်ုပ်သည် မိတ်ဆွေ၏ အကြံပြုချက်နှင့် အတွေးအခေါ်များကို နားလည် သဘောပေါက်ကြောင်း ပြပြီးမှသာလျှင် ဆုံးဖြတ်ချက်ချတတ်သည်။		
၁၀၆	ကျွန်ုပ်စကားပြောနေစဉ် မိတ်ဆွေက ဝင်ရောက်ပြောဆိုသောအခါ ကျွန်ုပ်က ခေတ္တရပ်ပေးလေ့ရှိသည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါသည်
၁၀၇	ကျွန်ုပ်သည် မိတ်ဆွေ၏ ခြေဟန်လက်ဟန် အမူအယာပြောင်းလဲမှု ပေါ်မူတည်၍ အလိုက်သင့် ပြုမူတုန့်ပြန် လေ့ရှိသည်။		
၁၀၈	ကျွန်ုပ်သည် အငြင်းအခုံဖြစ်သည့်အခါ အခြားသူတို့၏ စိတ်ခံစားချက်ကို မထိခိုက်စေရန် အထူးဂရုစိုက်လေ့ ရှိသည်။		

Sources of Items:

Dimensions	Items No.	Total Items
Social Sensitivity	1, 14, 27, 40(R), 53, 66, 79, 91, 97, 100, 103, 107	12
Self-Regulation	2(R), 15, 28, 41, 54(R), 67, 80	7
Expressivity	3, 16, 29, 42, 55, 68, 81, 92, 98, 104	10
Assertiveness	4, 17, 10, 43, 56, 69, 82, 93, 99, 105	10
Acceptance	5, 18, 31, 44, 57, 70, 83, 94, 101, 106	10
Social Skill	6(R), 19, 32, 45(R), 58(R), 71, 84(R)	7
Social Information Process	7, 20, 33, 46, 59, 72, 85	7
Social Awareness	8(R), 21(R), 34(R), 47(R), 60(R), 73(R), 86(R)	7
Perspective Taking	9(R), 22, 35, 48(R), 61, 74, 87	7
Empathic Concern	10, 23(R), 36, 49(R), 62(R), 75	6
Personal Distress	11, 24, 37, 50, 63(R), 76, 88	7
Conflict	12(R), 25, 38(R), 51, 64 (R), 77, 89, 95, 102(R), 108	10
Closeness	13, 26, 39(R), 52, 65(R), 78(R), 90, 96(R)	8
Total Items		108

Note: (R) denotes item to be scored in reverse fashion

Social Intelligence Scale (99 items)

ဆရာ၊ ဆရာမများ၏ သဘောထားနှင့် ကိုက်ညီသောအဖြေကို အမှန်ခြစ်(✔)၍ဖော်ပြပါ။

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါ သည်
၁	ကျွန်ုပ်သည်လက်ဟန်ခြေဟန်နှင့် မျက်နှာအမူအယာတို့ ပြောင်းလဲ ခြင်းဖြင့် သင့်တော်သော တုန့်ပြန်မှုကို ဖော်ပြတတ်သည်။		
၂	အခြေအနေ အမျိုးမျိုး လူအမျိုးမျိုးနှင့် ကိုက်ညီအောင် ကျွန်ုပ်၏ အပြုအမူကို လိုက်ပြောင်းရန်မှာ ခက်ခဲလှပါသည်။		
၃	ကျွန်ုပ်၏ ခံစားမှုများကို မိတ်ဆွေအား ဖွင့်ပြောပြတတ်သည်။		
၄	ကျွန်ုပ်၏ဆုံးဖြတ်ချက်များကို စကားလုံးနှင့်သာမက အပြုအမူဖြင့်ပါ ဖော်ပြနိုင်သည်။		
၅	ကျွန်ုပ်သည် မိတ်ဆွေ၏ အားထုတ်မှုများ၊ အောင်မြင်မှုနှင့် အပြုအမူများ အပေါ် ချီးမွမ်းဂုဏ်ပြုလေ့ရှိသည်။		
၆	မရင်းနှီးသော သူစိမ်းများ၏ ဝန်းကျင်တွင် နေထိုင်ရခြင်းသည် ကျွန်ုပ်အတွက် ယုံကြည်မှု မရှိသလိုခံစားရသည်။		
၇	ကျွန်ုပ်သည် အခြားသူများ၏ အပြုအမူကို ကြိုတင်ခန့်မှန်း တတ်သည်။		
၈	ကျွန်ုပ်ကိုယ်တိုင် သတိမထားမိဘဲ အခြားသူများကို မကြာခဏ ထိခိုက်အောင် ပြုလုပ်တတ်သည်။		
၉	အခြားသူများ၏ နေရာမှ ခံစားကြည့်ရန်မှာ ကျွန်ုပ်အတွက် တစ်ခါတစ်ရံ ခက်ခဲလှသည်။		
၁၀	ကျွန်ုပ်လောက်ကံမကောင်းသူများအပေါ် ကြင်နာသနားတတ်သည်။		
၁၁	ရုတ်တရက် ရင်ဆိုင်ရသော အရေးပေါ် အခြေအနေများတွင် ကျွန်ုပ်သည် စိုးရိမ်ကြောင့်ကြ ပူပန်တတ်သည်။		
၁၂	ကျွန်ုပ်သည် အခြားသူများနှင့် သဘောထား ကွဲလွဲသည့်အခါ စိတ်မသက်မသာ ဖြစ်ရသည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါ သည်
၁၃	ကျွန်ုပ်သည် အခြားသူများ၏ အတွေ့အကြုံကိုမေးမြန်းရန် သင့်တော်သော အချိန်ကောင်းကိုသိသည်။		
၁၄	မိတ်ဆွေကစကားဖြင့်ပြောလျှင် ကျွန်ုပ်သည် စကားဖြင့်သာ ပြန်လည် တုန့်ပြန် ပြောဆိုတတ်သည်။		
၁၅	အခြေအနေကို သိလိုက်သည်နှင့် တစ်ပြိုင်နက် ကျွန်ုပ်၏ အပြုအမူများကို လိုက်လျောညီထွေပြောင်းလဲရန် လွယ်ကူသည်။		
၁၆	ကျွန်ုပ်သည်မိတ်ဆွေထံမှ အကူအညီနှင့် နှစ်သိမ့်မှုများကိုရယူရန် ကြိုးစား တတ်သည်။		
၁၇	ကျွန်ုပ်၏ ထင်မြင်ယူဆချက်ကို မိတ်ဆွေအား ဖွင့်ဟပြောပြ တတ်သည်။		
၁၈	ကျွန်ုပ်သည် မိတ်ဆွေ၏ ပျော်ရွှင်မှုအပေါ် ပြုံးပြ၍ဖြစ်စေ၊ လက်ခုပ်တီး၍ ဖြစ်စေ ထပ်တူဝမ်းသာကြောင်း ပြသလေ့ရှိသည်။		
၁၉	ကျွန်ုပ်သည် ပထမဆုံးတွေ့ဆုံရသောသူများနှင့် လူမှုပတ်ဝန်းကျင် တွင်လိုက်လျောညီထွေနေထိုင်နိုင်သည်။		
၂၀	ကျွန်ုပ်၏ အပြုအမူများသည် သူတပါးအား မည်သို့ ခံစားသွားစေ နိုင်ကြောင်း သိသည်။		
၂၁	လူတို့၏ အပြုအမူကို ကြိုတင်ခန့်မှန်း၍ မရနိုင်ကြောင်း ကျွန်ုပ်သိသည်။		
၂၂	ကျွန်ုပ်သည် ဆုံးဖြတ်ချက်တစ်ခုကို မချမီ အခြားသူများ၏ မတူညီသော အမြင်များကို ထည့်သွင်းစဉ်းစားလေ့ရှိသည်။		
၂၃	တစ်ခါတစ်ရံ ကျွန်ုပ်သည် အခက်အခဲဖြစ်နေသော သူများအပေါ် စိတ်မကောင်းမဖြစ်တတ်ပါ။		
၂၄	ကျွန်ုပ်သည်အလွန်အမင်း စိတ်လှုပ်ရှားသည့်အခါတွင် ကူညီသူမဲ့သည် ဟု တစ်ခါတစ်ရံခံစားရသည်။		
၂၅	ကျွန်ုပ်သည် အခြားသူများနှင့် အငြင်းပွားရသည့် အခါတွင် အကြောင်း အရင်းကို နားလည်သဘောပေါက်တတ်ပါသည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါ သည်
၂၆	မိမိနှင့် ရင်းနှီးသောသူများ၏ လျှို့ဝှက်ချက်ကို ထိန်းပေးရန် လိုအပ်သည်ဟု ခံစားရသည်။		
၂၇	မိတ်ဆွေက စကားဖြင့်ပြောခြင်းကို ကျွန်ပ်က အပြုအမူဖြင့် အလိုက်သင့် ကိုက်ညီအောင် တုန့်ပြန်တတ်သည်။		
၂၈	ကျွန်ပ်၏ ဖြစ်ချင်သောဆန္ဒများကို မိတ်ဆွေအား ခြေဟန် လက်ဟန်ဖြင့် ပြတတ်သည်။		
၂၉	ကျွန်ပ်သည် ကွဲပြားသော ရပ်တည်ချက်နှင့် ထင်မြင်ယူဆချက်များ ကို ဖွင့်ဟပြောဆိုတတ်သည်။		
၃၀	ကျွန်ပ်သည် မိတ်ဆွေ၏ စိတ်မချမ်းမြေ့ဖွယ် ခံစားမှုအပေါ် နှုတ်ဖြင့်ဖြစ်စေ၊ အမူအယာဖြင့်ဖြစ်စေ ကိုယ်ချင်းစာနာကြောင်း ပြသလေ့ရှိသည်။		
၃၁	ကျွန်ပ်သည် လူမှုပတ်ဝန်းကျင်အသစ်သို့ ရောက်ရှိသွားသောအခါ နှင့် မရင်းနှီးသော သူစိမ်းများနှင့် စတင်တွေ့ဆိုသည့်အခါများတွင် အဆင်ပြေစွာ နေတတ်သည်။		
၃၂	ကျွန်ပ်သည် အခြားသူများ၏ခံစားချက်ကိုနားလည်သည်။		
၃၃	ကျွန်ပ်သည်တစ်ခါတစ်ရံ မိတ်ဆွေသူငယ်ချင်းများ၏ နေရာတွင် ဝင်ရောက် ခံစားကြည့်ပြီး သူတို့အပေါ်တွင်ပို၍ နားလည်နိုင်ရန် ကြိုးစားသည်။		
၃၄	ကျွန်ပ်သည် အသုံးချခံရသူတစ်ချို့အား တွေ့သည့်အခါ ထိုသူတို့အား ကာကွယ်စောင့်ရှောက်ပေး လိုစိတ်ဖြစ်ပေါ်မိသည်။		
၃၅	တစ်စုံတစ်ယောက် စိတ်ထိခိုက်နေသည်ကို တွေ့သည်အခါတိုင်း ကျွန်ပ်နှင့် မဆိုင်သလို အေးအေးဆေးဆေးနေတတ်သည်။		
၃၆	တစ်စုံတစ်ယောက်က ကျွန်ပ်အား စိတ်ဆိုးနေသောအခါ ထိုသူစိတ်ဆိုး ရသောအကြောင်းအရင်းကို နားမလည်ပါ။		
၃၇	ကျွန်ပ်၏ အတွေ့အကြုံများကို မည်သူ့ကိုမျှ မပြောခြင်းသည် အကောင်းဆုံး ဖြစ်သည်ဟုခံစားရသည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါ သည်
၃၈	မိတ်ဆွေက အမူအယာဖြင့် ဖော်ပြသည့်အခါ ကျွန်ုပ်သည် မည်သို့မျှ မတုံ့ပြန်ဘဲ ထိုသူတို့ကို ကြည့်ရှုကြည့် နေလိုက်သည်။		
၃၉	မိမိရောက်ရှိနေသော မည်သည့်အခြေအနေမျိုးတွင်မဆို လိုအပ်ချက်နှင့် အံဝင်ခွင်ကျဖြစ်စေရန် ကျွန်ုပ်၏အပြုအမူများကို ညှိယူနေထိုင် တတ်သည်။		
၄၀	မိတ်ဆွေက ကျွန်ုပ်အပေါ် ဂရုဏာစိတ်ရှိ၊မရှိကို ဖျက်ခဲ ကြည့်လိုက်ရုံဖြင့် သိသည်။		
၄၁	ကျွန်ုပ်၏ မတူညီသောအမြင်များကို ခြေဟန်လက်ဟန် အမူအယာ များဖြင့် ဖော်ပြတတ်သည်။		
၄၂	ကျွန်ုပ်သည် မိတ်ဆွေ၏ စကားအပေါ် ချစ်ခင်နှစ်လိုဖွယ် တုံ့ပြန် ပြောဆို လေ့ရှိသည်။		
၄၃	အခြားသူများနှင့် အဆင်ပြေစွာ ဆက်ဆံနေထိုင်ရန်မှာ ကျွန်ုပ်အတွက် ခက်ခဲ လှပါသည်။		
၄၄	ကျွန်ုပ်သည် အခြားသူများ၏ ဖြစ်ချင်သောဆန္ဒကိုနားလည်သည်။		
၄၅	ကျွန်ုပ်တွေးထင်သည့်အတိုင်း ပြောမိသည့်အခါ အခြားသူများသည် မကြာခဏ သည်းမခံနိုင်ဘဲဒေါသဖြစ်ကြသည် ဟုထင်သည်။		
၄၆	ကျွန်ုပ်မှန်သည်ဟု သေချာလျှင် အခြားသူများ၏ အငြင်းပွားမှုကို အချိန်ကုန်ခံ၍ နားမထောင်တော့ပါ။		
၄၇	အခြားသူများ၏ ကံဆိုးမှုများက ကျွန်ုပ်အတွက် မည်သည့်အနောက် အယှက်မှ မဖြစ်စေပါ။		
၄၈	ပေါင်းသင်းဆက်ဆံရေးတွင် စိတ်သဘောထားချင်း မတိုက်ဆိုင် ကြောင်းဖော်ပြရခြင်းသည် အကျိုးရှိသည့် အချိန်အခါလည်း ရှိတတ်သည်ဟု ခံစားရသည်။		
၄၉	အခြားသူများနှင့် ရင်းနှီးကျွမ်းဝင်သော ဆက်ဆံရေးသည် ကျွန်ုပ်အတွက် အရေးကြီးသည်ဟု ခံစားရသည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါ သည်
၅၀	မိတ်ဆွေက အပြုအမူ (သို့မဟုတ်) ကိုယ်ဟန်အမူအယာဖြင့်ပြလျှင် ကျွန်ုပ်သည် စကားဖြင့် တုန့်ပြန်ပြောဆို တတ်သည်။		
၅၁	မိမိအတွက် အကျိုးရှိမည့် ကိစ္စကိုပင်လျှင် ဦးစားပေး ဆောင်ရွက်ရန် ခဲယဉ်းသည်။		
၅၂	ကျွန်ုပ်၏ ခံစားချက်အပြောင်းအလဲကို မျက်နှာအမူအရာဖြင့် ဖော်ပြ တတ်သည်။		
၅၃	ကျွန်ုပ်သည် မိတ်ဆွေက စကားပြောသည်ကို ပြုံးရွှင်နားထောင် လေ့ရှိသည်။		
၅၄	အခြားသူများ အကြောင်းကို ကောင်းကောင်းသိနားလည်ရန် ကျွန်ုပ်အတွက် အချိန်များစွာယူရသည်။		
၅၅	အခြားသူများ၏ အပြုအမူသည် ကျွန်ုပ်အား မကြာခဏ အံ့အားသင့်စေသည်။		
၅၆	ကိစ္စတိုင်းတွင် အမြင်နှစ်ဖက်ရှိသောကြောင့် နှစ်ဖက်မျှကြည့်ရှု ဆုံးဖြတ် သင့်သည်ဟု ကျွန်ုပ်ယုံကြည်သည်။		
၅၇	မမျှတစွာဆက်ဆံခံနေရသော လူတစ်ချို့အပေါ်တွင် ကျွန်ုပ်သည် တစ်ခါတစ်ရံ မသနားတတ်ပါ။		
၅၈	ကျွန်ုပ်သည် အရေးပေါ်အခြေအနေများကို ထိထိရောက်ရောက် ကိုင်တွယ်ဖြေရှင်းနိုင်သည်။		
၅၉	ကျွန်ုပ်သည် အခြေအနေနှင့် အချိန်အခါကို မကြည့်ဘဲ အငြင်းပွား လိုသောစိတ်ဖြစ်တတ်သည်။		
၆၀	ကျွန်ုပ်၏ အကြောင်းများကို အခြားသူများအား မပြောပြလိုပါ။		
၆၁	မိတ်ဆွေ၏အပြုအမူ (သို့မဟုတ်) ကိုယ်ဟန်အမူအယာများကို ကျွန်ုပ်သည် စကားနှင့်ဖြစ်စေ၊ မျက်နှာအမူအယာနှင့်ဖြစ်စေ၊ လှုပ်ရှားမှုတစ်ခုခုနှင့်ဖြစ်စေ ပြုမူတုန့်ပြန်တတ်သည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါ သည်
၆၂	ကျွန်ုပ်နှင့် ပေါင်းသင်းဆက်ဆံနေသော လူများ၏ အထင်ကြီး လေးစားမှုကို ရလို၍ ကျွန်ုပ်၏အပြုအမူများကို ထိန်းချုပ်နိုင်စွမ်း ရှိသည်။		
၆၃	ကျွန်ုပ်သည် စကားပြောဆိုရာတွင် ပြုံးပြုံးရယ်ရယ်ဖြင့် ပြောတတ်သည်။		
၆၄	ကျွန်ုပ်၏ ထင်မြင်ယူဆချက်များကို မိတ်ဆွေ၏ နားလည်နိုင်စွမ်း ပေါ်မူတည်၍ ရှင်းပြလေ့ရှိသည်။		
၆၅	ကျွန်ုပ်သည် မိတ်ဆွေပြောဆိုသော စကားနှင့် အပြုအမူများအပေါ် အမြဲခေါင်းငြိမ့်၍ တုန့်ပြန်လေ့ရှိသည်။		
၆၆	ကျွန်ုပ်၏အပြုအမူများကို သူတစ်ပါးက မည်သို့တုန့်ပြန်မည်ကို ကြိုတင် ခန့်မှန်းနိုင်သည်။		
၆၇	အခြားသူများသည် ကျွန်ုပ်အား အကြောင်းအရင်းကို ရှင်းပြခွင့် မပေးဘဲ ကျွန်ုပ်အပေါ်တွင် စိတ်ဆိုးကြသည်။		
၆၈	ကျွန်ုပ်သည် တစ်စုံတစ်ယောက်ကို မနှစ်မြို့သည့်အခါ တခဏမျှ ထိုသူ၏နေရာတွင် ဝင်၍နေကြည့်နိုင်ရန် ကြိုးစားသည်။		
၆၉	ကျွန်ုပ်သည် နှလုံးသား နူးညံ့သော လူတစ်ယောက်ဖြစ်သည်။		
၇၀	အရေးအပေါ်အခြေအနေများတွင် ကျွန်ုပ်၏စိတ်ကို ထိန်းချုပ်ရန် ခက်ခဲလှသည်။		
၇၁	ကျွန်ုပ်သည် အငြင်းပွားစေနိုင်သည့် အရာမှန်သမျှကို ဖြစ်သည့်နည်းဖြင့် ရှောင်ရှားလိုသည်။		
၇၂	အခြားသူများနှင့် စကားပြောသည့်အခါ စိတ်တင်းကြပ်မှုကို ခံစားရသည်။		
၇၃	မိတ်ဆွေ၏ မျက်နှာအမူအယာပြောင်းလဲမှုကို သတိထားမိလျှင် ကျွန်ုပ်သည် စကားဖြင့်တုန့်ပြန်ပြောဆိုတတ်သည်။		
၇၄	ကျွန်ုပ်၏အမူအယာ အပြောအဆိုများသည် လက်ရှိအခြေအနေနှင့် ကိုက်ညီမှုမရှိဟု ခံစားရသည့်အခါ ပြောင်းလဲရန် ဝန်မလေးပါ။		

152

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါ သည်
၇၅	ကျွန်ုပ်သည် တစ်ဖက်လူနှင့် မျက်လုံးချင်းဆုံအောင် ကြိုးစား လုပ်ယူလေ့ရှိသည်။		
၇၆	ကျွန်ုပ်သည် ညွှန်ကြားချက်များနှင့် ယူဆချက်များကို ဒွိဟမဖြစ်စေဘဲ ရှင်းရှင်းလင်းလင်း ပြတ်ပြတ်သားသား ဖော်ပြတတ်သည်။		
၇၇	ကျွန်ုပ်သည် မိတ်ဆွေက စကားပြောဆိုနေစဉ်တွင် ကြားဖြတ်၍ ပြောဆိုခြင်းမျိုး မပြုလုပ်ပါ။		
၇၈	ကျွန်ုပ်သည် စကားပြောရမည့် ခေါင်းစဉ်နှင့်အကြောင်းအရာ ကောင်းကို ရှာတွေ့ရန် ခက်ခဲလှသည်။		
၇၉	ကျွန်ုပ်သည် အခြားသူများ၏ မျက်နှာအမူအယာနှင့် ကိုယ်အမူအယာများကို ကြည့်ရှု့ဖြင့် ၎င်းတို့၏ ဆိုလိုချက်ကို နားလည်နိုင်သည်။		
၈၀	ကျွန်ုပ်၏ လုပ်ရပ်အပေါ် အခြားသူများ၏ တုန့်ပြန်မှုများက ကျွန်ုပ်အား မကြာခဏ အံ့အားသင့်စေသည်။		
၈၁	တစ်စုံတစ်ယောက်အား မဝေဖန်ခင် ထိုသူ၏နေရာတွင် ဝင်၍ခံစားကြည့်ရန် ကြိုးစားလေ့ရှိသည်။		
၈၂	အရေးပေါ်အခြေအနေတစ်ခုတွင် အလွန်အမင်း အကူအညီ လိုအပ်နေသူများအားမြင်လျှင် ကျွန်ုပ်ကိုယ်တိုင်က စိတ်ယိမ်းယိုင် ပြို့လဲ သွားပါသည်။		
၈၃	ကျွန်ုပ်သည် အခြားသူများနှင့် အငြင်းပွားမှုကို ဖြေရှင်း၍ ပြန်လည် အဆင်ပြေချင်သည်။		
၈၄	အခြားသူများအား ကူညီပံ့ပိုးပေးခြင်းသည် အကောင်းဆုံးသော လုပ်ရပ်ဟု ထင်မြင်မိသည်။		
၈၅	ကျွန်ုပ်သည် မိတ်ဆွေ၏ မျက်နှာအမူအယာ ပြောင်းလဲမှုကို သတိထား မိသည့်အခါ ထိုသူများကို မတုန့်ပြန်ဘဲ ကြည့်နေလိုက်သည်။		
၈၆	မိတ်ဆွေ၏ အမြင်အပေါ် တစ်စိတ်တစ်ပိုင်း(သို့)အပြည့်အဝ လက်ခံကြောင်းကို သင့်လျော်သည့် အမူအယာဖြင့် ဖော်ပြလေ့ ရှိသည်။		

153

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါ သည်
၈၇	အငြင်းပွားနေစဉ် အခြားသူများနှင့်မိမိကြား ရင်းနှီးမှုပိုလာသည်ဟု ခံစား ရသည်။		
၈၈	သူတစ်ပါးက အကူအညီလိုအပ်နေမှန်းသိသော်လည်း ကျွန်ုပ်သည် အနည်းအကျဉ်းသာ ကူညီလိုစိတ်ရှိသည်။		
၈၉	ကျွန်ုပ်သည်မိတ်ဆွေ၏ မျက်နှာအမူအယာပြောင်းလဲမှု ပေါ်မူတည် ၍မိမိဘက်မှ ထုတ်ဖော်၊ ပြောဆို ဆောင်ရွက်ပေးသည်။		
၉၀	ကျွန်ုပ်သည် အကြောင်းအရာ အချက်အလက်များရယူရန် အခြားသူ၏ မျက်နှာကို သေချာကြည့်၍ အကဲခတ်တတ်သည်။		
၉၁	ကျွန်ုပ်သည် မိတ်ဆွေ၏ အတွေးအခေါ်များကို နားလည်ကြောင်း ပြပြီးမှသာ ကျွန်ုပ်၏ ကိုယ်ပိုင်စိတ်ကူးကို ဖော်ပြတတ်သည်။		
၉၂	ကျွန်ုပ်သည် မိတ်ဆွေကစကားပြောဆိုပြီး ၅ စက္ကန့်အတွင်း ပြုံးပြခြင်း (သို့မဟုတ်) မျက်မှောင်ကြုတ်ခြင်းများကို ပြုလုပ် တတ်သည်။		
၉၃	မိမိသဘောထားနှင့် တိုက်ဆိုင်မှုမရှိလျှင်တောင် မိတ်ဆွေ၏ သဘောထားကို လက်ခံပေးလေ့ရှိသည်။		
၉၄	အငြင်းပွားနေစဉ်အချိန်အတွင်းတွင် ကျွန်ုပ်သည် တဖက်သားအား စိတ်ကသိကအောက်ဖြစ်စေရန် တမင်တကာပြုလုပ်တတ်သည်။		
၉၅	တစ်ဖက်လူက မျက်လုံးခြင်းဆုံ၍စကားပြောဆိုလျှင် ကျွန်ုပ်သည် လည်းထိုသူ၏မျက်နှာ(သို့မဟုတ်)မျက်လုံးကိုကြည့်၍ ပြောသည်။		
၉၆	ကျွန်ုပ်သည် မိတ်ဆွေ၏ အကြံပြုချက်နှင့် အတွေးအခေါ်များကို နားလည်သဘောပေါက်ကြောင်း ပြပြီးမှသာလျှင် ဆုံးဖြတ်ချက်ချ တတ်သည်။		
၉၇	ကျွန်ုပ်စကားပြောနေစဉ် မိတ်ဆွေက ဝင်ရောက်ပြောဆိုသောအခါ ကျွန်ုပ်က ခေတ္တရပ်ပေးလေ့ရှိသည်။		
၉၈	ကျွန်ုပ်သည် မိတ်ဆွေ၏ ခြေဟန်လက်ဟန် အမူအယာပြောင်းလဲမှု ပေါ်မူတည်၍ အလိုက်သင့် ပြုမူတုန့်ပြန် လေ့ရှိသည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါ သည်
၉၉	ကျွန်ုပ်သည် အငြင်းအခုံဖြစ်သည့်အခါ အခြားသူတို့၏ စိတ်ခံစားချက်ကို မထိခိုက်စေရန် အထူးဂရုစိုက်လေ့ ရှိသည်။		

Sources of Items:

Dimensions	Items No.	Total Items
Social Sensitivity	1, 14, 27, 38(R), 50, 61, 73, 85, 89, 92, 95, 98	12
Self-Regulation	2(R), 15, 39, 51(R), 62, 74	6
Expressivity	3, 16, 28, 40, 52, 63, 75, 90	8
Assertiveness	4, 17, 29, 41, 64, 76, 91, 96	8
Acceptance	5, 18, 30, 42, 53, 65, 77, 86, 93, 97	10
Social Skill	6(R), 19, 31, 43(R), 54(R), 78(R)	6
Social Information Process	7, 20, 32, 44, 66, 79	6
Social Awareness	8(R), 21(R), 45(R), 55(R), 67(R), 80(R)	6
Perspective Taking	9(R), 22, 33, 46(R), 56, 68, 81	7
Empathic Concern	10, 23(R), 34, 47(R), 57(R), 69	6
Personal Distress	11, 24, 35, 58(R), 70, 82	6
Conflict	12(R), 25, 36(R), 48, 59(R), 71, 83, 87, 94(R), 99	10
Closeness	13, 26, 37(R), 49, 60(R), 72(R), 84, 88(R)	8
Total Items		99

Note: (R) denotes item to be scored in reverse fashion

Social Intelligence Scale (25 items)

ဆရာ၊ ဆရာမများ၏ သဘောထားနှင့် ကိုက်ညီသောအဖြေကို အမှန်ခြစ်(✔)၍ဖော်ပြပါ။

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါ သည်
၁	ကျွန်ုပ်သည် အခြားသူများ၏ အပြုအမူကို ကြိုတင်ခန့်မှန်း တတ်သည်။		
၂	ကျွန်ုပ်သည် အခြားသူများ၏ အတွေ့အကြုံကိုမေးမြန်းရန် သင့်တော်သော အချိန်ကောင်းကိုသိသည်။		
၃	ကျွန်ုပ်သည် ပထမဆုံးတွေ့ဆုံရသောသူများနှင့် လူမှုပတ်ဝန်းကျင် တွင်လိုက်လျောညီထွေနေထိုင်နိုင်သည်။		
၄	မိမိနှင့် ရင်းနှီးသောသူများ၏ လျှို့ဝှက်ချက်ကို ထိန်းပေးရန် လိုအပ်သည်ဟု ခံစားရသည်။		
၅	ကျွန်ုပ်သည် လူမှုပတ်ဝန်းကျင်အသစ်သို့ ရောက်ရှိသွားသောအခါ နှင့် မရင်းနှီးသော သူစိမ်းများနှင့် စတင်တွေ့ဆုံသည့်အခါများတွင် အဆင်ပြေစွာ နေတတ်သည်။		
၆	ကျွန်ုပ်သည် အခြားသူများ၏ခံစားချက်ကိုနားလည်သည်။		
၇	မိမိရောက်ရှိနေသော မည့်သည့်အခြေအနေမျိုးတွင်မဆို လိုအပ်ချက်နှင့် အံဝင်ခွင်ကျဖြစ်စေရန် ကျွန်ုပ်၏အပြုအမူများကို ညှိယူနေထိုင် တတ်သည်။		
၈	အခြားသူများနှင့် အဆင်ပြေစွာ ဆက်ဆံနေထိုင်ရန်မှာ ကျွန်ုပ်အတွက် ခက်ခဲ လှပါသည်။		
၉	ကျွန်ုပ်သည် အကြောင်းအရာ အချက်အလက်များရယူရန် အခြားသူ၏ မျက်နှာကို သေချာကြည့်၍ အကဲခတ်တတ်သည်။		
၁၀	ကျွန်ုပ်သည် အခြားသူများ၏ ဖြစ်ချင်သောဆန္ဒကိုနားလည်သည်။		
၁၁	မိတ်ဆွေက ကျွန်ုပ်အပေါ် ဂရုဏာစိတ်ရှိ၊မရှိကို ဖျက်ခံ ကြည့်လိုက်ရုံဖြင့် သိသည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါ သည်
၁၂	အခြားသူများ အကြောင်းကို ကောင်းကောင်းသိနားလည်ရန် ကျွန်ုပ်အတွက် အချိန်များစွာယူရသည်။		
၁၃	အခြားသူများ၏ အပြုအမူသည် ကျွန်ုပ်အား မကြာခဏ အံ့အားသင့်စေသည်။		
၁၄	တစ်စုံတစ်ယောက်က ကျွန်ုပ်အား စိတ်ဆိုးနေသောအခါ ထိုသူစိတ်ဆိုး ရသောအကြောင်းအရင်းကို နားမလည်ပါ။		
၁၅	ကျွန်ုပ်၏အပြုအမူများကို သူတစ်ပါးက မည်သို့တုန့်ပြန်မည်ကို ကြိုတင် ခန့်မှန်းနိုင်သည်။		
၁၆	ကျွန်ုပ်ကိုယ်တိုင် သတိမထားမိဘဲ အခြားသူများကို မကြာခဏ ထိခိုက်အောင် ပြုလုပ်တတ်သည်။		
၁၇	ကျွန်ုပ်သည် အခြားသူများ၏ မျက်နှာအမူအယာနှင့် ကိုယ်အမူအယာများကို ကြည့်ရှုဖြင့် ၎င်းတို့၏ ဆိုလိုချက်ကို နားလည်နိုင်သည်။		
၁၈	ကျွန်ုပ်သည် မိတ်ဆွေက စကားပြောဆိုနေစဉ်တွင် ကြားဖြတ်၍ ပြောဆိုခြင်းမျိုး မပြုလုပ်ပါ။		
၁၉	လူတို့၏ အပြုအမူကို ကြိုတင်ခန့်မှန်း၍ မရနိုင်ကြောင်း ကျွန်ုပ်သိသည်။		
၂၀	ကျွန်ုပ်၏ လုပ်ရပ်အပေါ် အခြားသူများ၏ တုန့်ပြန်မှုများက ကျွန်ုပ်အား မကြာခဏ အံ့အားသင့်စေသည်။		
၂၁	မိတ်ဆွေ၏ အမြင်အပေါ် တစ်စိတ်တစ်ပိုင်း(သို့)အပြည့်အဝ လက်ခံကြောင်းကို သင့်လျော်သည့် အမူအယာဖြင့် ဖော်ပြလေ့ ရှိသည်။		
၂၂	သူတစ်ပါးက အကူအညီလိုအပ်နေမှန်းသိသော်လည်း ကျွန်ုပ်သည် အနည်းအကျဉ်းသာ ကူညီလိုစိတ်ရှိသည်။		
၂၃	ကျွန်ုပ်သည် အခြားသူများနှင့် အငြင်းပွားရသည့် အခါတွင် အကြောင်း အရင်းကို နားလည်သဘောပေါက်တတ်ပါသည်။		

စဉ်	အကြောင်းအရာ	သဘော မတူပါ	သဘော တူပါ သည်
၂၄	ကျွန်ုပ်သည် မိတ်ဆွေ၏ စကားအပေါ် ချစ်ခင်နှစ်လိုဖွယ် တုန့်ပြန် ပြောဆို လေ့ရှိသည်။		
၂၅	ကျွန်ုပ်သည်မိတ်ဆွေ၏အကြံပြုချက်နှင့်အတွေးအခေါ်များကို နားလည် သဘောပေါက်ကြောင်း ပြပြီးမှသာလျှင် ဆုံးဖြတ်ချက်ချတတ်သည်။		

Sources of Items:

Dimensions	Items No.	Total Items
Social Information Process	1, 2, 6, 10, 12(R), 14(R), 15, 19(R), 23	9
Social Awareness	9, 11, 13(R), 16(R), 17, 20(R)	6
Acceptance	4, 18, 21, 22(R), 24, 25	6
Social Skill	3, 5, 7, 8(R)	4
Total Items		25

Note: (R) denotes item to be scored in reverse fashion

APPENDIX E

Job Performance Questionnaire (100 items)

ဆရာ၊ ဆရာမများ၏ သဘောထားနှင့်ကိုက်ညီသော အဖြေကို အမှန်ခြစ် (✔) ၍ဖော်ပြပါ

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၁	စာသင်ခန်းတွင်း၌ဖြစ်စေ စာသင်ခန်းပြင်ပ၌ တွင်ဖြစ်စေ ကျောင်းသားများ၏ သင်ယူလေ့လာမှုကို အထောက် အကူပြုနိုင်မည့် ပတ်ဝန်းကျင်ကောင်း တစ်ခုကို ဖန်တီးပေးသည်။				
၂	သင်ခန်းစာတစ်ခု ပြီးဆုံးချိန်၌ ပေါက်မြောက်အောင်မြင်ရမည့် သင်ပြမှု ဦးတည်ချက်များကို ချမှတ်ထားပါသည်။				
၃	ကျောင်းသားများ သင်ခန်းစာကိုနားလည်ကြောင်း သေချာစေရန် အတွက် လေ့ကျင့်ခန်းများကို ပုံမှန်လေ့ကျင့်ပေး ပါသည်။				
၄	ကျွန်ုပ်၏ အားလပ်ချိန်အများစုကို ကျောင်းသားများအား နှစ်သိမ့် ဆွေးနွေး အကြံပေးမှုများ ပြုလုပ်ရန် မြှုပ်နှံထားပါသည်။				
၅	ကျွန်ုပ်သည် စာသင်ကြားခြင်းအပြင် ကျောင်းသားများ၏ အခြားမည်သည့် ပြသနာများကိုမဆို ကူညီဖြေရှင်းပေး တတ် သည်။				
၆	သင်ခန်းစာ သင်ကြားနေစဉ် ကျောင်းသားများ၏ ပူးပေါင်း ဆောင်ရွက်မှု ကြောင့်စာသင်ချိန်ကို အထိရောက်ဆုံး အသုံးပြုနိုင်ပါသည်။				
၇	ကျောင်းသားများ၏ လုပ်ဆောင်ချက်များအပေါ် အပြုသဘော ဆောင်သည့် လမ်းညွှန်အကြံပြုချက်များပေးနိုင်ရန် အမျိုးမျိုးသော နည်းဗျူဟာများကို သုံး၍ သိမ်မွေ့စွာကိုင်တွယ်သည်။				
၈	ကျွန်ုပ်သည် စာမသင်ကြားမီတစ်ရက်အလိုတွင် သင်ကြားမှု ပုံစံငယ်များ ကို ကြို့တင်ပြင်ဆင်တတ်သည်။				
၉	ကျောင်းသားများ အတန်းတွင်း၌ တက်ကြွစွာ ပါဝင်ဆွေးနွေး စေရေးအတွက် သင်ခန်းစာများတွင် ဉာဏ်စမ်းမေးခွန်း များမေးမြန်း၍ သင်ကြားပါသည်။				
၁၀	ကျွန်ုပ်သည် ထိရောက်သော သင်ကြားသင်ယူမှုဖြစ်စေရန် လုံလောက်သော ရေးဖြေနှင့်လက်တွေ့ လေ့ကျင့်ခန်းများကို ချက်ချင်း ပြုလုပ်ခိုင်းသည်။				

159

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၁၁	ကျွန်ုပ်သည် လုပ်ဖော်ကိုင်ဖက်များနှင့် ရင်းနှီးခင်မင်စွာ နေရသည်ကို နှစ်သက်ပျော်ရွှင်ပါသည်။				
၁၂	အတန်းတွင်း၌ရှိသော ကျောင်းသားတစ်ဦးဦးသည် သင်ခန်းစာကို စိတ်မဝင်စားဘဲ အချိန်ဖြုန်းတီးနေလျှင် အလွန်သိသာပါသည်။				
၁၃	မိမိ၏ သင်ကြားမှုတိုးတက်စေရန် နှင့် ကျောင်းသားများအား မငြီးငွေ့စေရန် ကျွန်ုပ်သည် သင်ကြားနည်း အမျိုးမျိုးကို အသုံးပြုပါသည်။				
၁၄	ဌာနမှူးသည် ကျွန်ုပ်တို့၏ Lesson Plan နှင့် လုပ်ငန်းအချိန်ဇယားများကို စာသင်ချိန် အချိန်ဇယားများကို ကြီးကြပ်ပေးသည်။				
၁၅	ကျောင်းသားများဘာသာရပ်တွင် အကောင်းဆုံး ထူးချွန်စေရန် အတွက် အချို့သော သင်ခန်းစာများကို အပြန်အလှန် အချေအတင် ဆွေးနွေးခိုင်းပါသည်။				
၁၆	ကျွန်ုပ်သည် ဌာနမှူးနှင့်ဆွေးနွေးအတည်ပြုချမှတ်ထားသော လုပ်ငန်း အစီအစဉ်များကို ဌာနမှူးအပြင် အခြားလုပ်ဖော်ကိုင်ဖက် များနှင့်ပါ ပူးပေါင်းလုပ်ဆောင်ပါသည်။				
၁၇	ကျွန်ုပ်သည် မည်သည့်အလုပ်ကိုမဆို လုပ်ဖော်ကိုင်ဖက်များ နှင့်အတူ ပူးပေါင်းလုပ်ဆောင်သည်။				
၁၈	ကျွန်ုပ်က စောင့်ပြီးကြည့်မနေလျှင်တောင်မှ ကျောင်းသားများ သည် သူတို့အလုပ်ကို သူတို့အတန်းထဲ၌ လုပ်နေကြသည်။				
၁၉	ကျောင်းသားများ၏ ဖန်တီးနိုင်မှုစွမ်းရည် နှင့် ဝေဖန်ပိုင်းခြားနိုင်မှု စွမ်းရည်များ ဖွံ့ဖြိုးတိုးတက်အောင် လမ်းညွှန်ပေး နိုင်ရေးအတွက် သင်ကြားရေးတွင် စည်းကမ်းထိန်းသိမ်းထားပါသည်။				
၂၀	သင်ကြားပြီးသော သင်ခန်းစာများ ပေါက်မြောက်အောင်မြင်မှု ရှိမရှိကို အကဲဖြတ်စစ်ဆေးပါသည်။				
၂၁	ချမှတ်ထားသော ရည်ရွယ်ချက် ပေါက်မြောက် အောင်မြင် ရန်အတွက် စာသင်နှစ်အဆုံးတွင် စာမေးပွဲများ စစ်ဆေးပါသည်။				

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၂၂	ကျွန်ုပ်သည် သင်ကြားရေးထိရောက်စေရန်အတွက် လိုအပ်သော ပြန်လည်ကုစားသင်ကြားခြင်းကို စေတနာအလျောက် ပြုလုပ်လေ့ ရှိသည်။				
၂၃	ကျွန်ုပ်၏ စာသင်ခန်းနှင့်ပတ်သက်၍ ဖြေရှင်းစရာ အကြောင်းအရာ များကို လုပ်ဖော်ကိုင်ဖက်များနှင့် ဆွေးနွေး တိုင်ပင် တတ်သည်။				
၂၄	အတန်းထဲတွင် ကျောင်းသားများအား သူတို့၏မတူညီသော အမြင်များကို ငြင်းခုံဆွေးနွေးခွင့်ပြုထားပါသည်။				
၂၅	ကျွန်ုပ်အတန်းထဲရှိ ကျောင်းသားအများစုသည် အမှတ်ကောင်း ကြသည်။				
၂၆	ကျွန်ုပ်သည် ကျောင်းသားများကို မည်သို့ကိုင်တွယ် သင်ကြား ရမည်ကို သိသည်။				
၂၇	ကျွန်ုပ်သည် ကျယ်ပြန့်စွာခြုံငုံမိပြီး ပကတိအရှိကိုပေါ်လွင်စေသော စစ်ဆေးအကဲဖြတ်ခြင်းများကိုသာအသုံးပြုသည်။				
၂၈	ကျွန်ုပ်သည် စာသင်ကြားခြင်းအပြင် အခြားတာဝန်များကိုပါ အပြည့်အဝ လုပ်ဆောင်ပေးသည်။				
၂၉	ကျွန်ုပ်သည် ကျောင်းသားများအား လူမှုရေးလုပ်ငန်းများတွင် ပါဝင်ရန် တိုက်တွန်းလှုံ့ဆော် ပေးသည်။				
၃၀	သင်ယူမှုဦးတည်ချက်များအရ လိုအပ်လျှင် စာသင်ခုံများကို ပြောင်းလဲ နေရာချထားပါသည်။				
၃၁	ကျွန်ုပ်သည် ကျောင်းသားတိုင်းအား ၎င်းတို့၏ အရည်အချင်းပေါ်မူတည်၍ သင်ကြားပို့ချပေးပါသည်။				
၃၂	ကျွန်ုပ်သည် ကျောင်းသားများငြိမ်သက်ချိန်ထံ စောင့်ပြီးမှ သင်ခန်းစာ တစ်ခုကို စတင်သင်ကြားပါသည်။				
၃၃	ကျောင်းသားများကို ပေးအပ်ထားသော လုပ်ငန်းပေး ဆောင်ရွက်ခြင်း (Assignments) ကိုပုံမှန်စစ်ဆေးလေ့ရှိပါသည်။				
၃၄	ကျွန်ုပ်သည် စာသင်ကြားရေးကို ထိခိုက်စေမည့် မည့်သည့် အလုပ်ကိုမှ မပြုလုပ်ပါ။				

161

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၃၅	ကျွန်ုပ်သည် ဌာနမှူးအား ကျောင်း၏ပြဿနာများကိုဖြေရှင်းရာတွင် ကူညီပေးသည်။				
၃၆	စာသင်ခန်းအတွင်းတွင် ကျောင်းသားတစ်ဦးစီနှင့် ပတ်သက်သော ပြဿနာများ၊ အခက်အခဲများကို ပြေလည်အောင် ကိုင်တွယ်ဖြေရှင်း ပေးနိုင်ပါသည်။				
၃၇	ကျွန်ုပ်သည် ခက်ခဲသော သင်ခန်းစာများကိုပင် အလွယ်တကူ သင်ကြားပေးနိုင်ပါသည်။				
၃၈	ကျွန်ုပ်၏ သင်ကြားရေးအောင်မြင်ရန်အတွက် လေ့ကျင့်ခန်းများကို ပြည့်စုံစွာ ရေးသားပြင်ဆင်ပါသည်။				
၃၉	ကျောင်းသားများ သင်ခန်းစာကိုနားလည်မှု ရှိ၊ မရှိ သိရှိနိုင်စေရန် သင်ယူနေစဉ်အချိန်အတွင်း မေးခွန်းများ မေးမြန်းပါသည်။				
၄၀	အိမ်တွင်းရေးကိစ္စများကြောင့် ကျွန်ုပ်၏ သင်ကြားရေးတာဝန်ကို အနှောက်အယှက်ဖြစ်စေအောင် မပြုလုပ်ပါ။				
၄၁	ကျွန်ုပ်သည် ကျောင်းသားများ၏ အမြင်ကို ကြိုးစား နားထောင်ပေးသည်။				
၄၂	စာသင်ခန်းတွင် စည်းမျဉ်းစည်းကမ်းများနှင့် ဆုံးဖြတ်ချက်များ ချမှတ်ရာတွင် ကျောင်းသားကျောင်းသူများအား ပါဝင်စေပါသည်။				
၄၃	ကျွန်ုပ်သည် ကျောင်းသားများမေးသော မေးခွန်းတိုင်းကို မည်သည့် အဆင့်တွင်ဖြစ်စေ ကျေနပ်မှုရစေရန် ကြိုးစား၍ ဖြေပေးသည်။				
၄၄	ကျွန်ုပ်သည်စာသင်ခန်းထဲ့ စည်းကမ်းကိုကောင်းကောင်း ထိန်းသိမ်း ထားနိုင်သည်။				
၄၅	ကျွန်ုပ်သည် ကျောင်းသားများ၏ သင်ယူနိုင်စွမ်းကို ဆန်းစစ် နိုင်ရန်အတွက် Tutorial များ စစ်ဆေးခြင်းကို ဆောင်ရွက်ပါသည်။				
၄၆	တစ်စုံတစ်ယောက်က ကျွန်ုပ်၏တာဝန်များကို ပြောင်းလဲ လျှင်တောင်မှ ဖြစ်မြောက်အောင် ညှိနှိုင်းဆောင်ရွက်သည်။				
၄၇	ကောင်းမွန်သော ဆရာတပည့်ဆက်ဆံရေးသည် ကျွန်ုပ်၏ ပထမ ဦးစားပေးဖြစ်သည်။				

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၄၈	ကျောင်းသားများ မိမိကိုယ်မိမိ ယုံကြည်မှုကို ရရှိသွားစေသော သင်ယူမှုပတ်ဝန်းကျင်ကို ဖန်တီးပေးနိုင်ပါသည်။				
၄၉	ကျွန်ုပ်သည် အဖြေလွှာများကို စစ်ဆေးရာတွင် ဘက်လိုက်မှု မရှိဘဲ စစ်ဆေးသည်။				
၅၀	ကျွန်ုပ် သင်ကြားသမျှ သင်ခန်းစာအားလုံးအတွက် ကျွန်ုပ်ကိုယ်တိုင် မှတ်တမ်းမှတ်ရာများကို ပြုစုထားပါသည်။				
၅၁	ကျောင်းသားများ သင်ခန်းစာကိုကြိုးစားသင်ယူလုပ်ဆောင် နေကြချိန်တွင် စောင့်ကြည့်စစ်ဆေး၍ ကြီးကြပ်ပေးသည်။				
၅၂	ကျွန်ုပ်သည် ကျောင်းကိုပုံမှန် လာပါသည်။				
၅၃	ကျွန်ုပ်သည်ကျောင်းသားများအား ၎င်းတို့အတွက် အကျိုးရှိမည့် အကြောင်း ကိစ္စများနှင့် ဆုံးဖြတ်ချက်များကို ချတတ်စေရန် လိုအပ်သည် များကို ဖြည့်ဆည်းပေးသည်။				
၅၄	ကျောင်းသားများ လေ့လာသင်ယူလိုစိတ် ဖြစ်ပေါ်စေရန် လှုံ့ဆော် ပေးပါသည်။				
၅၅	ကျွန်ုပ်သည် ကျောင်းသားများ၏ သင်ယူလုပ်ဆောင်မှုနှင့် တိုးတက် မှုကိုသူတို့ကိုယ်တိုင် ရှင်းရှင်းလင်းလင်း သဘောပေါက်စေရန် သင်ခန်းစာများကို ပြန်လည်လေ့ကျင့်မှုတွင် အကူအညီ ပေးပါသည်။				
၅၆	သင်ခန်းစာများကို ကျောင်းသားများကိုယ်တိုင် လေ့လာ သင်ယူနိုင်စေရန် အချိန်လုံလောက်စွာပေးပါသည်။				
၅၇	ကျောင်းသားများအား သူတို့သင်ယူလေ့လာပြီးသမျှကို ပြန်လည် အကဲဖြတ် သုံးသပ်စေသည်။				
၅၈	ကျွန်ုပ်သည် စာသင်ချိန်ကို အချိန်အတိအကျ ဝင်ပါသည်။				
၅၉	ကျွန်ုပ်သည် လူငယ်များနှင့် အလုပ်တွဲလုပ်ရသည်ကို ပျော်ရွှင်ပါသည်။				
၆၀	ကျောင်းသားများ၏ စိတ်ဝင်စားမှုကို ရရှိရန် တိတ်ဆိတ် ငြိမ်သက်သော စာသင်ခန်းတစ်ခုကို ပြင်ဆင်ဖန်တီး ပေးနိုင်ပါသည်။				

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၆၁	ကျွန်ုပ်သည် သင်ခန်းစာနှင့်ပတ်သက်ပြီး ကျောင်းသားများအား ခက်ခဲမှုအဆင့်မတူညီသော မေးခွန်းများကို မေးလေ့ရှိသည်။				
၆၂	နေ့စဉ် လုပ်ရိုးလုပ်စဉ်လုပ်ငန်းများကို အစီအစဉ်တကျ ရေးဆွဲပြီး ဆောင်ရွက်ပါသည်။				
၆၃	စည်းဆက်မပြတ်အကဲဖြတ်မှုသည် မရှိမဖြစ်လိုအပ်ကြောင်း သိရှိနားလည် ပါသည်။				
၆၄	ကျွန်ုပ်၏စာသင်ချိန်တွင် သင်ကြားရေးနှင့် မသက်ဆိုင်သော လုပ်ငန်းများကို လုပ်လေ့မရှိပါ။				
၆၅	ကျွန်ုပ်သည် တပည့်များအား စာသင်ကြားရာတွင် သင့်တော်သလို ဟာသလေးများထည့်ပြောတတ်သည်။				
၆၆	ကျွန်ုပ်သည် သင်ခန်းစာကို သင်ကြားရာတွင် အဖွဲ့လိုက် ဆွေးနွေးခြင်းနှင့် နှုတ်ဖြင့်တင်ပြဆွေးနွေးခြင်း တို့ကဲ့သို့ အမျိုးမျိုး သောအတန်းတွင်း လှုပ်ရှားမှုများကို စီစဉ်ပေး လေ့ရှိသည်။				
၆၇	ကျောင်းသားများ၏ စိတ်ဝင်စားမှုကို ဆွဲဆောင်နိုင်ရန် စာသင်ခန်းကို စနစ်တကျ ပြင်ဆင်ထားပါသည်။				
၆၈	အကဲဖြတ်မှုနည်းလမ်းများ၏ ထူးခြားချက်၊ အသုံးဝင်မှု၊ အားသာချက်၊ အားနည်းချက်များကို သိရှိနားလည် ပါသည်။				
၆၉	ကျွန်ုပ်လုပ်ဆောင်ရမည့် လုပ်ငန်းများကို အချိန်မီ ပြီးစီးအောင် လုပ်ဆောင်ပါသည်။				
၇၀	ကျွန်ုပ်သည် မိမိ၏ ကျောင်းသားများအကြောင်းသိရန် ကြိုးစားသည်။				
၇၁	ကျွန်ုပ်သည် သင်ခန်းစာနှင့်ပတ်သက်ပြီး ကျောင်းသားများ ကိုယ်တိုင် တက်ကြွစွာစူးစမ်းလေ့လာစေ၍ ဗဟုသုတ ရှာဖွေမှု များတွင် ကျောင်းသားများနှင့်အတူ ပါဝင်ဆောင်ရွက်သည်။				
၇၂	သင်ကြားရာတွင် လိုအပ်သောသင်ထောက်ကူပစ္စည်း အမျိုးမျိုးကို ကြိုတင်ပြင်ဆင်ထားပါသည်။				
၇၃	ကျောင်းသားများ၏ တိုးတက်မှုကို မသင်ကြားမီ၊ သင်ကြား နေစဉ်နှင့် သင်ကြားပြီး အချိန်များတွင် အကဲဖြတ် စစ်ဆေးပါသည်။				

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၇၄	ကျွန်ုပ်သည် သင်ရိုးကို အချိန်မီ ပြီးအောင် သင်ကြားပါသည်။				
၇၅	ကျွန်ုပ်သည် တပည့်များနှင့် ပတ်သက်၍ ဘက်လိုက်မှုမရှိပါ။				
၇၆	ကျွန်ုပ်သည် သင်ကြားသော အကြောင်းအရာများကို ကျောင်းသားများ နားလည်မှုရှိမရှိကို သေချာစေရန်အတွက် မေးခွန်းများ မေးလေ့ရှိသည်။				
၇၇	ကျောင်းသားများကို အတန်းချိန်အကူးအပြောင်းတွင် စနစ်တကျရှိစေရန် စီစဉ်ထားပါသည်။				
၇၈	ကျွန်ုပ်သည် စာသင်ခန်းထဲတွင် စည်းကမ်းကို သေချာ ကိုင်တွယ်ပါသည်။				
၇၉	ကျွန်ုပ်သည် ကျောင်းသားတစ်ဦးချင်းဆီ၏ ကွဲပြားချက်ကို လက်ခံနားလည် ပါသည်။				
၈၀	ကျွန်ုပ်သည် သင်ခန်းစာတစ်ခုပြီးတိုင်း ကျောင်းသားများနှင့် ဆွေးနွေးခြင်း အနှစ်ချုပ်ခြင်း ပြုလုပ်လေ့ရှိသည်။				
၈၁	မိမိဘာသာရပ်နှင့်ဆိုင်သော ဂျာနယ်များ၊ ကျမ်းကိုးများ၊ သုတေသန စာစောင်များကို ဖတ်ရှုပါသည်။				
၈၂	ကျောင်းသားများအား တစ်ဦးချင်းဖြစ်စေ၊ အုပ်စုလိုက်ဖြစ်စေ အကဲဖြတ်စစ်ဆေးပါသည်။				
၈၃	ကျွန်ုပ်သင်ကြားနေသော ဘာသာရပ်နှင့် ပတ်သက်၍ နှံ့နှံ့စပ်စပ် သိရှိပါသည်။				
၈၄	ကျွန်ုပ်သည် ကျောင်းသားများအား စိတ်ဝင်စားဖွယ်ရာ ကောင်းသည့် အလုပ်များကို ခိုင်းလေ့ရှိသည်။				
၈၅	ကျွန်ုပ်သည် အမျိုးမျိုးသော အတန်းတွင်းလှုပ်ရှားမှုများနှင့် သင်ယူမှု အရင်းအမြစ်များကို အသုံးပြုသည်။				
၈၆	အလုပ်ရုံဆွေးနွေးပွဲများ၊ လုပ်ငန်းခွင်စည်းဝေးများ တက်ရောက်၍ လုပ်ဖော်ကိုင်ဖက်များနှင့် အယူအဆအတွေး အမြင်များကို အပြန်အလှန် ဆွေးနွေးညှိနှိုင်းခြင်းကို ပြုလုပ်ပါသည်။				
၈၇	ကျွန်ုပ်သည် တတ်နိုင်သမျှ ပျော်ရွှင်စရာကောင်းသော အကြောင်းအရာ များကို သင်ကြားပေးသည်။				

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၈၈	ကျောင်း၏ ပညာရေးနှင့် လူမှုရေးဆိုင်ရာ လှုပ်ရှားမှုများတွင် ပါဝင် ဆောင်ရွက်ပါသည်။				
၈၉	ကျွန်ုပ်သည် ကျောင်းသားများက မေးခွန်းမေးကြသည်ကို သဘောကျ ပါသည်။				
၉၀	မိမိ၏ လုပ်ဆောင်မှုရလဒ်များအပေါ် ပြန်လည်စဉ်းစားသုံးသပ်ပြီး ပိုမို တိုးတက်အောင် စီစဉ်ဆောင်ရွက်ပါသည်။				
၉၁	သင်ယူမှုတွင် အားနည်းသူများကို အချိန်ဈမီ ပြန်လည်ကုစား သင်ကြား ပေးပါသည်။				
၉၂	ဘာသာရပ်နှင့်ပတ်သက်၍ ကျယ်ပြန့်သော အမြင်များရရှိစေရန် အခြားတက္ကသိုလ်များနှင့် ဆက်သွယ်၍ အပြန်အလှန် Lecture ပေးခြင်း၊ အလုပ်ရုံဆွေးနွေးပွဲများ ကျင်းပခြင်းတို့ကို ပူးပေါင်းဆောင်ရွက်ပါသည်။				
၉၃	ကျွန်ုပ်သည် ကျောင်းသားများအား အလုပ်တစ်ခုကို ကောင်းကောင်း လုပ်ရန် အတွက် လိုအပ်သော အကူအညီများကို တတ်နိုင်သမျှ ထောက်ပံ့ပေးသည်။				
၉၄	ကျွန်ုပ်သည် ကျောင်းသားများအား ပုစ္ဆာများကို နည်းလမ်း အသစ်များဖြင့် ရှုမြင်တတ် ဖြေရှင်းတတ်စေရန် အားပေးသည်။				
၉၅	ကျွန်ုပ်၏ သင်ကြားမှု၊ သင်ယူမှု လုပ်ငန်းများတွင် ကျောင်းသားများ၏ ဆွေးနွေးတင်ပြချက်များအပေါ် အလေးပေး၍ ညှိနှိုင်းဆွေးနွေး ပေးပါသည်။				
၉၆	ကျွန်ုပ်သည် ကျောင်းသားများအား သူတို့၏အမှားများမှ သင်ခန်းစာ ယူနိုင်ရန် အားပေးသည်။				
၉၇	ဆရာဟူသော အသက်မွေးဝမ်းကျောင်းနှင့် ပတ်သက်၍ ချမှတ်ထားသော ဥပဒေ၊ ကိုယ့်ကျင့်တရား၊ ကျင့်ဝတ်များကို သိရှိနားလည်ထားပါသည်။				
၉၈	ကျွန်ုပ်သည် တတ်နိုင်သမျှ ကျောင်းသားများ၏ စူးစမ်းလိုစိတ်ကို လှုံ့ဆော်ပေးနိုင်သော ပစ္စည်းများကိုအသုံးပြုသည်။				
၉၉	ဆရာတစ်ယောက်၏ လုပ်ငန်းတာဝန်နှင့် လိုအပ်ချက်များကို သိရှိနားလည်ပါသည်။				

166

| ၁၀၀ | ကျောင်းသားများ၏ လေ့လာသင်ယူမှု နှင့် တိုးတက်မှုအပေါ် ဆရာ၊ ဆရာမများ၏အပြုအမူများက လွှမ်းမိုးနေသည်ကို သိရှိ နားလည်ထား ပါသည်။ | | | | |

Sources of Items:

Dimensions	**Items No.**	**Total Items**
Teaching Skill	1, 7, 13, 19, 25, 31, 37, 43, 49, 55, 61, 66, 71, 76, 80, 85, 89, 94, 98	19
Planning and Preparation	2, 8, 14, 20, 26, 32, 38, 44, 50, 56, 62, 67, 72, 77	14
Assessment	3, 9, 15, 21, 27, 33, 39, 45, 51, 57, 63, 68, 73, 82, 91	15
Responsibility	4, 10, 16, 22, 28, 34, 40, 46, 52, 58, 64, 69, 74, 78, 81, 83, 86, 88, 90, 92, 95, 97, 99, 100	24
Interpersonal Relationship	5, 11, 17, 23, 29, 35, 41, 47, 53, 59, 65, 70, 75, 79, 84, 87, 93, 96	18
Classroom Environment	6, 12, 18, 24, 30, 36, 42, 48, 54, 60	10
Total Items		100

Note: (R) denotes item to be scored in reverse fashion

APPENDIX F

Teacher Educator Job Performance Questionnaire (87 items)

ဆရာ၊ ဆရာမများ၏ သဘောထားနှင့်ကိုက်ညီသော အဖြေကို အမှန်ခြစ် (✔) ၍ဖော်ပြပါ

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၁	ကျောင်းသားများ သင်ခန်းစာကိုနားလည်ကြောင်း သေချာစေရန် အတွက် လေ့ကျင့်ခန်းများကို ပုံမှန်လေ့ကျင့်ပေး ပါသည်။				
၂	ကျွန်ုပ်သည် စာသင်ကြားခြင်းအပြင် ကျောင်းသားများ၏ အခြားမည့်သည့် ပြဿနာများကိုမဆို ကူညီဖြေရှင်းပေး တတ် သည်။				
၃	သင်ခန်းစာ သင်ကြားနေစဉ် ကျောင်းသားများ၏ ပူးပေါင်း ဆောင်ရွက်မှု ကြောင့်စာသင်ချိန်ကို အထိရောက်ဆုံး အသုံးပြုနိုင်ပါသည်။				
၄	ကျောင်းသားများ၏ လုပ်ဆောင်ချက်များအပေါ် အပြုသဘော ဆောင်သည့် လမ်းညွှန်အကြံပြုချက်များပေးနိုင်ရန် အမျိုးမျိုး သောနည်းပျူဟာများကို သုံး၍ သိမ်မွေ့စွာကိုင်တွယ်သည်။				
၅	ကျောင်းသားများ အတန်းတွင်း၌ တက်ကြွစွာ ပါဝင်ဆွေးနွေး စေရေးအတွက် သင်ခန်းစာများတွင် ဉာဏ်စမ်းမေးခွန်း များမေးမြန်း၍ သင်ကြားပါသည်။				
၆	ကျွန်ုပ်သည် ထိရောက်သော သင်ကြားသင်ယူမှုဖြစ်စေရန် လုံလောက်သော ရေးဖြေနှင့်လက်တွေ့ လေ့ကျင့်ခန်းများကို ချက်ချင်း ပြုလုပ်ခိုင်းသည်။				
၇	ကျွန်ုပ်သည် လုပ်ဖော်ကိုင်ဖက်များနှင့် ရင်းနှီးခင်မင်စွာ နေရသည်ကို နှစ်သက်ပျော်ရွှင်ပါသည်။				
၈	မိမိ၏ သင်ကြားမှုတိုးတက်စေရန် နှင့် ကျောင်းသားများအား မြင်းဆွေစေရန် ကျွန်ုပ်သည် သင်ကြားနည်း အမျိုးမျိုးကို အသုံးပြုပါသည်။				
၉	ဌာနမှူးသည် ကျွန်ုပ်တို့၏ Lesson Plan နှင့် လုပ်ငန်းအချိန်ဇယားများကို စာသင်ချိန် အချိန်ဇယားများကို ကြီးကြပ်ပေးသည်။				

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၁၀	ကျောင်းသားများဘာသာရပ်တွင် အကောင်းဆုံး ထူးချွန်စေရန် အတွက် အချို့ဖွာသော သင်ခန်းစာများကို အပြန်အလှန် အချေအတင် ဆွေးနွေးခိုင်းပါသည်။				
၁၁	ကျွန်ုပ်သည် ဌာနမှူးနှင့်ဆွေးနွေးအတည်ပြုချမှတ်ထားသော လုပ်ငန်း အစီအစဉ်များကို ဌာနမှူးအပြင် အခြားလုပ်ဖော်ကိုင်ဖက် များနှင့်ပါ ပူးပေါင်းလုပ်ဆောင်ပါသည်။				
၁၂	ကျွန်ုပ်သည် မည်သည့်အလုပ်ကိုမဆို လုပ်ဖော်ကိုင်ဖက်များ နှင့်အတူ ပူးပေါင်းလုပ်ဆောင်သည်။				
၁၃	ကျောင်းသားများ၏ ဖန်တီးနိုင်မှုစွမ်းရည် နှင့် ဝေဖန်ပိုင်းခြားနိုင်မှု စွမ်းရည်များ ဖွံ့ဖြိုးတိုးတက်အောင် လမ်းညွှန်ပေး နိုင်ရေးအတွက် သင်ကြားရေးတွင် စည်းကမ်းထိန်းသိမ်းထားပါသည်။				
၁၄	သင်ကြားပြီးသော သင်ခန်းစာများ ပေါက်မြောက်အောင်မြင်မှု ရှိမရှိကို အကဲဖြတ်စစ်ဆေးပါသည်။				
၁၅	ချမှတ်ထားသော ရည်ရွယ်ချက် ပေါက်မြောက် အောင်မြင် ရန်အတွက် စာသင်နှစ်အဆုံးတွင် စာမေးပွဲများ စစ်ဆေးပါသည်။				
၁၆	ကျွန်ုပ်သည် သင်ကြားရေးထိရောက်စေရန်အတွက် လိုအပ်သော ပြန်လည်ကုစားသင်ကြားခြင်းကို စေတနာအလျောက် ပြုလုပ်လေ့ ရှိသည်။				
၁၇	ကျွန်ုပ်၏ စာသင်ခန်းနှင့်ပတ်သက်၍ ဖြေရှင်းစရာ အကြောင်းအရာ များကို လုပ်ဖော်ကိုင်ဖက်များနှင့် ဆွေးနွေး တိုင်ပင် တတ်သည်။				
၁၈	အတန်းထဲတွင် ကျောင်းသားများအား သူတို့၏မတူညီသော အမြင်များကို ငြင်းခုံဆွေးနွေးခွင့်ပြုထားပါသည်။				
၁၉	ကျွန်ုပ်သည် ကျောင်းသားများကို မည်သို့ကိုင်တွယ် သင်ကြား ရမည်ကို သိသည်။				
၂၀	ကျွန်ုပ်သည် ကျယ်ပြန့်စွာခြုံငုံမိပြီး ပကတိအရှိကိုပေါ်လွင်စေသော စစ်ဆေးအကဲဖြတ်ခြင်းများကိုသာအသုံးပြုသည်။				

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၂၁	ကျွန်ုပ်သည် စာသင်ကြားခြင်းအပြင် အခြားတာဝန်များကိုပါ အပြည့်အဝ လုပ်ဆောင်ပေးသည်။				
၂၂	ကျွန်ုပ်သည် ကျောင်းသားများအား လူမှုရေးလုပ်ငန်းများတွင် ပါဝင်ရန် တိုက်တွန်းလှုံ့ဆော် ပေးသည်။				
၂၃	သင်ယူမှုဦးတည်ချက်များအရ လိုအပ်လျှင် စာသင်ခုံများကို ပြောင်းလဲ နေရာချထားပါသည်။				
၂၄	ကျောင်းသားများကို ပေးအပ်ထားသော လုပ်ငန်းပေး ဆောင်ရွက်ခြင်း (Assignments) ကိုပုံမှန်စစ်ဆေးလေ့ရှိပါသည်။				
၂၅	ကျွန်ုပ်သည် စာသင်ကြားရေးကို ထိခိုက်စေမည့် မည်သည့် အလုပ်ကိုမျှ မပြုလုပ်ပါ။				
၂၆	စာသင်ခန်းအတွင်းတွင် ကျောင်းသားတစ်ဦးစီနှင့် ပတ်သက်သော ပြဿနာများ၊ အခက်အခဲများကို ပြေလည်အောင် ကိုင်တွယ်ဖြေရှင်း ပေးနိုင်ပါသည်။				
၂၇	ကျွန်ုပ်သည် ခက်ခဲသော သင်ခန်းစာများကိုပင် အလွယ်တကူ သင်ကြားပေးနိုင်ပါသည်။				
၂၈	ကျွန်ုပ်၏ သင်ကြားရေးအောင်မြင်ရန်အတွက် လေ့ကျင့်ခန်းများကို ပြည့်စုံစွာ ရေးသားပြင်ဆင်ပါသည်။				
၂၉	ကျောင်းသားများ သင်ခန်းစာကိုနားလည်မှု ရှိ၊ မရှိ သိရှိနိုင်စေရန် သင်ယူနေစဉ်အချိန်အတွင်း မေးခွန်းများ မေးမြန်းပါသည်။				
၃၀	အိမ်တွင်းရေးကိစ္စများကြောင့် ကျွန်ုပ်၏ သင်ကြားရေးတာဝန်ကို အနောက်အယှက်ဖြစ်စေအောင် မပြုလုပ်ပါ။				
၃၁	ကျွန်ုပ်သည် ကျောင်းသားများ၏ အမြင်ကို ကြိုးစား နားထောင်ပေးသည်။				
၃၂	ကျွန်ုပ်သည် ကျောင်းသားများမေးသော မေးခွန်းတိုင်းကို မည်သည့် အဆင့်တွင်ဖြစ်စေ ကျေနပ်မှုရစေရန် ကြိုးစား၍ ဖြေပေးသည်။				
၃၃	ကျွန်ုပ်သည်စာသင်ခန်းထဲ၌ စည်းကမ်းကိုကောင်းကောင်း ထိန်းသိမ်း ထားနိုင်သည်။				

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၃၄	ကျွန်ုပ်သည် ကျောင်းသားများ၏ သင်ယူနိုင်စွမ်းကို ဆန်းစစ် နိုင်ရန်အတွက် Tutorial များ စစ်ဆေးခြင်းကို ဆောင်ရွက်ပါသည်။				
၃၅	တစ်စုံတစ်ယောက်က ကျွန်ုပ်၏တာဝန်များကို ပြောင်းလဲ လျှင်တောင်မှ ဖြစ်မြောက်အောင် ညှိနိုင်းဆောင်ရွက်သည်။				
၃၆	ကောင်းမွန်သော ဆရာတပည့်ဆက်ဆံရေးသည် ကျွန်ုပ်၏ ပထမ ဦးစားပေးဖြစ်သည်။				
၃၇	ကျောင်းသားများ မိမိကိုယ်မိမိ ယုံကြည်မှုကို ရရှိသွားစေသော သင်ယူမှုပတ်ဝန်းကျင်ကို ဖန်တီးပေးနိုင်ပါသည်။				
၃၈	ကျွန်ုပ်သည် အဖြေလွှာများကို စစ်ဆေးရာတွင် ဘက်လိုက်မှု မရှိဘဲ စစ်ဆေးသည်။				
၃၉	ကျွန်ုပ် သင်ကြားသမျှ သင်ခန်းစာအားလုံးအတွက် ကျွန်ုပ်ကိုယ်တိုင် မှတ်တမ်းမှတ်ရာများကို ပြုစုထားပါသည်။				
၄၀	ကျောင်းသားများ သင်ခန်းစာကို ကြိုးစားသင်ယူလုပ်ဆောင် နေကြချိန်တွင် စောင့်ကြည့်စစ်ဆေး၍ ကြီးကြပ်ပေးသည်။				
၄၁	ကျွန်ုပ်သည် ကျောင်းကိုပုံမှန် လာပါသည်။				
၄၂	ကျွန်ုပ်သည်ကျောင်းသားများအား ၎င်းတို့အတွက် အကျိုးရှိမည် အကြောင်း ကိစ္စများနှင့် ဆုံးဖြတ်ချက်များကို ချတတ်စေရန် လိုအပ်သည် များကို ဖြည့်ဆည်းပေးသည်။				
၄၃	ကျောင်းသားများ လေ့လာသင်ယူလိုစိတ် ဖြစ်ပေါ်စေရန် လှုံ့ဆော် ပေးပါသည်။				
၄၄	ကျွန်ုပ်သည် ကျောင်းသားများ၏ သင်ယူလုပ်ဆောင်မှုနှင့် တိုးတက် မှုကိုသူတို့ကိုယ်တိုင် ရှင်းရှင်းလင်းလင်း သဘောပေါက်စေရန် သင်ခန်းစာများကို ပြန်လည်လေ့ကျင့်မှုတွင် အကူအညီ ပေးပါသည်။				
၄၅	သင်ခန်းစာများကို ကျောင်းသားများကိုယ်တိုင် လေ့လာ သင်ယူနိုင်စေရန် အချိန်လုံလောက်စွာပေးပါသည်။				

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၄၆	ကျောင်းသားများအား သူတို့သင်ယူလေ့လာပြီးသမျှကို ပြန်လည် အကဲဖြတ် သုံးသပ်စေသည်။				
၄၇	ကျွန်ုပ်သည် စာသင်ချိန်ကို အချိန်အတိအကျ ဝင်ပါသည်။				
၄၈	ကျွန်ုပ်သည် လူငယ်များနှင့် အလုပ်တွဲလုပ်ရသည်ကို ပျော်ရွှင်ပါသည်။				
၄၉	ကျောင်းသားများ၏ စိတ်ဝင်စားမှုကို ရရှိရန် တိတ်ဆိတ် ငြိမ်သက်သော စာသင်ခန်းတစ်ခုကို ပြင်ဆင်ဖန်တီး ပေးနိုင်ပါသည်။				
၅၀	ကျွန်ုပ်သည် သင်ခန်းစာနှင့်ပတ်သက်ပြီး ကျောင်းသားများအား ခက်ခဲမှုအဆင့်မတူညီသော မေးခွန်းများကို မေးလေ့ရှိသည်။				
၅၁	နေ့စဉ် လုပ်ရိုးလုပ်စဉ်လုပ်ငန်းများကို အစီအစဉ်တကျ ရေးဆွဲပြီး ဆောင်ရွက်ပါသည်။				
၅၂	စဉ်ဆက်မပြတ်အကဲဖြတ်မှုသည် မရှိမဖြစ်လိုအပ်ကြောင်း သိရှိနားလည် ပါသည်။				
၅၃	ကျွန်ုပ်သည် သင်ခန်းစာကို သင်ကြားရာတွင် အဖွဲ့လိုက် ဆွေးနွေးခြင်းနှင့် နှုတ်ဖြင့်တင်ပြဆွေးနွေးခြင်း တို့ကဲ့သို့ အမျိုးမျိုး သောအတန်းတွင်း လှုပ်ရှားမှုများကို စီစဉ်ပေး လေ့ရှိသည်။				
၅၄	ကျောင်းသားများ၏ စိတ်ဝင်စားမှုကို ဆွဲဆောင်နိုင်ရန် စာသင်ခန်းကို စနစ်တကျ ပြင်ဆင်ထားပါသည်။				
၅၅	အကဲဖြတ်မှုနည်းလမ်းများ၏ ထူးခြားချက်၊ အသုံးဝင်မှု၊ အားသာချက်၊ အားနည်းချက်များကို သိရှိနားလည် ပါသည်။				
၅၆	ကျွန်ုပ်လုပ်ဆောင်ရမည့် လုပ်ငန်းများကို အချိန်မီ ပြီးစီးအောင် လုပ်ဆောင်ပါသည်။				
၅၇	ကျွန်ုပ်သည် မိမိ၏ ကျောင်းသားများအကြောင်းသိရန် ကြိုးစားသည်။				
၅၈	ကျွန်ုပ်သည် သင်ခန်းစာနှင့်ပတ်သက်ပြီး ကျောင်းသားများ ကိုယ်တိုင် တက်ကြွစွာစူးစမ်းလေ့လာစေ၍ ဗဟုသုတ ရှာဖွေမှု များတွင် ကျောင်းသားများနှင့်အတူ ပါဝင်ဆောင်ရွက်သည်။				

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၅၉	သင်ကြားရာတွင် လိုအပ်သောသင်ထောက်ကူပစ္စည်း အမျိုးမျိုးကို ကြိုတင်ပြင်ဆင်ထားပါသည်။				
၆၀	ကျောင်းသားများ၏ တိုးတက်မှုကို မသင်ကြားမီ၊ သင်ကြား နေစဉ်နှင့် သင်ကြားပြီး အချိန်များတွင် အကဲဖြတ် စစ်ဆေးပါသည်။				
၆၁	ကျွန်ုပ်သည် သင်ရိုးကို အချိန်မီ ပြီးအောင် သင်ကြားပါသည်။				
၆၂	ကျွန်ုပ်သည် တပည့်များနှင့် ပတ်သက်၍ ဘက်လိုက်မှုမရှိပါ။				
၆၃	ကျွန်ုပ်သည် သင်ကြားသော အကြောင်းအရာများကို ကျောင်းသားများ နားလည်မှုရှိမရှိကို သေချာစေရန်အတွက် မေးခွန်းများ မေးလေ့ရှိသည်။				
၆၄	ကျောင်းသားများကို အတန်းချိန်အကူးအပြောင်းတွင် စနစ်တကျရှိစေရန် စီစဉ်ထားပါသည်။				
၆၅	ကျွန်ုပ်သည် စာသင်ခန်းထဲတွင် စည်းကမ်းကို သေချာ ကိုင်တွယ်ပါသည်။				
၆၆	ကျွန်ုပ်သည် ကျောင်းသားတစ်ဦးချင်းဆီ၏ ကွဲပြားချက်ကို လက်ခံနားလည် ပါသည်။				
၆၇	ကျွန်ုပ်သည် သင်ခန်းစာတစ်ခုပြီးတိုင်း ကျောင်းသားများနှင့် ဆွေးနွေးခြင်း အနှစ်ချုပ်ခြင်း ပြုလုပ်လေ့ရှိသည်။				
၆၈	မိမိဘာသာရပ်နှင့်ဆိုင်သော ဂျာနယ်များ၊ ကျမ်းကိုးများ၊ သုတေသန စာစောင်များကို ဖတ်ရှုပါသည်။				
၆၉	ကျောင်းသားများအား တစ်ဦးချင်းဖြစ်စေ၊ အုပ်စုလိုက်ဖြစ်စေ အကဲဖြတ်စစ်ဆေးပါသည်။				
၇၀	ကျွန်ုပ်သင်ကြားနေသော ဘာသာရပ်နှင့် ပတ်သက်၍ နှံ့နှံ့စပ်စပ် သိရှိပါသည်။				
၇၁	ကျွန်ုပ်သည် ကျောင်းသားများအား စိတ်ဝင်စားဖွယ်ရာ ကောင်းသည့် အလုပ်များကို ခိုင်းလေ့ရှိသည်။				
၇၂	ကျွန်ုပ်သည် အမျိုးမျိုးသော အတန်းတွင်းလှုပ်ရှားမှုများနှင့် သင်ယူမှု အရင်းအမြစ်များကို အသုံးပြုသည်။				

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၇၃	အလုပ်ရုံဆွေးနွေးပွဲများ၊ လုပ်ငန်းခွင်စည်းဝေးများ တက်ရောက်၍ လုပ်ဖော်ကိုင်ဖက်များနှင့် အယူအဆအတွေး အမြင်များကို အပြန်အလှန် ဆွေးနွေးညှိနှိုင်းခြင်းကို ပြုလုပ်ပါသည်။				
၇၄	ကျွန်ုပ်သည် တတ်နိုင်သမျှ ပျော်ရွှင်စရာကောင်းသော အကြောင်းအရာ များကို သင်ကြားပေးသည်။				
၇၅	ကျောင်း၏ ပညာရေးနှင့် လူမှုရေးဆိုင်ရာ လှုပ်ရှားမှုများတွင် ပါဝင် ဆောင်ရွက်ပါသည်။				
၇၆	ကျွန်ုပ်သည် ကျောင်းသားများက မေးခွန်းမေးကြသည်ကို သဘောကျ ပါသည်။				
၇၇	မိမိ၏ လုပ်ဆောင်မှုရလဒ်များအပေါ် ပြန်လည်စဉ်းစားသုံးသပ်ပြီး ပိုမို တိုးတက်အောင် စီစဉ်ဆောင်ရွက်ပါသည်။				
၇၈	သင်ယူမှုတွင် အားနည်းသူများကို အချိန်မီ ပြန်လည်ကုစား သင်ကြား ပေးပါသည်။				
၇၉	ဘာသာရပ်နှင့်ပတ်သက်၍ ကျယ်ပြန့်သော အမြင်များရရှိစေရန် အခြားတက္ကသိုလ်များနှင့် ဆက်သွယ်၍ အပြန်အလှန် Lecture ပေးခြင်း၊ အလုပ်ရုံဆွေးနွေးပွဲများ ကျင်းပခြင်းတို့ကို ပူးပေါင်းဆောင်ရွက်ပါသည်။				
၈၀	ကျွန်ုပ်သည် ကျောင်းသားများအား အလုပ်တစ်ခုကို ကောင်းကောင်း လုပ်ရန် အတွက် လိုအပ်သော အကူအညီများကို တတ်နိုင်သမျှ ထောက်ပံ့ပေးသည်။				
၈၁	ကျွန်ုပ်သည် ကျောင်းသားများအား ပုစ္ဆာများကို နည်းလမ်း အသစ်များဖြင့် ရှုမြင်တတ် ဖြေရှင်းတတ်စေရန် အားပေးသည်။				
၈၂	ကျွန်ုပ်၏ သင်ကြားမှု၊ သင်ယူမှု လုပ်ငန်းများတွင် ကျောင်းသားများ၏ ဆွေးနွေးတင်ပြချက်များအပေါ် အလေးပေး၍ ညှိနှိုင်းဆွေးနွေး ပေးပါသည်။				
၈၃	ကျွန်ုပ်သည် ကျောင်းသားများအား သူတို့၏အမှားများမှ သင်ခန်းစာ ယူနိုင်ရန် အားပေးသည်။				
၈၄	ဆရာဟူသော အသက်မွေးဝမ်းကျောင်းနှင့်ပတ်သက်၍ ချမှတ်ထားသော ဥပဒေ၊ ကိုယ့်ကျင့်တရား၊ ကျင့်ဝတ်များကို သိရှိနားလည်ထားပါသည်။				

စဉ်	အကြောင်းအရာ	လုံးဝ မဟုတ်	တစ်ခါ တစ်ရံ	အများ အားဖြင့်	အမြဲ တမ်း
၈၅	ကျွန်ုပ်သည် တတ်နိုင်သမျှ ကျောင်းသားများ၏ စူးစမ်းလိုစိတ်ကို လှုံ့ဆော်ပေးနိုင်သော ပစ္စည်းများကိုအသုံးပြုသည်။				
၈၆	ဆရာတစ်ယောက်၏ လုပ်ငန်းတာဝန်နှင့် လိုအပ်ချက်များကို သိရှိနားလည်ပါသည်။				
၈၇	ကျောင်းသားများ၏ လေ့လာသင်ယူမှု နှင့် တိုးတက်မှုအပေါ် ဆရာ၊ ဆရာမများ၏အပြုအမူများက လွှမ်းမိုးနေသည်ကို သိရှိ နားလည်ထား ပါသည်။				

Sources of Items:

Dimensions	Items No.	Total Items
Teaching Skill	4, 8, 10, 18, 21, 22, 26, 27, 37, 50, 53, 58, 66, 67, 68, 71, 72, 73, 74, 75, 76, 80, 81, 82, 83, 85, 87	27
Responsibility	25, 30, 31, 32, 32, 33, 35, 36, 40, 41, 43, 47, 48, 52, 57, 56, 61, 62, 65, 84, 86	21
Planning /Assessment	1, 5, 6, 13, 14, 15, 16, 19, 20, 23, 24, 28, 29, 34, 38, 39, 42, 44, 45, 46, 49, 51, 54, 55, 59, 60, 63, 64, 69, 70, 78,	31
Interpersonal Relationship	2, 3, 7, 9, 11, 12, 17, 79,	8
Total Items		87

Note: (R) denotes item to be scored in reverse fashion

Supervisor's Assessment Rating Questionnaire

ဤသုတေသန စစ်ဆေးလွှာသည် ဌာနမှူးများ နှင့် ကျောင်းအုပ်ကြီးများမှ မိမိ၏ လက်ထောက်ဆရာ၊ဆရာမများ၏ လုပ်ငန်းစွမ်းရည်ကို အကဲဖြတ်သော စစ်ဆေးလွှာဖြစ်ပါသည်။ သို့ဖြစ်ပါ၍ အောက်ဖော်ပြချက်များကို သေချာစွာ ဖတ်ရပြီး ဆရာကြီး၊ ဆရာမကြီးများမှ လက်ထောက်ဆရာ၊ ဆရာမ တစ်ဦးချင်းစီ၏လုပ်ငန်းစွမ်းရည်နှင့် ပတ်သက်၍ မိမိ၏ အကဲဖြတ်မှုနှင့်ကိုက်ညီသော ရမှတ်အဆင့်နေရာတွင် ဝိုင်း O ၍ မိမိသဘောထားကို ဖော်ပြပါ။

လက်ထောက်ဆရာ၊ဆရာမ ၏အမည် --

စဉ်	အကြောင်းအရာ	၁	၂	၃	၄	၅
၁။	စီမံခန့်ခွဲနိုင်မှု စွမ်းရည်	၁	၂	၃	၄	၅
၂။	အခြားသူများနှင့် ပေါင်းသင်းဆက်ဆံမှု စွမ်းရည်	၁	၂	၃	၄	၅
၃။	တာဝန်ယူမှု၊ တာဝန်ခံမှု စွမ်းရည်	၁	၂	၃	၄	၅
၄။	ခေါင်းဆောင်နိုင်မှု စွမ်းရည်	၁	၂	၃	၄	၅
၅။	နည်းပညာ အသုံးချနိုင်မှု စွမ်းရည် (ICT)	၁	၂	၃	၄	၅
၆။	သင်ကြားရေး စွမ်းရည်	၁	၂	၃	၄	၅
၇။	ဆရာ၊ဆရာမသည်ကျောင်းပုံမှန်လာ၍ ကျောင်းနောက် ကျခြင်း များကိုလည်း အချိန်မီ သတင်းပို့ခွင့်တိုင်သည်။	၁	၂	၃	၄	၅
၈။	ဆရာ၊ဆရာမသည် အလုပ်အပေါ်တွင် အားတက်သရော ရှိပြီး စိတ်ဝင်စားမှုရှိသည်။	၁	၂	၃	၄	၅
၉။	ဆရာ၊ဆရာမသည် ကိုယ်စွမ်းကိုယ်စရှိသူ၊ ဦးဆောင် တတ်သူ၊အခက်အခဲများကိုအောင်မြင်စွာ ကျော်လွှားနိုင်သူ တစ်ယောက်ဖြစ်သည်။	၁	၂	၃	၄	၅
၁၀။	ဆရာ၊ဆရာမသည် သင်ကြားရေးပေါ်တွင် စိတ်ဝင်စား မှု၊ စိတ်အားထက်သန်မှု နှင့် ပညာရှင် ပီသသော သဘောထား များရှိသည်။	၁	၂	၃	၄	၅

စဉ်	အကြောင်းအရာ	၁	၂	၃	၄	၅
၁၁။	ဆရာ၊ဆရာမသည် ပညာရပ်ဆိုင်ရာ တိုးတက်ရေး၊ သင်ကြားရေး နှင့် သက်ဆိုင်သော ညီလာခံများကို တက်ရောက်သည်။	၁	၂	၃	၄	၅
၁၂။	ဆရာ၊ဆရာမသည် သင်နှင့် အဆင်ပြေစွာ ဆက်ဆံပြီး အခြားသော ဆရာမများနှင့်ပါ ပူးပေါင်းဆောင်ရွက် လုပ်ကိုင်နိုင်သည်။	၁	၂	၃	၄	၅
၁၃။	ပညာရှင် ပီပီ ပြုမူ ပြောဆို နေထိုင်သည်။	၁	၂	၃	၄	၅
၁၄။	ဆရာ၊ဆရာမသည် ပေးအပ်သော တာဝန်များကို ထိထိ ရောက်ရောက် စွမ်းစွမ်းတမံ လုပ်ဆောင်နိုင်သည်။	၁	၂	၃	၄	၅
၁၅။	ဆရာ၊ဆရာမသည် အခြားသူများ နှင့်အတူ အလုပ် လုပ်ဆောင် နိုင်သည့် စွမ်းရည်ရှိသည်။	၁	၂	၃	၄	၅
၁၆။	ဆရာ၊ဆရာမသည် တိကျပြီး အသေးစိတ် ကိစ္စများကို အာရုံစိုက်တတ်သူဖြစ်သည်။	၁	၂	၃	၄	၅
၁၇။	ဆရာ၊ဆရာမသည် အခြားသူများထံမှ အကူအညီနှင့် လမ်းညွှန်ပေးမှုများကို လက်ခံတတ်သည်။	၁	၂	၃	၄	၅
၁၈။	ဆရာ၊ဆရာမသည် ပြဿနာများကို ဝေဖန်ပိုင်းခြား နိုင်သော အတွေးအခေါ်ရှိပြီး ဖြေရှင်းနိုင်သောစွမ်းရည် ရှိသူတစ်ယောက်ဖြစ်သည်။	၁	၂	၃	၄	၅

၁၉။ ဆရာ၊ဆရာမ၏ အားသာချက်များ--

၂၀။ ဆရာ၊ဆရာမ၏တိုးတက်ရန် လိုအပ်သော အချက်များ-----------------------------

----

Colleagues' Assessment Rating Questionnaire

အောက်ဖော်ပြပါ အချက်များကို သေချာစွာ ဖတ်ရှု၍ မိမိလုပ်ဖော်ကိုင်ဖက် ဆရာ၊ဆရာမ၏ လုပ်ငန်းစွမ်းရည်ကို အကဲဖြတ်ပြီး လက်ယာဘက်တွင် ပေးထားသော ရမှတ်အဆင့်များထဲမှ သင်၏ အကဲဖြတ်မှုနှင့် ကိုက်ညီသော ရမှတ်နေရာကို ဝိုင်း ○ ပါ။

လုပ်ဖော်ကိုင်ဖက် ဆရာ၊ ဆရာမ၏ အမည် –––––––––––––––––––––

စဉ်	အကြောင်းအရာ	၁	၂	၃	၄	၅
၁။	Administration skill စီမံခန့်ခွဲနိုင်မှုစွမ်းရည်	၁	၂	၃	၄	၅
၂။	Quality of Work မိမိအလုပ်ကို အရည်အသွေး ပြည့်မီစွာဖြင့် ပြီးမြောက် အောင်ဆောင်ရွက်နိုင်မှု	၁	၂	၃	၄	၅
၃။	Communication skill ပေါင်းသင်းဆက်ဆံမှုစွမ်းရည်	၁	၂	၃	၄	၅
၄။	Decision Making/Problem Solving skill ပြဿနာဖြေရှင်း ဆုံးဖြတ်နိုင်မှု စွမ်းရည်	၁	၂	၃	၄	၅
၅။	Leadership skill ဦးဆောင်နိုင်မှုစွမ်းရည်	၁	၂	၃	၄	၅
၆။	Teamwork အခြားသူများနှင့် ပူးပေါင်းလုပ်ဆောင်နိုင်မှုစွမ်းရည်	၁	၂	၃	၄	၅
၇။	Teaching skill သင်ကြားရေးစွမ်းရည်	၁	၂	၃	၄	၅
၈။	Creativity and initiative skills ဆန်းသစ်တီထွင် ဖန်တီးနိုင်မှု စွမ်းရည်	၁	၂	၃	၄	၅
၉။	Professional development လက်ရှိ အသက်မွေးဝမ်းကျောင်း ပညာရပ်ဆိုင်ရာ တိုးတက်မှု	၁	၂	၃	၄	၅

စဉ်	အကြောင်းအရာ	၁	၂	၃	၄	၅
၁၀။	Actively participate in school activities ကျောင်းလုပ်ငန်းများတွင် တက်ကြွစွာ ပါဝင်လှုပ်ရှားမှု	၁	၂	၃	၄	၅
၁၁။	Quantity of Work ပေးအပ်သော တာဝန်များကို ပြီးစီးအောင် ဆောင်ရွက်နိုင်မှု ပမာဏ	၁	၂	၃	၄	၅
၁၂။	Punctuality of Work အလုပ်တွင် အချိန်မှန်မှု	၁	၂	၃	၄	၅
၁၃။	Interpersonal relationship with students ကျောင်းသား၊ ကျောင်းသူများနှင့် ပေါင်းသင်း ဆက်ဆံမှု	၁	၂	၃	၄	၅
၁၄။	Personal Appearance ရုပ်ပိုင်းဆိုင်ရာ သွင်ပြင်လက္ခဏာ	၁	၂	၃	၄	၅

Students' Assessment Rating Questionnaire

အောက်ဖော်ပြပါ အချက်များကို သေချာစွာ ဖတ်ရှု၍ မိမိဆရာ/ဆရာမ၏ လုပ်ငန်းစွမ်းရည်ကိုအကဲဖြတ်ပြီး လက်ယာဘက်တွင် ပေးထားသော ရမှတ်အဆင့်များထဲမှ သင်၏ အကဲဖြတ်မှုနှင့် ကိုက်ညီသော ရမှတ်နေရာကို ဝိုင်း **O** ပါ။

ဆရာ၊ ဆရာမ၏ အမည် –

စဉ်	အကြောင်းအရာ	၁	၂	၃	၄	၅
၁။	ဆရာ၊ဆရာမသည် ပြတ်ပြတ်သားသား ဆက်ဆံ တတ်သူ တစ်ယောက်ဖြစ်သည်။	၁	၂	၃	၄	၅
၂။	ဆရာ၊ဆရာမသည် သင်ကြားသည့် ဘာသာရပ်နှင့် ပတ်သက်၍ ကောင်းစွာ တတ်သိနားလည်သူ ဖြစ်သည်။	၁	၂	၃	၄	၅
၃။	ဆရာ၊ဆရာမသည် အတန်းတွင်း စီမံခန့်ခွဲမှုများကို ကောင်းစွာ စီမံကိုင်တွယ်နိုင်သည်။	၁	၂	၃	၄	၅
၄။	ဆရာ၊ဆရာမသည် သင်ခန်းစာ နှင့် စာမေးပွဲအတွက် အချိန်မီ Feedback ပေးသည်။	၁	၂	၃	၄	၅
၅။	ဆရာ၊ ဆရာမသည် စာသင်ခန်းတွင်းရှိ အနှောက်အယှက် များကို ထိရောက်စွာ ကိုင်တွယ် ဖြေရှင်းနိုင်သည်။	၁	၂	၃	၄	၅
၆။	ဆရာ၊ ဆရာမသည် ကျွန်ုပ်တို့အား အမျိုးမျိုးသော နည်းလမ်းများဖြင့်သင်ယူလေ့လာခြင်းကိုခွင့်ပြု သည်။	၁	၂	၃	၄	၅
၇။	ဆရာ၊ဆရာမသည် လိုအပ်လျှင် စာသင်ချိန်ပြင်ပတွင် ပါ ကျွန်ုပ်တို့ကို အကူအညီပေးသည်။	၁	၂	၃	၄	၅
၈။	ဆရာ၊ဆရာမသည် ကျောင်းသားများ အားလုံး၏ ခံစားချက်နှင့် အခွင့်အလမ်းများကို ထည့်သွင်း စဉ်းစားပေးသည်။	၁	၂	၃	၄	၅

စဉ်	အကြောင်းအရာ	၁	၂	၃	၄	၅
၉။	ဆရာ၊ဆရာမသည် ကျွန်ုပ်တို့အပေါ် လူသားတစ်ဦး အဖြစ် တန်ဖိုးထား ဆက်ဆံသည်။	၁	၂	၃	၄	၅
၁၀။	ဆရာ၊ဆရာမသည် ကျွန်ုပ်တို့အား အကောင်းဆုံး ကြိုးစားရန် တွန်းအားပေးသည်။	၁	၂	၃	၄	၅
၁၁။	ကျွန်ုပ်ကမေးခွန်းများ မေးသည့်အခါတွင် ဆရာ၊ ဆရာမသည် ကူညီဖြေဆိုပေးပါသည်။	၁	၂	၃	၄	၅
၁၂။	ကျွန်ုပ်တို့၏ စာသင်ခန်းသည်အမြဲတတ်ကြွစွာ သင်ယူ နေကြပြီး အချိန်ကို အလဟဿ မဖြုန်းတီး ကြပါ။	၁	၂	၃	၄	၅
၁၃။	ဆရာ၊ဆရာမ၏ အတန်းတွင်း စည်းကမ်းနှင့် လုပ်နည်း လုပ်ဟန်များသည် မျှတမှုရှိသည်။	၁	၂	၃	၄	၅
၁၄။	ဆရာ၊ ဆရာမသည် သူသင်ကြားနေသော အကြောင်းအရာကို ကျွန်ုပ်တို့ နားလည်မှု ရှိမရှိ သေချာအောင် စစ်ဆေးလေ့ရှိသည်။	၁	၂	၃	၄	၅
၁၅။	ဆရာ၊ဆရာမသည် ကျွန်ုပ်တို့တစ်စုံတစ်ရာ နားလည်မှု မရှိခဲ့လျှင် နောက်ထပ် နည်းလမ်းတစ်မျိုးဖြင့် ရှင်းပြသည်။	၁	၂	၃	၄	၅
၁၆။	ဆရာ၊ဆရာမသည် ကျွန်ုပ်တို့ တစ်နေ့စာ သင်ယူပြီးသော သင်ခန်းစာများကို အချိန်ပေး၍ အကျဉ်းချုပ်ပေးသည်။	၁	၂	၃	၄	၅
၁၇။	ဆရာ၊ဆရာမသည် ကျွန်ုပ်တို့၏ သင်ယူလေ့လာခြင်း အတွက် ရည်မှန်းချက် ပေါက်မြောက်ရန်နှင့် တိုးတက်မှု လမ်းကြောင်းကို ချမှတ်ပေးသည်။	၁	၂	၃	၄	၅
၁၈။	ဆရာ၊ဆရာမသည် ကျောင်း၏ အလုပ်များတွင် ကျွန်ုပ်တို့ စိတ်ဝင်စားလာစေရန် ဖန်တီးပေးသည်။	၁	၂	၃	၄	၅
၁၉။	ဆရာ၊ဆရာမသည် အတန်းအတွက် စနစ်တကျ ပြင်ဆင်မှုရှိသည်။	၁	၂	၃	၄	၅

စဉ်	အကြောင်းအရာ	၁	၂	၃	၄	၅
၂၀။	ဆရာ၊ဆရာမသည် စာသင်ခန်းတွင်း စည်းကမ်းများကို သေချာစွာ ထိန်းသိမ်းထားသည်။	၁	၂	၃	၄	၅
၂၁။	စာသင်ချိန်သည် ထိရောက်မှုရပြီး ကျွန်ုပ်တို့အတွက် အကျိုးဖြစ်ထွန်းသည်။	၁	၂	၃	၄	၅
၂၂။	ဆရာ၊ဆရာမသည် စာသင်ချိန်တွင် (ဆွေးနွေးခြင်း၊ အဖွဲ့လိုက်အလုပ်များ၊ Lecture ပေးခြင်း၊ လက်တွေ့ လုပ်စေခြင်း) စသဖြင့် အမျိုးမျိုးသော လုပ်ငန်းစဉ်များ ကိုသုံးသည်။	၁	၂	၃	၄	၅
၂၃။	ဆရာ၊ဆရာမသည် ကျောင်းသားများကို ကိုယ်တိုင် စဉ်းစား တွေးခေါ်တတ်စေရန် အားပေးသည်။	၁	၂	၃	၄	၅
၂၄။	စာသင်ခန်းတွင် ကျွန်ုပ်သည် မေးခွန်းများမေးခြင်း၊ ဆွေးနွေးခြင်း အားဖြင့် သင်ကြားသင်ယူမှုတွင် လွတ်လပ်စွာ ပါဝင်ခွင့်ရှိသည်။	၁	၂	၃	၄	၅
၂၅။	ဆရာ၊ဆရာမသည် အပြုသဘောဆောင်သော ဝေဖန်မှု၊ အားပေးမှုများ ပြုလုပ်သည်။	၁	၂	၃	၄	၅
၂၆။	ဆရာ၊ဆရာမသည် နားလည်ရ လွယ်ကူသော နည်းလမ်းများကို သုံး၍ရှင်းပြသည်။	၁	၂	၃	၄	၅
၂၇။	ဆရာ၊ဆရာမသည် ကျောင်းသားများ၏ လုပ်ဆောင်မှု ကိုအကဲဖြတ်ရာတွင် သင့်တော်သော ဉာဏ်စမ်း ပုစ္ဆာများ၊ မေးခွန်းများ နှင့် Assignment များပေး၍ မှန်မှန်ကန်ကန် အဆင့်ပေး အကဲဖြတ် သည်။	၁	၂	၃	၄	၅
၂၈။	ဆရာ၊ဆရာမသည် စာသင်ကြားရာတွင် စိတ်အား ထက်သန်ပြီး စိတ်ဝင်စားမှုရှိသည်။	၁	၂	၃	၄	၅
၂၉။	ဆရာ၊ဆရာမသည် ကျွန်ုပ်တို့ စာကြိုးစားပြီး အကောင်းဆုံး လုပ်ဆောင်သည်ကို သိသည်။	၁	၂	၃	၄	၅

Teacher Eduators' Interview Form

ဆရာ၊ ဆရာမ ၏ အမည်––––––––––––––––––––––––

၁။ ရရှိထားသော ဘွဲ့

ပထမဘွဲ့.–––––––––––––––––––––––––––

ဒုတိယဘွဲ့.–––––––––––––––––––––––––––

တတိယဘွဲ့.–––––––––––––––––––––––––––

အခြား ––––––––––––––––––––––––––––––––––––––

၂။ ယခုသင်ကြားနေသော ဘာသာရပ်

––

၃။ Major ဘာသာရပ်နှင့် ယခုသင်ကြားသော ဘာသာရပ် တူညီမှုရှိသလား

☐ တူညီ ☐ မတူညီ

၄။ မွေးရပ်မြေ

––

၅။ အိမ်နှင့်ကျောင်း နီးသလား

––

၆။ �’ဘာကြောင့် ဆရာဖြစ်ချင်တာလဲ

–မိဘဆွေမျိုးများ၏ တိုက်တွန်းချက်ကြောင့်

–ဆရာသမားများ တိုက်တွန်းချက်ကြောင့်

–မိမိ၏ ဝါသနာအရ

–အခြားလုပ်စရာမရှိသောကြောင့်

–လေးစားအားကျခဲ့ရသော ဆရာ၊ ဆရာမကဲ့သို့ဖြစ်ချင်သောကြောင့်

–တက္ကသိုလ်ဝင်တန်းအောင်ခဲ့စဉ်က ရမှတ် အရ

–အခြား ––––––––––––––––––––––––––––––––––––––

၇။ ကျောင်းတွင်း အဖွဲ့အစည်းများ၊ အသင်းအဖွဲ့များတွင် ပါဝင်ပါသလား

–ကျောင်းသားသမဂ္ဂ၊ ဆရာသမဂ္ဂ

–ကျောင်းသားဟောင်းများ အသင်း

–ကျောင်းသာယာရေးကော်မတီ

–စည်းကမ်းထိန်းသိမ်းရေး

–အခြား --

၈။ မည်သည့် အသင်းအဖွဲ့များတွင် နည်းပြ (သို့) အကြံပေးလုပ်ဖူးပါသလား

–အားကစား

–အိမ်တွင်းမှု

–ပန်းချီ၊ အနုပညာ

–အခြား --

၉။ ဘာသာရပ်နှင့်သက်ဆိုင်သော ညီလာခံများ၊ အလုပ်ရုံဆွေးနွေးပွဲများ၊ စာတမ်းဖတ်ပွဲများ (ပြည်တွင်း၊ ပြည်ပ) ကို အမြဲတက်ရောက်ဖြစ်ပါသလား

–သတင်းအချက်အလက် နှင့် နည်းပညာ

–ဘာသာရပ်ဆိုင်ရာ မွမ်းမံသင်တန်းများ

–ပညာရေးနှင့် ပတ်သက်သော ဘွဲ့ ၊ ဒီပလိုမာ များရရှိရန် ကြိုးစားခြင်း

–Workshop, seminar, conference etc…

–အခြား --

၁၀။ စာသင်ခန်းတွင် အသုံးပြုသော အမျိုးမျိုးသော သင်ကြားရေးနည်းလမ်းများ

–သင်နည်းအသစ်များသုံးခြင်း

–ထိရောက်သော သင်ထောက်ကူပစ္စည်းများသုံးခြင်း

–သင်ယူမှုပတ်ဝန်းကျင်ကောင်းကို ဖန်တီးပေးခြင်း

–ကျောင်းသားနှင့် ဆီလျော်သော သင်နည်းကို သုံးခြင်း

–အခြား --

၁၁။ အများနှင့် အဆင်ပြေစွာ ဆက်ဆံနိုင်မှု

–ကျောင်းအုပ်၊ ဌာနမှူး

–လုပ်ဖော်ကိုင်ဖက်

–ကျောင်းသားမိဘ

–ကျောင်းသား

–အခြား ––

၁၂။ သင်ကြားမှု တိုးတက်ရေးအတွက် လုပ်ဖော်ကိုင်ဖက်များနှင့် ဆွေးနွေးခြင်း

–တစ်ပတ်တစ်ကြိမ်

–တစ်လ တစ်ကြိမ်

–လိုအပ်သလို

–အခြား ––

၁၃။ စာသင်ကြားခြင်းနှင့် ပတ်သက်၍ သင်အနှစ်သက်ဆုံးနှင့် မနှစ်သက်ဆုံးကို ပြောပြပါ

–––

–––

–––

–––

၁၄။ ပူးပေါင်းလုပ်ဆောင်လိုစိတ်မရှိသော အပေါင်းအသင်းများနှင့် မည်သို့ ပေါင်းသင်း ဆက်ဆံသလဲ

–––

–––

–––

–––

၁၅။ သင်၏အားသာချက်နှင့် အားနည်းချက်ကိုပြောပြပါ

အားသာချက်––

––

––

အားနည်းချက်––

––

––

––

APPENDIX K

Ability and Raw Scored of Teacher Educators

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0001	0.2144	9	103.216	0.4066
sd0002	0.2144	9	103.216	0.4066
sd0003	0.2144	9	103.216	0.4066
sd0004	-0.015	8	99.775	0.4306
sd0005	1.3357	15	120.0355	0.3686
sd0006	-0.0988	7	98.518	0.4406
sd0007	-1.735	2	73.975	0.7832
sd0008	-3.271	0	50.935	1.4342
sd0009	-1.2763	3	98.518	0.6539
sd0010	1.0505	13	115.7575	0.3649
sd0011	0.4676	11	107.014	0.3861
sd0012	0.1939	9	98.518	0.4086
sd0013	0.1581	9	102.3715	0.412
sd0014	1.132	14	116.98	0.365
sd0015	0.6483	11	98.518	0.3754
sd0016	-0.0227	7	99.6595	0.4315
sd0017	-0.4072	5	98.518	0.4828
sd0018	3.9805	24	159.7075	0.966
sd0019	-0.1067	7	98.3995	0.4416
sd0020	-1.5585	3	98.518	0.7297
sd0021	1.3039	15	119.5585	0.3677
sd0022	0.6054	11	98.518	0.3776
sd0023	0.8969	12	113.4535	0.3667
sd0024	-0.0319	7	99.5215	0.4326
sd0025	-0.1998	7	98.518	0.4535
sd0026	-0.4092	5	93.862	0.4831
sd0027	0.6936	12	98.518	0.3733
sd0028	0.3731	9	105.5965	0.393
sd0029	-0.463	6	98.518	0.4914

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0030	2.2154	20	133.231	0.4406
sd0031	-0.0452	8	98.518	0.4341
sd0032	1.4269	15	121.4035	0.3717
sd0033	-0.9197	4	86.2045	0.5734
sd0034	0.2144	9	98.518	0.4066
sd0035	-1.1918	3	82.123	0.6334
sd0036	1.3753	15	98.518	0.3698
sd0037	0.912	12	113.68	0.3664
sd0038	0.5155	10	107.7325	0.3829
sd0039	1.0887	13	116.3305	0.3648
sd0040	0.5831	11	108.7465	0.3789
sd0041	-0.0478	7	98.518	0.4345
sd0042	-0.2023	6	96.9655	0.4538
sd0043	-0.7534	5	88.699	0.541
sd0044	-0.0838	7	98.518	0.4388
sd0045	0.764	11	111.46	0.3705
sd0046	-1.0468	4	98.518	0.6003
sd0047	0.2743	9	104.1145	0.4012
sd0048	-0.163	7	98.518	0.4487
sd0049	0.7956	13	111.934	0.3695
sd0050	-0.5809	5	98.518	0.5105
sd0051	-0.7708	4	88.438	0.5443
sd0052	0.6287	11	109.4305	0.3764
sd0053	-0.0434	7	98.518	0.4339
sd0054	-0.7781	4	88.3285	0.5456
sd0055	-0.2647	7	98.518	0.4622
sd0056	-0.0886	6	98.671	0.4393
sd0057	-3.271	0	50.935	1.4342
sd0058	-0.7039	5	89.4415	0.5319
sd0059	1.1733	14	117.5995	0.3653
sd0060	1.0921	14	98.518	0.3648

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0061	-1.667	3	74.995	0.762
sd0062	0.2971	9	104.4565	0.3992
sd0063	-1.1956	3	98.518	0.6343
sd0064	0.9047	12	113.5705	0.3666
sd0065	-1.9906	2	98.518	0.8698
sd0066	0.8615	11	112.9225	0.3676
sd0067	1.4957	16	122.4355	0.3747
sd0068	0.3128	10	104.692	0.3979
sd0069	1.038	13	98.518	0.3649
sd0070	-0.8619	4	87.0715	0.5618
sd0071	-2.696	1	59.56	1.1742
sd0072	0.445	9	98.518	0.3876
sd0073	-0.4881	6	92.6785	0.4954
sd0074	0.1482	8	98.518	0.413
sd0075	0.1482	8	102.223	0.413
sd0076	0.0682	8	101.023	0.4213
sd0077	1.4784	16	98.518	0.3739
sd0078	-0.6281	5	90.5785	0.5186
sd0079	0.4482	11	98.518	0.3874
sd0080	0.0745	7	101.1175	0.4207
sd0081	1.5169	17	122.7535	0.3758
sd0082	-0.4398	5	98.518	0.4878
sd0083	-0.2279	6	96.5815	0.4572
sd0084	-1.7944	2	98.518	0.8023
sd0085	-0.851	4	87.235	0.5596
sd0086	-0.2742	6	98.518	0.4636
sd0087	-1.0185	4	84.7225	0.5941
sd0088	0.616	11	98.518	0.3771
sd0089	-3.271	0	50.935	1.4342
sd0090	0.3514	9	105.271	0.3947
sd0091	0.4288	11	98.518	0.3888

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0092	-0.3949	6	94.0765	0.481
sd0093	1.4706	17	98.518	0.3736
sd0094	-2.6905	1	59.6425	1.1715
sd0095	-0.0838	7	98.743	0.4388
sd0096	0.7034	11	98.518	0.3729
sd0097	-0.7476	5	88.786	0.5399
sd0098	0.1649	8	98.518	0.4114
sd0099	1.3361	15	120.0415	0.3686
sd0100	2.4738	20	137.107	0.4815
sd0101	-0.4234	6	98.518	0.4853
sd0102	-0.1426	7	97.861	0.4461
sd0103	-0.1723	5	98.518	0.4499
sd0104	-0.3941	6	94.0885	0.4809
sd0105	0.13	8	98.518	0.4149
sd0106	-3.1842	1	52.237	1.4513
sd0107	-1.1815	2	98.518	0.6309
sd0108	1.821	18	127.315	0.3965
sd0109	1.3307	15	119.9605	0.3684
sd0110	-0.6513	4	98.518	0.5226
sd0111	1.5044	15	122.566	0.3752
sd0112	0.922	12	98.518	0.3663
sd0113	-1.0012	3	84.982	0.5904
sd0114	-0.6944	4	89.584	0.5302
sd0115	-1.8563	2	98.518	0.823
sd0116	0.7588	11	111.382	0.3707
sd0117	2.5727	21	98.518	0.4998
sd0118	0.9016	13	113.524	0.3666
sd0119	1.8304	18	127.456	0.3973
sd0120	1.2216	15	98.518	0.366
sd0121	-0.0729	7	98.9065	0.4374
sd0122	0.2945	9	98.518	0.3994

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0123	-1.127	3	83.095	0.6182
sd0124	-1.7037	2	74.4445	0.7734
sd0125	1.0354	14	115.531	0.3649
sd0126	-0.3132	6	98.518	0.469
sd0127	0.9806	13	114.709	0.3654
sd0128	-0.009	8	99.865	0.4299
sd0129	-0.009	8	98.518	0.4299
sd0130	1.2818	14	119.227	0.3672
sd0131	0.2389	9	98.518	0.4043
sd0132	-0.0677	7	98.9845	0.4368
sd0133	1.8902	17	128.353	0.4028
sd0134	-0.2133	7	98.518	0.4553
sd0135	-2.6905	1	59.6425	1.1715
sd0136	-0.0838	7	98.518	0.4388
sd0137	0.7034	11	110.551	0.3729
sd0138	-0.7476	5	88.786	0.5399
sd0139	0.1649	8	98.518	0.4114
sd0140	1.3361	15	120.0415	0.3686
sd0141	2.4738	20	98.518	0.4815
sd0142	-0.4234	6	93.649	0.4853
sd0143	-0.1426	7	97.861	0.4461
sd0144	-0.1723	5	97.4155	0.4499
sd0145	-0.3941	6	98.518	0.4809
sd0146	0.13	8	101.95	0.4149
sd0147	-3.1842	1	52.237	1.4513
sd0148	-1.1815	2	98.518	0.6309
sd0149	1.821	18	127.315	0.3965
sd0150	1.3307	15	98.518	0.3684
sd0151	-0.6513	4	90.2305	0.5226
sd0152	1.5044	15	122.566	0.3752
sd0153	0.922	12	113.83	0.3663

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0154	-1.0012	3	84.982	0.5904
sd0155	-0.6944	4	98.518	0.5302
sd0156	-1.8563	2	72.1555	0.823
sd0157	0.7588	11	111.382	0.3707
sd0158	2.5727	21	98.518	0.4998
sd0159	0.9016	13	113.524	0.3666
sd0160	1.8304	18	98.518	0.3973
sd0161	1.2216	15	118.324	0.366
sd0162	-0.0729	7	98.9065	0.4374
sd0163	0.2945	9	104.4175	0.3994
sd0164	-1.127	3	98.518	0.6182
sd0165	-1.7037	2	74.4445	0.7734
sd0166	1.0354	14	115.531	0.3649
sd0167	-0.3132	6	98.518	0.469
sd0168	-0.3782	5	94.327	0.4785
sd0169	0.1893	8	98.518	0.409
sd0170	-0.338	5	94.93	0.4726
sd0171	-0.2357	6	96.4645	0.4583
sd0172	0.3557	8	105.3355	0.3943
sd0173	-0.4628	5	93.058	0.4914
sd0174	0.6116	11	98.518	0.3773
sd0175	-2.0361	2	69.4585	0.8866
sd0176	0.1976	7	102.964	0.4082
sd0177	0.7881	10	98.518	0.3697
sd0178	0.4978	11	107.467	0.384
sd0179	-1.2616	3	98.518	0.6503
sd0180	1.1462	14	117.193	0.3651
sd0181	-1.2201	3	98.518	0.6401
sd0182	0.1124	9	101.686	0.4167
sd0183	1.5222	16	98.518	0.3761
sd0184	-3.1842	1	52.237	1.4513

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0185	-3.1842	1	52.237	1.4513
sd0186	-3.1842	1	98.518	1.4513
sd0187	-3.1842	1	52.237	1.4513
sd0188	-3.1842	1	98.518	1.4513
sd0189	-3.1842	1	52.237	1.4513
sd0190	-3.1842	1	52.237	1.4513
sd0191	1.2619	13	98.518	0.3667
sd0192	-0.154	7	97.69	0.4475
sd0193	-0.9206	4	98.518	0.5736
sd0194	0.5418	10	108.127	0.3813
sd0195	0.0755	9	101.1325	0.4206
sd0196	0.0755	9	98.518	0.4206
sd0197	0.0755	9	101.1325	0.4206
sd0198	0.0755	9	98.518	0.4206
sd0199	0.0755	9	101.1325	0.4206
sd0200	-0.8104	4	87.844	0.5518
sd0201	-1.6735	2	74.8975	0.764
sd0202	1.3968	15	98.518	0.3706
sd0203	-1.1675	2	82.4875	0.6276
sd0204	-1.1675	2	82.4875	0.6276
sd0205	-1.6548	2	98.518	0.7583
sd0206	0.5773	10	108.6595	0.3792
sd0207	0.5222	9	98.518	0.3825
sd0208	-0.5163	6	92.2555	0.4999
sd0209	-1.5663	2	76.5055	0.732
sd0210	1.7538	17	98.518	0.391
sd0211	1.0315	13	115.4725	0.365
sd0212	-1.2994	3	98.518	0.6597
sd0213	-0.6327	5	90.5095	0.5194
sd0214	0.954	12	114.31	0.3657
sd0215	-0.0728	6	98.518	0.4374

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0216	-0.7433	5	88.8505	0.5391
sd0217	0.309	10	98.518	0.3982
sd0218	-0.4426	6	93.361	0.4883
sd0219	0.2768	9	98.518	0.401
sd0220	-0.132	7	98.02	0.4447
sd0221	-0.8606	5	98.518	0.5615
sd0222	2.6202	22	139.303	0.5092
sd0223	0.926	11	113.89	0.3662
sd0224	0.8296	11	98.518	0.3684
sd0225	0.361	9	105.415	0.3939
sd0226	0.6845	11	98.518	0.3738
sd0227	-1.0246	4	84.631	0.5954
sd0228	-3.271	0	50.935	1.4342
sd0229	-1.2913	3	80.6305	0.6576
sd0230	-0.2499	7	96.2515	0.4602
sd0231	-0.2245	6	98.518	0.4568
sd0232	-1.5168	3	77.248	0.7178
sd0233	-1.4766	3	77.851	0.7065
sd0234	-3.1842	1	98.518	1.4513
sd0235	-3.1842	1	52.237	1.4513
sd0236	-3.1842	1	98.518	1.4513
sd0237	-3.1842	1	52.237	1.4513
sd0238	-3.1842	1	98.518	1.4513
sd0239	1.2619	13	118.9285	0.3667
sd0240	-0.154	7	98.518	0.4475
sd0241	-0.9206	4	86.191	0.5736
sd0242	0.5418	10	108.127	0.3813
sd0243	0.0755	9	98.518	0.4206
sd0244	0.0755	9	101.1325	0.4206
sd0245	0.0755	9	98.518	0.4206
sd0246	0.0755	9	101.1325	0.4206

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0247	0.0755	9	101.1325	0.4206
sd0248	-0.8104	4	98.518	0.5518
sd0249	-1.6735	2	74.8975	0.764
sd0250	1.3968	15	98.518	0.3706
sd0251	-1.1675	2	82.4875	0.6276
sd0252	-1.1675	2	82.4875	0.6276
sd0253	-1.6548	2	98.518	0.7583
sd0254	0.5773	10	108.6595	0.3792
sd0255	0.5222	9	98.518	0.3825
sd0256	-0.5163	6	92.2555	0.4999
sd0257	-1.5663	2	76.5055	0.732
sd0258	1.7538	17	126.307	0.391
sd0259	1.0315	13	98.518	0.365
sd0260	-1.2994	3	80.509	0.6597
sd0261	-0.6327	5	90.5095	0.5194
sd0262	0.954	12	98.518	0.3657
sd0263	-0.0728	6	98.908	0.4374
sd0264	-0.7433	5	98.518	0.5391
sd0265	0.309	10	104.635	0.3982
sd0266	-0.4426	6	93.361	0.4883
sd0267	0.2768	9	104.152	0.401
sd0268	-0.132	7	98.02	0.4447
sd0269	-0.8606	5	98.518	0.5615
sd0270	2.6202	22	139.303	0.5092
sd0271	0.926	11	113.89	0.3662
sd0272	0.8296	11	98.518	0.3684
sd0273	0.361	9	105.415	0.3939
sd0274	0.6845	11	98.518	0.3738
sd0275	-1.0246	4	84.631	0.5954
sd0276	-3.271	0	50.935	1.4342
sd0277	-1.2913	3	80.6305	0.6576

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0278	-0.2499	7	98.518	0.4602
sd0279	0.8292	13	112.438	0.3684
sd0280	0.1084	7	101.626	0.4171
sd0281	-3.271	0	98.518	1.4342
sd0282	0.5491	10	108.2365	0.3808
sd0283	-3.271	0	98.518	1.4342
sd0284	1.0962	13	116.443	0.3648
sd0285	0.6644	12	109.966	0.3747
sd0286	0.872	12	98.518	0.3673
sd0287	1.1577	13	117.3655	0.3652
sd0288	-1.2332	3	98.518	0.6433
sd0289	-2.0333	2	69.5005	0.8855
sd0290	-0.0922	8	98.617	0.4398
sd0291	-0.9211	4	98.518	0.5737
sd0292	0.2921	9	104.3815	0.3996
sd0293	1.1292	13	98.518	0.365
sd0294	0.2769	9	104.1535	0.4009
sd0295	1.1548	14	98.518	0.3651
sd0296	-1.1691	3	82.4635	0.628
sd0297	0.2064	9	98.518	0.4074
sd0298	1.1455	14	117.1825	0.3651
sd0299	0.8428	11	112.642	0.368
sd0300	-3.0583	1	98.518	1.3739
sd0301	1.28	14	119.2	0.3671
sd0302	-1.123	3	98.518	0.6173
sd0303	1.8361	18	127.5415	0.3978
sd0304	-0.571	5	91.435	0.5089
sd0305	-0.1353	6	97.9705	0.4451
sd0306	0.44	9	106.6	0.388
sd0307	-0.2344	6	98.518	0.4581
sd0308	1.3693	15	120.5395	0.3696

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0309	0.8459	12	112.6885	0.368
sd0310	-1.1621	3	98.518	0.6264
sd0311	-0.5681	5	91.4785	0.5084
sd0312	0.4616	11	98.518	0.3865
sd0313	-0.6216	5	90.676	0.5174
sd0314	0.221	9	98.518	0.406
sd0315	1.1145	14	116.7175	0.3649
sd0316	-1.1302	3	98.518	0.619
sd0317	-0.7793	4	88.3105	0.5459
sd0318	1.1528	15	117.292	0.3651
sd0319	0.8107	10	98.518	0.369
sd0320	1.4096	16	121.144	0.3711
sd0321	0.2982	10	98.518	0.3991
sd0322	0.2332	8	103.498	0.4049
sd0323	0.1551	9	102.3265	0.4123
sd0324	0.3189	9	98.518	0.3973
sd0325	0.7577	11	111.3655	0.3708
sd0326	3.112	23	98.518	0.6297
sd0327	-0.6486	4	90.271	0.5221
sd0328	-0.8837	4	86.7445	0.5661
sd0329	0.2718	9	98.518	0.4014
sd0330	1.7893	18	126.8395	0.3938
sd0331	-0.0677	8	98.518	0.4368
sd0332	-0.6936	5	89.596	0.5301
sd0333	0.624	10	109.36	0.3767
sd0334	-0.4048	6	93.928	0.4825
sd0335	-0.3311	6	98.518	0.4716
sd0336	0.4164	9	106.246	0.3897
sd0337	1.0376	12	115.564	0.3649
sd0338	-0.4431	6	98.518	0.4883
sd0339	-0.2731	7	95.9035	0.4634

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0340	0.1584	8	98.518	0.412
sd0341	-3.271	0	50.935	1.4342
sd0342	-0.8757	4	86.8645	0.5645
sd0343	-0.6328	5	90.508	0.5194
sd0344	-2.5197	1	62.2045	1.0884
sd0345	0.3429	10	98.518	0.3954
sd0346	2.0885	19	131.3275	0.4242
sd0347	0.7589	12	111.3835	0.3707
sd0348	-0.8837	4	98.518	0.5661
sd0349	0.2718	9	104.077	0.4014
sd0350	1.7893	18	98.518	0.3938
sd0351	-0.0677	8	98.9845	0.4368
sd0352	-0.6936	5	89.596	0.5301
sd0353	0.624	10	109.36	0.3767
sd0354	-0.4048	6	98.518	0.4825
sd0355	-0.3311	6	95.0335	0.4716
sd0356	0.4164	9	106.246	0.3897
sd0357	1.0376	12	98.518	0.3649
sd0358	-0.4431	6	93.3535	0.4883
sd0359	-0.2731	7	98.518	0.4634
sd0360	0.1584	8	102.376	0.412
sd0361	-3.271	0	50.935	1.4342
sd0362	-0.8757	4	98.518	0.5645
sd0363	-0.6328	5	90.508	0.5194
sd0364	-2.5197	1	98.518	1.0884
sd0365	0.3429	10	105.1435	0.3954
sd0366	2.0885	19	131.3275	0.4242
sd0367	0.7589	12	98.518	0.3707
sd0368	0.5585	11	108.3775	0.3803
sd0369	-3.271	0	98.518	1.4342
sd0370	0.3651	9	105.4765	0.3936

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0371	-1.0918	4	98.518	0.6103
sd0372	-2.5176	1	62.236	1.0874
sd0373	-1.3531	2	98.518	0.6734
sd0374	-0.9491	3	85.7635	0.5794
sd0375	-0.1321	6	98.0185	0.4447
sd0376	-0.2448	6	98.518	0.4595
sd0377	-0.7948	4	88.078	0.5488
sd0378	0.7793	11	98.518	0.37
sd0379	-0.1977	7	97.0345	0.4532
sd0380	-2.3639	1	64.5415	1.0182
sd0381	-0.1514	7	97.729	0.4472
sd0382	0.5905	10	108.8575	0.3785
sd0383	0.9353	13	98.518	0.366
sd0384	0.7793	11	111.6895	0.37
sd0385	0.7793	11	111.6895	0.37
sd0386	-2.3639	1	98.518	1.0182
sd0387	-2.3639	1	64.5415	1.0182
sd0388	-2.3639	1	98.518	1.0182
sd0389	-0.0328	8	99.508	0.4327
sd0390	-2.3639	1	98.518	1.0182
sd0391	-2.3639	1	64.5415	1.0182
sd0392	0.9438	13	98.518	0.3659
sd0393	1.7542	17	126.313	0.391
sd0394	1.7542	17	126.313	0.391
sd0395	-0.7948	4	98.518	0.5488
sd0396	0.7941	11	111.9115	0.3695
sd0397	0.7941	11	98.518	0.3695
sd0398	0.7941	11	111.9115	0.3695
sd0399	0.3531	7	105.2965	0.3945
sd0400	-3.271	0	98.518	1.4342
sd0401	-1.2389	3	81.4165	0.6447

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0402	0.2531	8	98.518	0.4031
sd0403	1.8213	18	127.3195	0.3965
sd0404	0.267	9	104.005	0.4018
sd0405	0.267	9	98.518	0.4018
sd0406	1.7913	17	126.8695	0.394
sd0407	0.7779	12	98.518	0.37
sd0408	-0.1264	7	98.104	0.444
sd0409	-0.1264	7	98.518	0.444
sd0410	-0.0792	8	98.812	0.4382
sd0411	0.1888	9	98.518	0.409
sd0412	0.1888	9	102.832	0.409
sd0413	-2.5197	1	62.2045	1.0884
sd0414	1.0204	13	98.518	0.365
sd0415	-0.2471	7	96.2935	0.4598
sd0416	-0.0926	8	98.518	0.4398
sd0417	-2.3639	1	64.5415	1.0182
sd0418	-2.3639	1	64.5415	1.0182
sd0419	-0.5339	5	98.518	0.5028
sd0420	-0.8751	4	86.8735	0.5644
sd0421	0.4772	10	98.518	0.3854
sd0422	0.6122	10	109.183	0.3773
sd0423	-3.271	0	50.935	1.4342
sd0424	-3.271	0	98.518	1.4342
sd0425	-3.1842	1	52.237	1.4513
sd0426	-3.271	0	98.518	1.4342
sd0427	-3.271	0	50.935	1.4342
sd0428	-3.271	0	50.935	1.4342
sd0429	-0.5535	5	91.6975	0.506
sd0430	-0.5014	6	98.518	0.4975
sd0431	-0.9948	4	85.078	0.5891
sd0432	-0.9948	4	85.078	0.5891

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0433	0.4693	10	98.518	0.3859
sd0434	0.6122	10	109.183	0.3773
sd0435	-3.271	0	98.518	1.4342
sd0436	-3.271	0	50.935	1.4342
sd0437	-3.1842	1	52.237	1.4513
sd0438	-3.271	0	98.518	1.4342
sd0439	-3.271	0	50.935	1.4342
sd0440	-3.271	0	98.518	1.4342
sd0441	-0.5535	5	91.6975	0.506
sd0442	-0.5014	6	92.479	0.4975
sd0443	-0.9948	4	98.518	0.5891
sd0444	-0.9948	4	85.078	0.5891
sd0445	0.4693	10	98.518	0.3859
sd0446	0.1094	7	101.641	0.417
sd0447	1.3105	13	98.518	0.3679
sd0448	1.3105	13	119.6575	0.3679
sd0449	0.1004	7	98.518	0.4179
sd0450	-0.7766	5	88.351	0.5453
sd0451	0.5391	11	108.0865	0.3814
sd0452	-0.5801	4	98.518	0.5104
sd0453	1.1393	15	117.0895	0.365
sd0454	0.6421	11	98.518	0.3758
sd0455	-0.0582	6	99.127	0.4357
sd0456	0.755	11	111.325	0.3709
sd0457	-1.8897	2	98.518	0.8343
sd0458	-0.3853	6	94.2205	0.4796
sd0459	-0.7572	5	98.518	0.5417
sd0460	-0.5042	5	92.437	0.4979
sd0461	0.9521	12	114.2815	0.3658
sd0462	-1.3761	3	98.518	0.6794
sd0463	-1.3761	3	79.3585	0.6794

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0464	-1.3761	3	98.518	0.6794
sd0465	1.9958	19	129.937	0.4135
sd0466	-3.271	0	98.518	1.4342
sd0467	-0.1814	7	97.279	0.4511
sd0468	0.9338	12	98.518	0.366
sd0469	-0.6943	5	89.5855	0.5302
sd0470	0.6168	10	109.252	0.377
sd0471	-0.0203	8	98.518	0.4312
sd0472	-0.4439	6	93.3415	0.4885
sd0473	-1.9449	2	98.518	0.8535
sd0474	1.6462	17	124.693	0.3833
sd0475	-0.4725	5	92.9125	0.4929
sd0476	1.632	18	124.48	0.3823
sd0477	0.8549	13	112.8235	0.3677
sd0478	-0.2037	7	98.518	0.454
sd0479	-0.2037	7	96.9445	0.454
sd0480	-0.2037	7	96.9445	0.454
sd0481	0.3316	10	98.518	0.3963
sd0482	3.1313	23	146.9695	0.6353
sd0483	0.8581	12	98.518	0.3676
sd0484	0.8581	12	112.8715	0.3676
sd0485	0.8581	12	98.518	0.3676
sd0486	-2.0469	2	69.2965	0.8906
sd0487	0.7879	13	98.518	0.3697
sd0488	0.8307	12	112.4605	0.3684
sd0489	1.4948	15	122.422	0.3747
sd0490	-0.6876	4	98.518	0.529
sd0491	-0.1496	7	97.756	0.447
sd0492	-1.001	4	98.518	0.5904
sd0493	-1.6693	3	74.9605	0.7627
sd0494	1.0562	14	115.843	0.3649

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0495	-0.9477	4	98.518	0.5792
sd0496	-0.435	6	93.475	0.4871
sd0497	0.9157	11	98.518	0.3664
sd0498	-0.4654	6	93.019	0.4918
sd0499	-0.1395	5	97.9075	0.4457
sd0500	-0.1395	5	98.518	0.4457
sd0501	-1.5847	2	76.2295	0.7373
sd0502	-1.7013	2	98.518	0.7726
sd0503	0.7037	12	110.5555	0.3729
sd0504	-1.7796	2	98.518	0.7975
sd0505	-0.6745	5	89.8825	0.5267
sd0506	-1.7536	2	98.518	0.7892
sd0507	-0.4147	6	93.7795	0.484
sd0508	-3.271	0	50.935	1.4342
sd0509	0.5469	11	98.518	0.381
sd0510	0.7289	11	110.9335	0.3719
sd0511	-0.4838	6	98.518	0.4947
sd0512	-1.8465	2	72.3025	0.8196
sd0513	2.4665	21	136.9975	0.4802
sd0514	-3.1842	1	98.518	1.4513
sd0515	-1.7013	2	74.4805	0.7726
sd0516	0.1631	8	98.518	0.4115
sd0517	0.9157	11	113.7355	0.3664
sd0518	-0.4654	6	93.019	0.4918
sd0519	-0.1395	5	98.518	0.4457
sd0520	-0.1395	5	97.9075	0.4457
sd0521	-1.5847	2	98.518	0.7373
sd0522	-1.7013	2	74.4805	0.7726
sd0523	0.7037	12	98.518	0.3729
sd0524	-1.7796	2	73.306	0.7975
sd0525	-0.6745	5	98.518	0.5267

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0526	-1.7536	2	73.696	0.7892
sd0527	-0.4147	6	93.7795	0.484
sd0528	-3.271	0	98.518	1.4342
sd0529	0.5469	11	108.2035	0.381
sd0530	0.7289	11	98.518	0.3719
sd0531	-0.4838	6	92.743	0.4947
sd0532	-1.8465	2	72.3025	0.8196
sd0533	2.4665	21	98.518	0.4802
sd0534	-3.1842	1	52.237	1.4513
sd0535	-1.7013	2	98.518	0.7726
sd0536	0.1631	8	102.4465	0.4115
sd0537	-1.6237	2	75.6445	0.7489
sd0538	0.1542	8	98.518	0.4124
sd0539	-0.0631	7	99.0535	0.4363
sd0540	-0.3609	5	98.518	0.4759
sd0541	-0.0947	6	98.5795	0.4401
sd0542	0.7045	11	110.5675	0.3729
sd0543	-0.728	5	89.08	0.5363
sd0544	-0.0475	7	98.518	0.4344
sd0545	-1.2976	3	80.536	0.6592
sd0546	0.1891	8	102.8365	0.409
sd0547	0.1327	8	98.518	0.4146
sd0548	1.0994	14	116.491	0.3648
sd0549	0.1133	7	98.518	0.4166
sd0550	-0.6667	5	89.9995	0.5253
sd0551	-0.5171	5	92.2435	0.5
sd0552	-3.0583	1	98.518	1.3739
sd0553	-0.3396	7	94.906	0.4728
sd0554	0.4797	10	98.518	0.3852
sd0555	-0.4661	6	93.0085	0.4919
sd0556	1.7723	19	126.5845	0.3924

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0556	-0.4676	6	98.518	0.4921
sd0557	-3.271	0	50.935	1.4342
sd0558	-0.576	6	98.518	0.5097
sd0559	2.2246	20	133.369	0.4419
sd0560	0.7702	12	111.553	0.3703
sd0561	0.1845	7	102.7675	0.4095
sd0562	-2.3639	1	98.518	1.0182
sd0563	0.6489	11	109.7335	0.3754
sd0564	-2.0469	2	69.2965	0.8906
sd0565	-0.4186	6	98.518	0.4846
sd0566	-3.271	0	50.935	1.4342
sd0567	0.8815	13	98.518	0.3671
sd0568	0.3132	10	104.698	0.3978
sd0569	-1.2072	3	81.892	0.637
sd0570	-1.2488	3	98.518	0.6471
sd0571	-0.9347	3	85.9795	0.5765
sd0572	-0.2238	7	98.518	0.4567
sd0573	0.3022	9	104.533	0.3988
sd0574	1.2808	16	119.212	0.3671
sd0575	1.8211	19	98.518	0.3965
sd0576	-1.4347	2	78.4795	0.695
sd0577	0.2707	8	98.518	0.4015
sd0578	-0.2837	6	95.7445	0.4649
sd0579	0.3021	9	98.518	0.3988
sd0580	-0.1433	7	97.8505	0.4462
sd0581	-0.3342	6	98.518	0.4721
sd0582	-0.0785	6	98.8225	0.4381
sd0583	-2.0869	2	68.6965	0.9056
sd0584	-1.7135	2	98.518	0.7764
sd0585	-0.2775	7	95.8375	0.464
sd0586	-3.271	0	98.518	1.4342

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0587	0.3602	9	105.403	0.394
sd0588	-1.055	3	84.175	0.6021
sd0589	-0.1293	7	98.518	0.4444
sd0590	-1.6393	2	75.4105	0.7536
sd0591	-0.0192	8	98.518	0.4311
sd0592	1.7745	18	126.6175	0.3926
sd0593	0.5844	10	108.766	0.3788
sd0594	-0.7036	4	98.518	0.5319
sd0595	-0.3045	7	95.4325	0.4678
sd0596	-1.0468	4	98.518	0.6003
sd0597	-0.9093	4	86.3605	0.5713
sd0598	0.5534	10	108.301	0.3806
sd0599	1.0579	13	115.8685	0.3649
sd0600	0.3121	10	98.518	0.3979
sd0601	-0.2428	6	96.358	0.4592
sd0602	0.5144	10	107.716	0.383
sd0603	0.0087	7	98.518	0.4279
sd0604	0.0087	7	100.1305	0.4279
sd0605	0.5451	10	98.518	0.3811
sd0606	-1.5314	3	77.029	0.7219
sd0607	0.3703	9	105.5545	0.3932
sd0608	-0.4186	6	98.518	0.4846
sd0609	0.3703	9	105.5545	0.3932
sd0610	-0.2817	7	98.518	0.4646
sd0611	1.0731	14	116.0965	0.3648
sd0612	0.0925	7	101.3875	0.4188
sd0613	1.2581	15	98.518	0.3666
sd0614	2.096	19	131.44	0.4251
sd0615	-0.1819	7	98.518	0.4511
sd0616	-0.1819	7	97.2715	0.4511
sd0617	-0.4047	6	93.9295	0.4825

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0618	-0.1494	8	97.759	0.4469
sd0619	0.67	12	98.518	0.3744
sd0620	-0.7469	5	88.7965	0.5398
sd0621	-0.2428	6	96.358	0.4592
sd0622	0.5144	10	98.518	0.383
sd0623	0.0087	7	100.1305	0.4279
sd0624	0.0087	7	98.518	0.4279
sd0625	0.5451	10	108.1765	0.3811
sd0626	-1.5314	3	77.029	0.7219
sd0627	0.3703	9	105.5545	0.3932
sd0628	-0.4186	6	93.721	0.4846
sd0629	0.3703	9	98.518	0.3932
sd0630	-0.2817	7	95.7745	0.4646
sd0631	1.0731	14	116.0965	0.3648
sd0632	0.0925	7	98.518	0.4188
sd0633	1.2581	15	118.8715	0.3666
sd0634	2.096	19	98.518	0.4251
sd0635	-0.1819	7	97.2715	0.4511
sd0636	-0.1819	7	97.2715	0.4511
sd0637	-0.4047	6	93.9295	0.4825
sd0638	-0.1494	8	98.518	0.4469
sd0639	0.67	12	110.05	0.3744
sd0640	-0.7469	5	88.7965	0.5398
sd0641	1.313	15	98.518	0.3679
sd0642	1.1422	14	117.133	0.365
sd0643	1.1422	14	98.518	0.365
sd0644	-0.3317	6	95.0245	0.4717
sd0645	-0.2194	7	96.709	0.4561
sd0646	0.3671	10	105.5065	0.3934
sd0647	0.0657	8	100.9855	0.4216
sd0648	-0.3423	5	98.518	0.4732

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0649	1.8444	18	127.666	0.3986
sd0650	-0.2496	5	96.256	0.4602
sd0651	0.0122	7	98.518	0.4275
sd0652	-0.2147	7	96.7795	0.4555
sd0653	0.3642	9	98.518	0.3937
sd0654	-1.1311	3	83.0335	0.6192
sd0655	1.5566	15	123.349	0.3779
sd0656	-1.9464	2	70.804	0.8541
sd0657	-2.0839	2	98.518	0.9045
sd0658	-0.4034	6	93.949	0.4823
sd0659	-0.4034	6	93.949	0.4823
sd0660	2.4281	21	98.518	0.4735
sd0661	-0.114	7	98.29	0.4425
sd0662	-1.1191	4	98.518	0.6164
sd0663	0.7438	12	111.157	0.3713
sd0664	0.412	9	106.18	0.39
sd0665	-0.0479	7	98.518	0.4345
sd0666	1.1669	15	117.5035	0.3653
sd0667	-0.9854	4	98.518	0.587
sd0668	0.472	11	107.08	0.3858
sd0669	-0.8528	4	87.208	0.56
sd0670	1.2749	15	98.518	0.367
sd0671	-0.8779	4	86.8315	0.565
sd0672	0.1037	7	98.518	0.4176
sd0673	1.2293	14	118.4395	0.3661
sd0674	1.2263	14	118.3945	0.3661
sd0675	0.3459	8	105.1885	0.3951
sd0676	0.1553	8	98.518	0.4123
sd0677	-1.029	4	84.565	0.5964
sd0678	1.6186	16	124.279	0.3815
sd0679	1.0426	14	98.518	0.3649

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0680	0.6272	10	109.408	0.3765
sd0681	0.8405	11	98.518	0.3681
sd0682	0.7273	12	110.9095	0.3719
sd0683	-0.3317	6	95.0245	0.4717
sd0684	-0.1546	6	98.518	0.4476
sd0685	0.6186	10	109.279	0.377
sd0686	-0.7476	4	98.518	0.5399
sd0687	0.4095	10	106.1425	0.3902
sd0688	-0.2462	6	96.307	0.4597
sd0689	-0.1349	6	98.518	0.4451
sd0690	-1.0095	4	84.8575	0.5922
sd0691	0.4759	9	98.518	0.3855
sd0692	0.1303	8	101.9545	0.4148
sd0693	0.2242	9	103.363	0.4057
sd0694	-0.0815	7	98.7775	0.4385
sd0695	0.3269	10	98.518	0.3967
sd0696	-0.1311	7	98.0335	0.4446
sd0697	-0.3045	7	95.4325	0.4678
sd0698	1.8877	18	98.518	0.4025
sd0699	-0.3045	7	95.4325	0.4678
sd0700	-0.3317	6	98.518	0.4717
sd0701	0.1883	9	102.8245	0.4091
sd0702	-0.3917	6	94.1245	0.4805
sd0703	-0.2838	7	98.518	0.4649
sd0704	1.6695	17	125.0425	0.3848
sd0705	-0.8577	5	98.518	0.5609
sd0706	0.0869	8	101.3035	0.4193
sd0707	-1.029	4	84.565	0.5964
sd0708	1.6186	16	98.518	0.3815
sd0709	1.0426	14	115.639	0.3649
sd0710	0.6272	10	98.518	0.3765

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0711	0.8405	11	112.6075	0.3681
sd0712	0.7273	12	110.9095	0.3719
sd0713	-0.3317	6	95.0245	0.4717
sd0714	-0.1546	6	98.518	0.4476
sd0715	0.6186	10	109.279	0.377
sd0716	-0.7476	4	88.786	0.5399
sd0717	0.4095	10	98.518	0.3902
sd0718	-0.2462	6	96.307	0.4597
sd0719	-0.1349	6	98.518	0.4451
sd0720	-1.0095	4	84.8575	0.5922
sd0721	0.4759	9	107.1385	0.3855
sd0722	0.1303	8	101.9545	0.4148
sd0723	0.2242	9	103.363	0.4057
sd0724	-0.0815	7	98.518	0.4385
sd0725	0.3269	10	104.9035	0.3967
sd0726	-0.1311	7	98.0335	0.4446
sd0727	-0.3045	7	98.518	0.4678
sd0728	1.8877	18	128.3155	0.4025
sd0729	-0.3045	7	98.518	0.4678
sd0730	-0.3317	6	95.0245	0.4717
sd0731	-1.3176	2	98.518	0.6643
sd0732	-0.1062	8	98.407	0.4415
sd0733	0.6577	12	98.518	0.375
sd0734	1.23	14	118.45	0.3661
sd0735	0.9333	12	113.9995	0.3661
sd0736	1.1262	14	98.518	0.3649
sd0737	-0.5883	5	91.1755	0.5118
sd0738	-3.271	0	98.518	1.4342
sd0739	-3.271	0	50.935	1.4342
sd0740	-0.1564	7	97.654	0.4478
sd0741	-0.0888	7	98.518	0.4394

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0742	-0.3654	5	94.519	0.4766
sd0743	0.145	6	98.518	0.4134
sd0744	-0.4428	5	93.358	0.4883
sd0745	-1.295	3	80.575	0.6586
sd0746	0.1798	9	98.518	0.4099
sd0747	-0.6794	5	89.809	0.5276
sd0748	-1.7521	2	98.518	0.7887
sd0749	-3.271	0	50.935	1.4342
sd0750	-0.5236	6	98.518	0.5011
sd0751	0.5444	9	108.166	0.3811
sd0752	-0.0792	8	98.518	0.4382
sd0753	1.4422	16	121.633	0.3724
sd0754	-0.0582	6	99.127	0.4357
sd0755	-0.9294	3	98.518	0.5754
sd0756	-0.2197	6	96.7045	0.4561
sd0757	-0.7405	5	98.518	0.5386
sd0758	0.2546	8	103.819	0.4029
sd0759	-0.3717	6	94.4245	0.4775
sd0760	-0.0223	7	98.518	0.4315
sd0761	1.9065	18	128.5975	0.4043
sd0762	-2.4598	1	98.518	1.0608
sd0763	0.13	8	101.95	0.4149
sd0764	-0.421	6	93.685	0.4849
sd0765	-0.2557	6	98.518	0.461
sd0766	0.2338	9	103.507	0.4048
sd0767	0.3437	10	98.518	0.3953
sd0768	0.0609	8	100.9135	0.4221
sd0769	0.1666	8	98.518	0.4112
sd0770	0.0547	8	100.8205	0.4228
sd0771	-0.2136	7	98.518	0.4553
sd0772	-1.0035	4	84.9475	0.5909

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0773	1.3857	15	120.7855	0.3702
sd0774	0.6719	11	98.518	0.3743
sd0775	-1.2296	3	81.556	0.6424
sd0776	0.8182	12	98.518	0.3687
sd0777	-1.7013	2	74.4805	0.7726
sd0778	1.9031	18	128.5465	0.404
sd0779	-2.5176	1	62.236	1.0874
sd0780	-2.5176	1	62.236	1.0874
sd0781	0.5661	11	98.518	0.3798
sd0782	0.4932	11	107.398	0.3843
sd0783	2.4117	21	136.1755	0.4707
sd0784	1.2033	15	98.518	0.3657
sd0785	1.2033	15	118.0495	0.3657
sd0786	1.5434	17	98.518	0.3772
sd0787	-0.9116	4	86.326	0.5717
sd0788	1.2149	14	118.2235	0.3659
sd0789	-3.271	0	50.935	1.4342
sd0790	0.9917	11	98.518	0.3653
sd0791	0.604	10	109.06	0.3777
sd0792	0.8604	12	112.906	0.3676
sd0793	1.2132	15	98.518	0.3658
sd0794	0.6011	11	109.0165	0.3779
sd0795	1.594	17	98.518	0.38
sd0796	1.1789	14	117.6835	0.3654
sd0797	0.494	11	107.41	0.3843
sd0798	-0.7607	5	88.5895	0.5424
sd0799	-2.5176	1	62.236	1.0874
sd0800	-2.5176	1	98.518	1.0874
sd0801	0.5661	11	108.4915	0.3798
sd0802	0.4932	11	107.398	0.3843
sd0803	2.4117	21	98.518	0.4707

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0804	1.2033	15	118.0495	0.3657
sd0805	1.2033	15	98.518	0.3657
sd0806	1.5434	17	123.151	0.3772
sd0807	-0.9116	4	98.518	0.5717
sd0808	1.2149	14	118.2235	0.3659
sd0809	-3.271	0	98.518	1.4342
sd0810	0.9917	11	114.8755	0.3653
sd0811	0.604	10	109.06	0.3777
sd0812	0.8604	12	98.518	0.3676
sd0813	1.2132	15	118.198	0.3658
sd0814	0.6011	11	98.518	0.3779
sd0815	1.594	17	123.91	0.38
sd0816	1.1789	14	117.6835	0.3654
sd0817	0.494	11	98.518	0.3843
sd0818	-0.7607	5	88.5895	0.5424
sd0819	-0.8886	3	98.518	0.5671
sd0820	-0.1702	6	97.447	0.4496
sd0821	-0.7417	4	88.8745	0.5388
sd0822	-0.3769	7	98.518	0.4783
sd0823	0.2852	8	104.278	0.4002
sd0824	0.4362	10	98.518	0.3882
sd0825	0.4362	10	106.543	0.3882
sd0826	0.1823	9	102.7345	0.4097
sd0827	-1.3957	3	79.0645	0.6846
sd0828	1.454	15	98.518	0.3729
sd0829	0.3337	9	105.0055	0.3961
sd0830	0.6438	11	109.657	0.3757
sd0831	-1.735	2	98.518	0.7832
sd0832	-0.4679	6	92.9815	0.4922
sd0833	-0.0111	8	98.518	0.4302
sd0834	-0.0111	8	99.8335	0.4302

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0835	-0.0111	8	99.8335	0.4302
sd0836	-0.0111	8	98.518	0.4302
sd0837	-1.5335	3	76.9975	0.7225
sd0838	-0.0111	8	98.518	0.4302
sd0839	0.4416	10	106.624	0.3879
sd0840	0.9478	13	114.217	0.3658
sd0841	0.4047	10	98.518	0.3906
sd0842	-0.9263	5	86.1055	0.5747
sd0843	-0.5536	6	98.518	0.506
sd0844	-0.5536	6	91.696	0.506
sd0845	1.5636	16	123.454	0.3783
sd0846	0.5504	9	108.256	0.3808
sd0847	0.2023	9	98.518	0.4078
sd0848	-1.2425	4	81.3625	0.6456
sd0849	-0.9218	5	86.173	0.5738
sd0850	-0.5536	6	98.518	0.506
sd0851	1.2075	14	118.1125	0.3658
sd0852	0.4892	9	98.518	0.3846
sd0853	0.2852	8	104.278	0.4002
sd0854	0.4362	10	106.543	0.3882
sd0855	0.4362	10	106.543	0.3882
sd0856	0.1823	9	102.7345	0.4097
sd0857	-1.3957	3	98.518	0.6846
sd0858	1.454	15	121.81	0.3729
sd0859	0.3337	9	105.0055	0.3961
sd0860	0.6438	11	98.518	0.3757
sd0861	-1.735	2	73.975	0.7832
sd0862	-0.4679	6	98.518	0.4922
sd0863	-0.0111	8	99.8335	0.4302
sd0864	-0.0111	8	99.8335	0.4302
sd0865	-0.0111	8	99.8335	0.4302

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0866	-0.0111	8	98.518	0.4302
sd0867	-1.5335	3	76.9975	0.7225
sd0868	-0.0111	8	99.8335	0.4302
sd0869	0.4416	10	98.518	0.3879
sd0870	0.9478	13	114.217	0.3658
sd0871	0.4047	10	98.518	0.3906
sd0872	-0.9263	5	86.1055	0.5747
sd0873	-0.5536	6	91.696	0.506
sd0874	-0.5536	6	91.696	0.506
sd0875	1.5636	16	123.454	0.3783
sd0876	0.5504	9	98.518	0.3808
sd0877	0.1848	7	102.772	0.4094
sd0878	-0.164	7	97.54	0.4488
sd0879	-0.1818	7	98.518	0.4511
sd0880	-1.4449	3	78.3265	0.6978
sd0881	0.7942	11	98.518	0.3695
sd0882	0.6007	10	109.0105	0.3779
sd0883	-0.0534	7	99.199	0.4351
sd0884	-0.8539	4	87.1915	0.5602
sd0885	1.4752	17	98.518	0.3738
sd0886	0.6299	9	109.4485	0.3764
sd0887	1.0461	14	115.6915	0.3649
sd0888	1.026	14	98.518	0.365
sd0889	-2.3051	2	65.4235	0.993
sd0890	-0.2754	6	98.518	0.4637
sd0891	-0.0263	7	99.6055	0.4319
sd0892	1.5266	16	122.899	0.3763
sd0893	-0.6069	5	90.8965	0.5149
sd0894	0.4504	10	106.756	0.3872
sd0895	-0.4774	5	98.518	0.4937
sd0896	-0.1439	7	97.8415	0.4462

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0897	-0.6492	4	90.262	0.5222
sd0898	0.7623	11	98.518	0.3706
sd0899	0.9252	13	113.878	0.3662
sd0900	-0.9032	4	98.518	0.57
sd0901	-0.3696	6	94.456	0.4772
sd0902	-1.6571	2	75.1435	0.759
sd0903	-0.2283	6	96.5755	0.4573
sd0904	-0.6492	4	98.518	0.5222
sd0905	0.1048	8	101.572	0.4175
sd0906	0.6699	11	110.0485	0.3744
sd0907	1.1279	14	98.518	0.365
sd0908	0.5671	10	108.5065	0.3798
sd0909	1.6623	16	98.518	0.3843
sd0910	-2.0107	1	69.8395	0.8772
sd0911	0.252	9	103.78	0.4032
sd0912	0.0983	9	98.518	0.4181
sd0913	0.4908	10	107.362	0.3845
sd0914	2.0629	20	98.518	0.4211
sd0915	-0.1127	7	98.3095	0.4423
sd0916	0.4721	9	107.0815	0.3857
sd0917	-1.027	4	98.518	0.596
sd0918	1.2819	16	119.2285	0.3672
sd0919	0.4119	8	98.518	0.39
sd0920	-0.2483	7	96.2755	0.46
sd0921	-0.6013	5	90.9805	0.514
sd0922	-0.61	5	90.85	0.5155
sd0923	0.363	9	98.518	0.3938
sd0924	3.0593	22	145.8895	0.6147
sd0925	-1.22	3	81.7	0.6401
sd0926	0.0666	8	98.518	0.4215
sd0927	0.787	10	111.805	0.3697

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0928	0.379	8	98.518	0.3925
sd0929	1.4539	17	121.8085	0.3728
sd0930	-0.2358	5	96.463	0.4583
sd0931	0.6374	10	98.518	0.376
sd0932	1.1355	14	117.0325	0.365
sd0933	-0.1723	8	98.518	0.4499
sd0934	-0.3653	7	94.5205	0.4766
sd0935	-0.3653	7	94.5205	0.4766
sd0936	-0.0333	7	98.518	0.4327
sd0937	1.2938	15	119.407	0.3675
sd0938	-0.0692	7	98.518	0.437
sd0939	0.5911	11	108.8665	0.3784
sd0940	1.5512	16	123.268	0.3776
sd0941	1.4858	16	122.287	0.3743
sd0942	1.6302	16	98.518	0.3822
sd0943	1.1877	14	117.8155	0.3655
sd0944	0.4777	8	107.1655	0.3854
sd0945	0.0813	7	98.518	0.4199
sd0946	-0.0692	7	98.962	0.437
sd0947	1.1571	14	98.518	0.3652
sd0948	0.4309	9	106.4635	0.3886
sd0949	-0.1392	7	97.912	0.4456
sd0950	0.7521	12	98.518	0.371
sd0951	-0.8455	3	87.3175	0.5586
sd0952	0.5308	10	98.518	0.3819
sd0953	0.5308	10	107.962	0.3819
sd0954	-0.0101	6	99.8485	0.4301
sd0955	0.4139	10	98.518	0.3899
sd0956	1.586	16	123.79	0.3795
sd0957	1.7363	18	98.518	0.3896
sd0958	0.0724	8	101.086	0.4209

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0959	1.2915	13	119.3725	0.3674
sd0960	-1.4033	3	78.9505	0.6866
sd0961	0.4695	9	98.518	0.3859
sd0962	1.2433	14	118.6495	0.3664
sd0963	-0.1447	6	97.8295	0.4463
sd0964	-0.2733	7	98.518	0.4634
sd0965	0.6339	10	109.5085	0.3762
sd0966	1.4739	15	98.518	0.3737
sd0967	1.1157	13	116.7355	0.3649
sd0968	0.3852	9	105.778	0.392
sd0969	1.1157	13	98.518	0.3649
sd0970	-0.4613	6	93.0805	0.4912
sd0971	1.2433	14	98.518	0.3664
sd0972	1.0336	13	115.504	0.3649
sd0973	-0.2934	6	95.599	0.4662
sd0974	0.5977	10	98.518	0.3781
sd0975	0.5977	10	108.9655	0.3781
sd0976	-0.1721	5	98.518	0.4498
sd0977	-0.7552	4	88.672	0.5413
sd0978	1.0261	13	98.518	0.365
sd0979	-3.0583	1	54.1255	1.3739
sd0980	1.2433	14	98.518	0.3664
sd0981	0.2626	9	103.939	0.4022
sd0982	0.9206	12	113.809	0.3663
sd0983	-2.3639	1	98.518	1.0182
sd0984	0.8825	13	113.2375	0.3671
sd0985	0.916	13	98.518	0.3664
sd0986	-2.6905	1	59.6425	1.1715
sd0987	1.4112	16	121.168	0.3711
sd0988	1.0226	13	115.339	0.365
sd0989	1.1814	15	117.721	0.3654

Student ID	Ability θ	Raw Score	IQ Score	SE
sd0990	0.6927	12	98.518	0.3734
sd0991	-0.1826	7	97.261	0.4512
sd0992	0.965	13	114.475	0.3656
sd0993	0.8724	12	98.518	0.3673
sd0994	0.5361	10	108.0415	0.3816
sd0995	0.8399	12	98.518	0.3681
sd0996	0.8399	12	112.5985	0.3681
sd0997	-2.3051	2	98.518	0.993
sd0998	-0.649	4	90.265	0.5222
sd0999	0.8399	12	98.518	0.3681
sd1000	0.3727	10	105.5905	0.393
sd1001	-0.2654	5	96.019	0.4623
sd1002	0.2329	8	98.518	0.4049
sd1003	0.0424	8	100.636	0.4241
sd1004	-0.2022	7	98.518	0.4538
sd1005	3.9219	24	158.8285	0.9376
sd1006	0.6029	11	109.0435	0.3778
sd1007	0.7193	12	98.518	0.3723
sd1008	-1.5003	2	77.4955	0.7131
sd1009	1.9576	18	98.518	0.4095
sd1010	1.0296	14	115.444	0.365
sd1011	1.8186	19	127.279	0.3963
sd1012	1.313	15	98.518	0.3679
sd1013	1.1422	14	117.133	0.365
sd1014	1.1422	14	98.518	0.365
sd1015	-0.3317	6	95.0245	0.4717
sd1016	-0.2194	7	98.518	0.4561
sd1017	0.3671	10	105.5065	0.3934
sd1018	0.0657	8	98.518	0.4216
sd1019	-0.3423	5	94.8655	0.4732
sd1020	1.8444	18	127.666	0.3986

Student ID	Ability θ	Raw Score	IQ Score	SE
sd1021	-0.2496	5	98.518	0.4602
sd1022	0.0122	7	100.183	0.4275
sd1023	-0.2147	7	98.518	0.4555
sd1024	0.3642	9	105.463	0.3937
sd1025	-1.1311	3	83.0335	0.6192
sd1026	1.5566	15	123.349	0.3779
sd1027	-1.9464	2	70.804	0.8541
sd1028	-2.0839	2	98.518	0.9045
sd1029	-0.4034	6	93.949	0.4823
sd1030	-0.4034	6	93.949	0.4823
sd1031	2.4281	21	98.518	0.4735
sd1032	-0.114	7	98.29	0.4425
sd1033	-1.1191	4	98.518	0.6164
sd1034	0.7438	12	111.157	0.3713
sd1035	0.412	9	106.18	0.39
sd1036	1.5566	15	123.349	0.3779
sd1037	-1.9464	2	98.518	0.8541
sd1038	-2.0839	2	68.7415	0.9045
sd1039	-0.4034	6	93.949	0.4823
sd1040	-0.4034	6	98.518	0.4823
sd1041	2.4281	21	136.4215	0.4735
sd1042	-0.114	7	98.518	0.4425
sd1043	-1.1191	4	83.2135	0.6164
sd1044	0.7438	12	111.157	0.3713
sd1045	0.412	9	106.18	0.39
sd1046	-0.0479	7	99.2815	0.4345
sd1047	1.1669	15	98.518	0.3653
sd1048	-0.9854	4	85.219	0.587
sd1049	0.472	11	107.08	0.3858
sd1050	-0.8528	4	98.518	0.56
sd1051	1.2749	15	119.1235	0.367

Student ID	Ability θ	Raw Score	IQ Score	SE
sd1052	-0.8779	4	98.518	0.565
sd1053	0.1037	7	101.5555	0.4176
sd1054	1.2293	14	118.4395	0.3661
sd1055	1.2263	14	118.3945	0.3661
sd1056	0.3459	8	98.518	0.3951
sd1057	0.1553	8	102.3295	0.4123
sd1058	0.3581	9	105.3715	0.3942
sd1059	0.8091	13	98.518	0.369
sd1060	1.5753	17	123.6295	0.3789
sd1061	-0.2182	6	98.518	0.4559
sd1062	0.2785	9	104.1775	0.4008
sd1063	-0.0658	7	99.013	0.4366
sd1064	0.0608	8	100.912	0.4221
sd1065	-0.1345	7	97.9825	0.445
sd1066	0.9148	13	98.518	0.3664
sd1067	-0.0531	8	99.2035	0.4351
sd1068	-0.173	6	97.405	0.45
sd1069	1.6328	17	98.518	0.3824
sd1070	0.9957	12	114.9355	0.3652
sd1071	0.7006	11	98.518	0.373
sd1072	0.4621	10	106.9315	0.3864
sd1073	0.5076	10	107.614	0.3834
sd1074	-0.8371	4	87.4435	0.5569
sd1075	1.3159	14	98.518	0.368
sd1076	-1.4418	3	78.373	0.697
sd1077	-0.5986	5	91.021	0.5135
sd1078	-0.1499	7	98.518	0.447
sd1079	0.1125	8	101.6875	0.4167
sd1080	2.4281	21	98.518	0.4735
sd1081	-0.3834	6	94.249	0.4793
sd1082	-1.492	3	77.62	0.7108

Student ID	Ability θ	Raw Score	IQ Score	SE
sd1083	0.8733	13	113.0995	0.3673
sd1084	0.4265	9	106.3975	0.389
sd1085	1.4912	15	98.518	0.3745
sd1086	-1.9464	2	70.804	0.8541
sd1087	-0.9951	4	85.0735	0.5891
sd1088	-0.6418	5	98.518	0.5209
sd1089	0.096	8	101.44	0.4184
sd1090	2.6721	22	98.518	0.5199
sd1091	0.0462	8	100.693	0.4237
sd1092	-0.9687	4	98.518	0.5835
sd1093	0.8605	13	112.9075	0.3676
sd1094	0.0635	7	98.518	0.4219
sd1095	-0.237	6	96.445	0.4585
sd1096	0.9914	14	114.871	0.3653
sd1097	-1.1377	4	98.518	0.6207
sd1098	-0.7177	5	89.2345	0.5344
sd1099	-0.2462	6	98.518	0.4597
sd1100	-0.1349	6	97.9765	0.4451
sd1101	-1.0095	4	84.8575	0.5922
sd1102	0.2144	9	103.216	0.4066

Bibliography

Adeyemi, T. O. (2008). Organisational climate and teachers' job performance in primary schools in Ondo State, Nigeria: An Analytical Survey. *Asian Journal of Information Technology,* 7(4), 138-145.

Aditya, R. (1997). The social scientific study of leadership: Quo Vadis? *Journal of Management*, 23, 409-474.

Akinyemi, A. (1993). Job satisfaction among teachers in Ondo State secondary school. *Journal of Educational Leadership*, 29, 10-22.

Albrecht, K. (2004). *Social intelligence theory*. Retrieved October 4, 2016, from http://www.karlalbrecht. com/siprofile/siprofiletheory.html

Albrecht, K. (2005). *Social intelligence: The new science of success*. San Fransisco: Pfeiffer. Retrieved February 14, 2016, from http://www.karlalbrecht. Infodb/crisis.onnigeria09

Albrecht, K. (2009). Social intelligence: The new science of success. *Personal Excellence*, 10(12), pp.5.

Al-Ghoul, A. A. (1993). *Self-efficacy and social intelligence and their relationship to some of the emotional factors of teachers, educators and non-educators and their students' academic achievement*. Unpublished doctoral dissertation, Faculty of Education, University of Assiut.

Al-Qudra, M. S. (2000). *Social intelligence among the students of the Islamic University and its relationship to religiosity and some of the variables*. Unpublished master thesis, Faculty of Education, University of Islamic-Gaza.

Amin, M., Rahmatullah, S., Muhammad, A., & Malik, A. A. (2013). Teacher' job performance at secondary level in Khyber Pakhyunkhwa, Pakistan. *Gomal University Journal of Research,* 29(2).

Anme, T. (2014). Validity and reliability of the interaction rating scale advanced (IRSA) as an index of social competence development. *Public Health Research,* 4(1), 25-30.

Atiya, I., & Palwasha, J. (n.d.,). Teacher's job performance: The role of Motivation, *Abasyn Journal of Social Science*, 5(2).

Aye Aye Aung. (2014). *An assessment of emotional intelligence impact on teachers' job performance.* Unpublished doctoral dissertation, Yangon University of Education.

Benton, L. B. (2002). *Supervision and management.* New York: McGraw Hill.

223

Birknerova, Z., Frankvsky, M., & Zbilejova, L. (2013). Social intelligence in the context of personality traits of teachers, *American International Journal of Contemporary Research,* 7(7), 11-17.

Birman, B., Desimone, G, M., & Porter, A. (2000). Designing professional development that works. *Journal of Educational Leadership*, 57(8), 28-33.

Bloom, P. (2013). *Just babies: The origins of good and evil*. Crown. Retrieved April 4, 2016, from http://hdl.handle.net/10603/8343

Bosman, L. A. (2003). Correlates and outcomes of emotional intelligence in organizations. *Faculty of Economic and Building Sciences*. University of Port Elizabeth. 19-215.

Brown, J. (1992). *Definition of a profession: The authority of metaphor in the history of intelligence testing, 1890-1930*. Princeton, NJ: Princeton University Press.

Brown, L. T., & Anthony, R. G. (1990). Continuing the search for social intelligence. *Personality and individual differences,* 11(5), 463-470.

Burden, P. R., & Byrd, D. M. (2002). *Methods for effective teaching*. Boston, MA: Allyn and Bacon.

Buzan, T. (2002). *The power of social intelligence: 10 ways to tap into your social genius.* Published June 5th 2002 by Thorsons.

Cai, Y., & Lin, C. (2006). Theory and practice on teacher performance evaluation, *Frontiers of Education in China,* 1(1), 29-39.

Calvin, W. H. (1996). *How brain think: The evolution of intelligence*. New York: Science Master. Retrieved September 19, 2014, from http://www.bradhambrick.com/what-is-emoitonal-maturity/

Cantor, N., & Kihlstrom, J. F. (1987). Social intelligence and cognitive assessments of personality. In R.S. Wyer & T.K. Srull (Eds), *Advances in social cognition.* Vol (2), 1-59.

Cheng, C., Chiu, C., Hong, Y., & Cheung, J. S. (2001). Discriminative facility and its role in the perceived quality of interactional experiences. *Journal of Personality,* 69(5), 765-786.

Cheng, Y. C., & Tsui, K. T. (1999). School organizational health and teacher commitment: A contingency study with multi-level analysis. *Educational Research and Evaluation,* 5, 249-268.

Cohen, J. (1998). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ:Erlbaum.

Cole, G. A. (1998). *Organization behaviour: Theory and practices*, London: Asford Colour Press.

Colquitt, J., LePine, J., & Wesson, M. (2010). *Organizational behavior*: *Improving performance and commitment in the workplace*, McGraw-Hill Education.

Crocker, L. M., & Algina, J. (1986). *Introduction to classical and modern test theory*. New York: Holt, Rinehart and Winston.

Danforth, S., & Boyle, J. R. (2007). *Cases in behavior management.* Upper Saddle River, NJ: Merrill Prentice-Hall Inc.

Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology, 10*, 85.

DeMars, K. J. (2010). *Nonlinear orbit uncertainty prediction and rectification for space situational awareness.* Unpublished doctoral dissertation, The University of Texas at Austin.

Department of Educational Psychology. (2012). *Educational psychology*, BEd 3th Year. Yangon University of Education.

Dessler, G. (2005). *Human resource management*, Pearson, New Jersey.

Dincer, K. (2007). Educators' role as spiritually intelligent leaders in educational institutions. *International Journal of Human Sciences, 4*(1).

Dong, O., Koper, R. G., & Collaço, C. M. (2008). Social intelligence, self-esteem, and intercultural communication sensitivity. *Intercultural Communication Studies*. 17(2), 162-165.

Edwards, C. H. (2008). *Classroom discipline and management*. Hoboken, NJ: John Wiley and Sons.

Ei Yamin Soe Naing. (2013). *The powerful effect of equating method on the adequacy of mixed format test equating in non equivalent groups at upper primary level*. Unpublished master thesis, Yangon University of Eduation.

Fambrough, M. J., & Hart, R. K. (2008). Emotions in leadership development: A critique of emotional intelligence. *Advances in Developing Human Resources*. 10(5), 740-746.

Fischer, K., & Immordino-Yang. (2008). Introduction: *The brain and learning*. San Francisco, CA: Jossey-Bass.

Ford, M. E., & Tisak, M. S. (1983). A further search for social intelligence. *Journal of Educational Psychology*, 75, 196-206.

Fredrick, L. D., Deitz, S. M., Bryceland, J. A., & Hummel, J. H. (2000). *Behavior analysis, education, and effective schooling*. Reno, NV: Context Press.

Ganaie, M. Y., & Hafiz, M. (2015). A study of social intelligence and academic achievement of college students of district Srinagar, J&K, India. *The Journal of American Science.* 11(3).

Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. New York: Basic Books. Retrieved May 11, 2015, from http://books.google.com/ books?id=4Do-bFrt9tUC

Gazzaniga, M. S., & Heatherton, T. F. (2007). *Psychological science*. New York: W.W. Norton & Company, Inc.

Gini, G. (2006). Adolescence. *Journal of Adolescence*. 29. 307-312.

Goleman, D. (1995). *Emotional Intelligences*. New York. Bantam Books.

Goleman, D. (1997). *Emotional Intelligence*. New York: Bantam Books Inc.

Goleman, D. (2000). *The handbook of emotional intelligence.* San Franciso: Jossey-Bass.

Goleman, D. (2006). *Social intelligence: The new science of human relationships*. New York New York: Bantam Dell. http://www.pearsonassessments.com /NR/Assess_Focus_ Spring_02.pdf

Goleman, D., & Boyatzis, R. E. (2008). Social intelligence and the biology of leadership. *Harvard Business Review*, 86(9), 74-81.

Green, C., Jegadeesh, N., & Tang, Y. (2005). Gender and job performance: Evidence from Wall Street. *Financial Analysis Journal,* 65(6).

Greenspan, S. (1979). *Handbook of mental deficiency, psychologicaltheory and research.* Hillsdale, NJ: Erlbaum.

Grubaugh, S., & Huston, R. (1990). Establishing a classroom environment that promotes interaction and improved student behavior. *Clearing House*, 63(8), 375-378.

Gupta, R. K., Woodside, A., Dubelaar, C., & Bradmore, D. (2009). Diffusing knowledge-based core competencies for leveraging innovation strategies: Modeling outsourcing to knowledge process organizations (KPOs) in pharmaceutical networks. *Industrial Marketing Management*, 38, Issue 2pp, 219-227.

Habib, E., Adel, Z., & Azim, E. (1994). The study of relationship between social intelligence and organizational performance. *International Journal of Organizational Leadership*, 2(1).

Hambleton, R. K., & Swaminathan, H. (1985). *Item response theory: Principles and applications*. Boston: Kluwer

Hambleton, R. K., Swaminathan, H., & Rogers, H. J. (1991). *Fundamentals of item response theory*. Newbury Park, CA: Sage Publications, Inc.

Harris, B. (2007). *Supporting the emotional work of school leaders*. California: Paul Chapman Publishing.

Harslett, M., Harrison, B., Godfrey, J., Partington, G., & Richer, K. (1998). *Aboriginal and Islander education workers' perceptions of schooling*. Paper prepared for the Australian Association for Educational Research Conference, Adelaide.

Hawley, W. D., & Valli, L. (1999). The essentials of effective professional development: A new consensus. In L.

Hoepfner, R., & O'Sullivan, M. (1968). Social intelligence and I.Q. *Educational and Psychological Measurement*, 28, 339-344.

Hopkins, M. M., & Bilimoria, D. (2008). Social and emotional competencies predicting success for male and female executives. *Journal of Management Development*, 27(1), 13-35.

Hulin, C. L., & Judge, T. A. (2003). Job Attitudes. In: Borman, W. C., & Ilgen, D. R, & Klimoski, R. J. (Eds) *Handbook of Psychology* (pp. 255-276). Hoboken, New Jersy: John Wiley & Sons. Inc. https://is.muni.cz/el/1441/podzim2012/ SZk1025a/um/ Handbook_ Of_Psychology_-Personality_And_Social_Psychology Malestrom_. pdf

Hunt, T. (1928). The measurement of social intelligence. *Journal of Applied Psychology*, 12, 317-334.

Inayatullah, A., & Jahangir, P. (2012), Teachers job performance*: The role of motivation. *Abasyn Journal of social science*, 5(2).

Jackson Public School. (2008). Teacher Performance Evaluation. Retrieved July 8, 2017, from : http://www.rrojasdata bank. Infodb/crisis.onnigeria09.pdf.

Jones, K., & Day, J. D. (1997). Discrimination of two aspects of cognitive-social intelligence from academic intelligence. *Journal of Educational Psychology*, 89(3), 486-497.

Joseph, C., & Lakshmi, S. S. (2010). *Social Intelligence, a key to success* (SSRN Scholarly Paper No. ID 1706610). Rochester, NY: Social Science Research Network. Retrieved from http://papers.ssrn.com/abstract=1706610

Joshua, K. (2014). The effects of Age on social and emotional intelligence and the surprising implications for business leaders. *Journal of Business*, 45(2).

Kamalpreet, K. T. (2013). A study of social and emotional intelligence of secondary school teachers. *International Journal of Behavioral Social and Movement Sciences*. Vol:02.

Keating, D. P. (1978). A search for social intelligence. *Journal of Educational Psychology,* 70, 218-223.

Kolski-Anderaco, A. (2010). *Social intelligence*. Smart Business Network Inc. kolskiandreacoa@upmc.edu or (412) 647-8728.

Kozmitzki, C., & John, O. P. (1993). The implict use of explicit conceptions of social intelligence. *Personality and Individual Differences*, 15, 11-23.

Landy, F. J. (2006). The long, frustrating, and fruitless search for social intelligence: *A cautionary tale. In* K.R. Murphy (Ed.), *A Critique of emotional intelligence: what are the problems and how can they be fixed?* (pp.81-123). Mahwah, NJ: Lawrence Erlbaum.

Langguyuan-Kadtong, M. (2013). Work performance and job satisfaction among teachers. *International Journal of Humanities and Social Science,* 3(5).

Lathesh, K. R., & Vidya, D. A. (2018). A study on social intelligence and its impact on employee performance of insurance sectors in Mysuru City. *International Journal of Mechanical Engineering and Technology (IJMET)*, 9(1).

Leigh, A., & Mead, S. (2005). Lifting performance of teachers. Policy Report, Progressive Policy Institute.

Lemlech, J. K. (1988). *Classroom management*. 2nd Edition. Longman Inc.: New York.

Lennox, R. D., & Wolfe, R. N. (1984). Self-monitoring scale. *Journal of Personality and Social Psychology*, 46(6).

Livergood, N. (2013). *Social intelligence*: *A new definition of human intelligence*. Retrieved August 24, 2017, from http://www.hermes-press.com/socint4.htm

Lord, F. M. (1980). *Applications of item response theory to practical testing problems*. New Jersey: Lawrence Erlbaum Associates, Inc.

Lord, F. M., & Novick, M. R. (1968). Statistical theories of mental test scores. Reading, MA: Addison-Wesley.

Magida, A. (2006). Opening the doors of wonder: Reflections on religious rites of passage. University of California Press, Berkeley. http://www.loc.gov/catdir/enhancements

Mali, P. (2005). *Improving total productivity*. New York: John Witey Press.

Malikow, M. (2005). Effective teacher study. *National Forum of Teacher Education Journal Electronic*, 16 (3E), 1-9.

Margaret, N. (2010). *Influence of the teachers' professionalism on the teacher performance in Busiro country secondary schools, Wakiso district*. Unpublished master thesis. Makerere University.

Marlowe, H. A. (1986). Social intelligence: Evidence for multidimensionality and construct independence. *Journal of Educational Psychology*, 78, 52-58.

Marti, S. J. (2005). Autonomous interactive intermediaries: Social intelligence for mobile communication agents. Program in Media Arts and Sciences, Massachusetts Institute of Technology. P. 23.

Martinez, M. E. (2000). *Education as the cultivation of intelligence*, Landon: Lawrence Erlbaun Associates, Publishers.

Marulus, T. (2007). *A History of the I.Q. test: Psychology, Human& Social Behavior*. Retrieved June 11, 2008, from http://forum.stirpes.net/psychology-human-social-behavior/11664-history-i-q-test.html

Marzano, R. J., Marzano, J. S., & Pickering, D. (2003). *Classroom management that works: Research-based Strategies for Every Teacher*. Alexandria, VA: Association for Supervision and Curriculum Development.

McBer, H. (2000). *Research into teacher effectiveness: A model of teacher effectiveness*. Nottingham, England: Department of Education and Employment.

Mehrabian, A. (2000). Beyond IQ: Broad-based measurement of individual success potential or emotional intelligence. *Genetic Social and General Psychology Monographs*, 126(2), 133-240.

Middle Georgia (2006). *Internship supervisor evaluation form*. State university: school of information technology. Retrieved January 12, 2016, from http://books.google.com/books?id=4Do-bFrt9tUC

Mohit, D., & Parminder, K. (2015). Study of social intelligence and adjustment among pupil teachers in relation to their gender and locality. *International Journal of Applied Research,* 1(7), 90-93.

Moss, F. A., & Hunt, T. (1927). Are you socially intelligent? *Scientific American, 137*, 108-110.

Moss, F. A., Hunt, T., & Omwake, K. T. (1949). *Manual for the social intelligence test, Revised Form.* Washington, D.C.: Center for Psychological Service.

Moss, F. A., Hunt, T., Omwake, K. T., & Woodward, L. G. (1955). *Manual for the George Washington University Series Social Intelligence Test*. Washington, D.C.: The Center for Psychological Service.

Motowildlo, S. J. (2003). *Job performance*. In: Borman, W. C., & Ilgen, D. R, & Klimoski, R. J.(Eds) *Handbook of Psychology* (pp. 39-54). Hoboken, New Jersy: John Wiley & Sons. Inc. https://is.muni.cz/el/1441/podzim2012/SZk1025a/um/ Handbook_Of_Psychology Personality_And_Social_Psychology Malestrom__.pdf

Murata, A. (2008). Human error management paying emphasis on decision making and social intelligence. Forth International Workshop on Computational Intelligence & Application, Hiroshima University, Japan.

Nampa, C. (2006). *Supervision and teachers' performance in Catholic founded schools in Luwero District*. Unpublished master thesis, Makerere University, Kampala, Uganda.

Nanson, P. K. (2010). *Leadership styles and teacher performance in secondary schools in Nakaseke District*. Unpublished master thesis. Makerere University, Kampala, Uganda.

Naugle, K., Naugle, L. B., & Naugle, R. (2000). *Kirkpatrick·s evaluation model as a means of evaluating teacher performance*. *Education,* 121(1), 135-144.

Nu Nu Khaing., Yamada, T., & Ishii, H. (2011). Developing two equivalent spatial ability tests for Myanmar middle school students. *Bulletin of the Graduate School of Education and Human Development,* Nagoya University Press, 8(1), 49-67.

Nwachukwu, C. C. (2006). *Management theory and practice.* Onitsha: Africana – Fep. Publishers.

Obilade, S. O. (1999). *Leadership qualities and styles as they relate to instructional productivity.* The Manager Ibadan: Department of Educational Management, University of Ibadan, 25-32.

OECD. (2005). *Teaching and learning international survey (TALIS): Teacher questionnaire.* International Project Consortium: International Association for the Evaluation of Education of Educational Achievement (IEA), the Netherlands IEA Data Processing and Research Center (IEA DPC), Germamy.

Okeniyi, C. M. (1995). *Relationship between leadership problems and school performance in Oyo state secondary schools.* Unpublished master thesis, University of Ibadan. 57-82.

Owolabi, J. (2006). Educational planning. Kampala: Makerere University.

Padmanabhan, L., & Magesh, R. (2016). Difference between employees' marital status and performance level in IT industry. *Imperial Journal of Interdisciplinary Research*. 2(6).

Parolini, J. L. (2005). Investigating the relationships among emotional intelligence, Servant Leadership Behaviors and Servant Leadership Culture. Servant Leadership Research Roundtable, http://www.regent.edu/acad/sls/publications/ conference_ proceedings/ servant_ leadership_rou ndtable/2005/pdf/parolini_ invest.pdf

Parto, E., Shahram, A., & Taghi, A. H. (2013) Relationship between social intelligence with effective influence among physical education expertise in Isfahan education organizations. *World Applied Sciences Journal*. 28(12).

Patrick, R. (2009). Teacher performance evaluation system 2012-2013. Mecklenburg Country Public School. Virginia.

Prathima, H. P., & Kulsum, U. (2013). Relationship between social intelligence and mental health of secondary school teachers. A published research paper. Research Scholar, Department of Education, Bangalore University, Bangalore. *Paripex - Indian Journal of Research*, 2(11), 21-36.

Promsri, C. (2014). An empirical study on social intelligence of Thai employees in a private organization. *Proceedings of Eurasia Business Research Conferenc. Nippon Hotel, Istanbul, Turkey.*

Rai, R., & Singh, M. (2014).   A study of social intelligence among college students in relation to their subject stream in Bijnor District. *International Journal of Languages, Education and Social Sciences (IJLESS),* Vol. 08, Issue 01.

Rao, D. B., & Kumar, D. N. (2004). *School teacher effectiveness*, New Delhi, Discovery Publishing House, pp. 89.

Richard, D. L., & Raymond, N. W. (1984). Revision of the self-monitoring scale. *Journal of Personality and Social Psychology*, 46(6), 1349-1364.

Rubina, H., Sadaf, T., & Masood, N. (2011). Personal and job related predictors of teacher stress and job performance among school teachers. *Pakistan Journal of Commerce and Social Sciences*, 5(2), 319-329.

Sackett, P. R., & Laczo, R. M. (2003). Job and work analysis. In W.C. Borman, D.R. Ilgen, and R.J. Klimoski (Eds.), *Handbook of psychology: Industrial and Organizational Psychology,*12, 21–37), Hoboken, NJ: Wiley.

Sameer, B. M. (2007). Social intelligence and aggression among senior secondary school students: A comparative Sketcht. Published master thesis. A Central University New Delhi.

San San Hla. (2008). *Development of competency model for professional development of upper primary teachers in Yangon Division*. Unpublished doctoral dissertation. Yangon University of Education.

Schmitt, N., & Cortina, J. M., Ingerick, M. J., & Wiechmann, D. (2003). Personal selection and employee performance. In: Borman, W. C., & Ilgen, D. R, & Klimoski, R. J. (Eds) *Handbook of Psychology* (pp. 77-106). Hoboken, New Jersy: John Wiley & Sons. Inc. https://is.muni.cz/el/1441/podzim2012/SZk1025a/um/Handbook_Of_Psychology_-_Personality_And_Social_Psychology__Malestrom_.pdf.

Silberman, M. (2000). *Peoplesmart: Developing your interpersonal intelligence.* San Francisco, CA: Berrett-Koehler Publishers Inc.

Silvera, D. H., Martinussen, M., & Dahl, T. I. (2001). The Tromso Social Intelligence Scale, a self-report measure of social Intelligence. *Scandinavian Journal of Psychloogy*, 42, 313-319.

Soleiman, Y. J., & Fatemeh, L. G. (2012). What is the relationship between spiritual intelligence and job satisfaction among MA and BA teachers? *International Journal of Business and Social Science, 3 (8).*

Steinwachs, J. (n.d.,). Interpersonal Relationships Questionnaire (IRQ). Retrieved May 3, 2015, from http://www.pearsonassessments.com/NR/.../Assess_Focus__Spring_02.pdf

Sternberg, R. J. (1985). *Beyond IQ: A triarchic theory of human intelligence.* New York: Cambridge University Press.

Sternberg, R. J. (1988). *The triarchic mind: A new theory of intelligence.* New York: Viking.

Strang, R. (1930). Relation of Social Intelligence to Certain Other Factors. *Sch. & Soc., 32*, 268-272.

Stronge, J. H., & Hindman, J. L. (2006). Teacher performance evaluation handbook. Stronge and Associate Educational Consulting, LLC. Retrieved March 23, 2010, from http://www.Bedford.K12.va.us/teforms

Sultana, M. (1983). Synthetic studies in the field of heterocyclic chemistry. *Journal of hertercyclic chemistry*. 26(5), 1167-1513.

Taylor, E. H. (1990). The assessment of social intelligence. *Psychotherapy,* 27(3), 445-457.

Thorndike, E. L. (1920). Intelligence and its use. *Harper's Magazine,* 140, 227-235.

Thorndike, E. L., & Stein, S. (1937). An evaluation of the attemps to measure social intelligence. *The Psychological Bulletin,* 34(5), 275-285.

Thurstone, L. L. (1938). *Primary mental abilities*. Chicago: University of Chicago Press.

Turner-Bisset, R. A. (1999). The knowledge bases of the expert teacher. *British Educational Research Journal,* 25, 39-55.

Vernon, P. E. (1993). Some characteristics of the good judge of personality. *Journal of Social Psychology,* 4, 42-57.

Viswesvaran, C., & Ones, D. S. (2000). Perspectives on models of job performance. *International Journal of Selection and Assessment,* 8, 216-226.

Walker, R. E., & Foley, J. M. (1973). Social intelligence: Its history and measurement. *Psychological Reports,* 33, 839-864.

Wang, M. C., Haertel, G. D., & Walberg, H. J. (1993). Towards a knowledge base for school learning. *Review of Educational Research*, 63(3), 249-250.

Warmbrod, J. R. (2001). Conducting, interpreting and reporting quantitative research. Paper presented at the Pre-session, National Agricultural Education Research Conference, New Orleans, LA.

Wechsler, D. (1958). *The measurement and appraisal of adult intelligence*. Baltimore: Williams & Wilkins.

Wedeck, J. (1947). The relationship between personality and psychological ability. *British Journal of Psychology*, 36, 133-151.

Weis, S., & Sus, H. M. (2005). Social intelligence: A review and critical discussion of measurement concepts. In R. Schulze & R. D. Roberts (Eds.), *An International Handbook of Emotional Intelligence,* 203-230, Gottingen: Hogrefe.

Wong, D. (2014). Field education supervisor evaluation form. Tyndale University. Tyndale University. Retrieved June 11, 2017, from http://www.karlalbrecht.com/siprofile /siprofiletheory.html

Woodrow, H. (1939). The common factors in 52 mental tests. Psychometrika, 4, 99-108.

Xavier, F. (2003). A study on social intelligence among arts and science college students. *Scholarly Research Journal for Humanity Science & Engligh Language*. Vol (2), Issue VII.

Yahyazadeh, S., & Lotfi, F. (2012). The relationship between social intelligence and job satisfaction among MA and BA teachers, *International Journal of Education Science,* 4(3), 209-213.

Yusoff, K. A. (2013). Job stress, performance and emotional intelligence in Academia, *Journal of Basic & Applied Science Resesearch*, 3(6), 1-8.

Zaccaro, S. J., Kem, C., & Bader, P. (2003). *Leader Traits and Attributes*. The Major Schools of Leadership, 05-Antonakis.qxd, 106-115.

Zimowski, M., Muraki, E., Mislevy, R. J., & Bock, R. D. (2003). BILOG-MG 3: Item analysis and test scoring with binary logistic models. Chicago, IL: Scientific Software. [Computer software.]

Zirkel, S. (2000). *Social intelligence: The development and maintenance of purposive behavior – The Handbook of Emotional Intelligence.* San Francisco, CA: Jossey-Bass.