

**RELATIONSHIP OF EMOTIONAL
INTELLIGENCE AND TEACHERS' SELF-
EFFICACY AT UNIVERSITY LEVEL**

BY

Muhammad Kazim



**NATIONAL UNIVERSITY OF MODERN LANGUAGES,
ISLAMABAD**

OCTOBER, 2021

**RELATIONSHIP OF EMOTIONAL INTELLIGENCE
AND TEACHERS' SELF-EFFICACY
AT UNIVERSITY LEVEL**

By

MUHAMMAD KAZIM

Master in Education, Karakoram International University,
Gilgit-Baltistan, 2017

A THESIS SUBMITTED IN THE PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF

Master of Philosophy in Education

To

DEPARTMENT OF EDUCATION,
FACULTY OF SOCIAL SCIENCES



NATIONAL UNIVERSITY OF MODERN LANGUAGES, ISLAMABAD

© Muhammad Kazim, 2021



THESIS/DISSERTATION AND DEFENSE APPROVAL FORM

The undersigned certify that they have read the following thesis, examined the defense, are satisfied with the overall exam performance and recommend the thesis to Faculty of Social Sciences for acceptance:

Thesis Title: Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level

Submitted By: Muhammad Kazim

Registration #: 1500-MPhil/Edu/S18

MASTER OF PHILOSOPHY

Degree Name in Full

EDUCATION

Name of Discipline

Dr. Quratul Ain Hina

Name of Research Supervisor

Signature of Research Supervisor

Prof. Dr. Mustafeez Ahmad Alvi

Name of Dean (FSS)

Signature of Dean (FSS)

Prof. Dr. Muhammad Safeer Awan

Name of Pro-Rector Academics

Signature of Pro-Rector Academics

Date

AUTHORS'S DECLARATION

I **Muhammad Kazim**
Son of **Ghulam Muhammad**
Registration # **1500-MPhil/Edu/S18**
Discipline **Education**

Candidate of **Master of Philosophy** at National University of Modern Languages do hereby declare that the thesis **“Relationship of Emotional Intelligence and Teachers’ Self-Efficacy at University Level.”** submitted by me in partial fulfillment of M. Phil Degree, is my original work, and has not been submitted or published earlier. I also solemnly declare that it should not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

I also understand that if evidence of plagiarism is found in my thesis/ dissertation at any stage, even after the award of a degree, the work may be cancelled and the degree revoked.

Dated: _____

Signature of Candidate

Muhammad Kazim
Name of Candidate

ABSTRACT

Thesis Title: Relationship of Emotional Intelligence and Teachers' Efficacy at University Level

This study was designed to explore the relationship of emotional intelligence and teachers' self-efficacy at university level. This study also compared the emotional intelligence and Teacher Self-Efficacy on the basis of gender and university sector (Public & Private). Quantitative research approach and correlational design were used in this study which aims to determine whether, and to what extent a relationship exists between two variables. Population of the study was based on 8696 university teachers from public and private universities of Islamabad. The sample of the study consisted of 645 respondents which was 74% of the total target sample. Two scales were used as a research instruments for data collection. One of the instrument named as "Teachers' Emotional Intelligence Scale (TEIS)" which was developed by researcher and the second one "Teacher Self- Efficacy Scale (TSES)" which was adapted. Data was analyzed by using Cronbach Alpha reliability, regression, individual score and independent t-test. The findings showed that emotional intelligence was positively correlated to teachers' self-efficacy. Furthermore, Female teachers were higher emotional intelligence than male teachers. Similarly, private sector university teachers were also higher emotional intelligence than public sector university teachers. In additional, there was no any significant difference between male and female, public and private university teachers related to self-efficacy. It was suggested that during recruitment process, teachers' emotional intelligence may also be considered. Emotional Intelligence and related skills may be made a part of teachers' in-service and preservice education. Female teachers must be given equal chance to show equal chance to show their potential in universities as well.

TABLE OF CONTENTS

Chapter	Page
DISSERTATION AND DEFENSE APPROVAL FORM.....	i
AUTHOR DECLARATION FORM	ii
ABSTRACT.....	iii
TABLE OF CONTENTS.....	iv
LIST OF TABLES	vii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	x
LIST OF APPENDICES	xi
ACKNOWLEDGEMENT	xii
DEDICATION	xiii
1. INTRODUCTION	
1.1 Background of the Study.....	01
1.2 Rational of the Study.....	05
1.3 Statement of the Problem.....	07
1.4 Research Objectives.....	08
1.5 Null Hypotheses.....	09
1.6 Conceptual Framework.....	10
1.7 Significance of the Study.....	15
1.8 Methodology.....	17
1.9 Delimitations.....	24
1.10 Operational Definitions.....	25
2. REVIEW OF THE RELATED LITERATURE	
Section 1 General Introduction of the Area of Research	
2.1 Emotional Intelligence.....	28
2.2 History of Emotional Intelligence.....	32
2.3 Why Teachers need to be Emotionally Intelligence.....	36
2.4 The Concept of Self-Efficacy.....	38
2.5 Teacher Self-Efficacy.....	39
2.6 The Importance of Teacher Self-Efficacy.....	41

Section 2 Models on Emotional Intelligence and Teachers Self-Efficacy	
2.7 Mayer, Caruso and Salovey’s Model of Emotional Intelligence.....	43
2.8 Goleman’s Model of Emotional Intelligence.....	46
2.9 Bar-On’ s Model of Emotional Intelligence.....	48
2.10 An Alternative Model.....	50
2.11 The Nine-Layer Model.....	50
2.12 Model of Self-Efficacy.....	54
2.13 Sources of Self-Efficacy.....	57
Section 3 Review of Related Researches.....	60

3. METHODS AND PROCEDURES

3.1 Research Approach.....	65
3.1.1 Research Method.....	66
3.1.2 Research Design.....	67
3.2 Overview of Research Objectives.....	67
3.3 Population.....	69
3.4 Sampling Technique.....	70
3.5 Sample.....	71
3.6 Tool Construction.....	72
3.7 Data Collection.....	84
3.8 Data Analysis	86
3.9 Delimitations of the Research Study.....	88

4. ANALYSIS AND INTERPRETATION OF THE DATA

4.1 Summary of the Analysis	89
4.2 Tool Construction (Final Tool)	91
4.3 Demographics of the Sample.....	97
4.4 Level of University Teachers’ EI	100
4.5 Level of University Teachers’ SE.....	101
4.6 Relationship of EI and Teachers SE	102
4.7 Gender wise Comparison of EI	112
4.8 Gender wise Comparison of TSE.....	113
4.9 University wise Comparison of EI.....	114
4.10 University wise Comparison of TSE.....	115

5. SUMMARY, FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS	
5.1 Summary	115
5.2 Findings	117
5.3 Discussions	122
5.4 Conclusions	129
5.5 Recommendations	130
5.6 Recommendation for Future Research	133
5.7 Limitations of the Research Study	132
6. References	133
7. Appendices	146

LIST OF TABLES

Table	Title	Page No.
Table 1.1	Description of Teachers' Emotional Intelligence Scale	21
Table 1.2	Description of Teacher Self-Efficacy Scale	22
Table 1.3	Objectives, Hypothesis, Instruments and Statistical Analysis	24
Table 3.1	List of items (Initial Version) TEIS	74
Table 3.2	List of items (Initial Version) TSES	75
Table 3.3	Cronbach Alpha Reliability of TEIS Pilot Testing	76
Table 3.4	Item-total Correlation of TEIS Pilot Testing	77
Table 3.5	Intersection Correlation of TEIS Pilot Testing	78
Table 3.6	Cronbach Alpha Reliability of TSES	79
Table 3.7	Item-total Correlation of TSES	80
Table 3.8	Intersection Correlation of TSES	81
Table 3.9	List of items (Final Version) TEIS	82
Table 3.10	List of items (Final Version) TSES	83
Table 3.11	Scoring for the Level of Teachers' EI	84
Table 3.12	Scoring for the level of Teachers' SE	85
Table 3.13	Objectives, Hypothesis, Instruments and Statistical Analysis	87
Table 4.1	Cronbach Alpha Reliability of TEIS (Final Tool)	91
Table 4.2	Item-total Correlation of TEIS (Final Tool)	92
Table 4.3	Intersection Correlation of TEIS (Final Tool)	93
Table 4.4	Cronbach Alpha Reliability of TSES (Final Tool)	94
Table 4.5	Item-total Correlation of TSES	95
Table 4.6	Intersection Correlation of TSES	96
Table 4.7	Gender wise Distribution of the Sample	97

Table 4.8	University wise Distribution of the Sample	98
Table 4.9	Level of University Teachers' EI	100
Table 4.10	Level of University Teachers' SE	101
Table 4.11	Relationship of EI and Teachers' SE	102
Table 4.12	Relationship of Emotional Stimuli and Teachers' SE	103
Table 4.13	Relationship of Emotional Recognition and Teachers'	104
Table 4.14	Relationship of Emotional Awareness and Teachers' SE	105
Table 4.15	Relationship of Emotional Management and Teachers' SE	106
Table 4.16	Relationship of Social Awareness and Teachers' SE	107
Table 4.17	Relationship of Social Skill and Teachers' SE	108
Table 4.18	Relationship of Self-Actualization and Teachers' SE	109
Table 4.19	Relationship of Transcendence and Teachers' SE	110
Table 4.20	Relationship of Transcendence and Teachers' SE	111
Table 4.21	Gender wise Comparison of University Teachers' EI	112
Table 4.22	Gender wise Comparison of University Teachers' SE	113
Table 4.23	University sector wise Comparison of University Teachers' EI	114
Table 4.24	University sector wise Comparison of University Teachers' SE	115

LIST OF FIGURES

Figure No.	Title	Page No.
Fig. 1	Conceptual Framework for the Study	11
Fig. 2.1	Mayer, Caruso and Salovey's Model of EI	45
Fig. 2.2	Goleman's Model of EI	47
Fig. 2.3	Bar-On's Model of Emotional Intelligence	50
Fig. 2.4	Model of Teachers's Emotional Intelligence	52
Fig. 2.5	Model Sources of Self-Efficacy	59
Fig. 3.1	Sample of the Study	73
Fig. 4.1	Gender wise Distribution of the sample	98
Fig. 4.2	University sector wise Distribution of sample	99

LIST OF ABBREVIATIONS

Abbreviation	Terms
EI	Emotional Intelligence
SE	Self-Efficacy
TEIS	Teachers' Emotional Intelligence Scale
TSES	Teachers' Self-Efficacy Scale
EQ	Emotional Quotient
IQ	Intelligence Quotient
Fig	Figure
HEC	Higher Education Commission
EU	Emotional Unity
Ho	Null Hypothesis
IV	Independent Variable
DV	Dependent Variable
R ²	Coefficient of determination
COVID-19	Corona Virus Disease
Sig.	Significance level

LIST OF APPENDICES

APPENDIX A	LIST OF POPULATION
APPENDIX B	LIST OF HEC RECOGNIZED UNIVERSITIES
APPENDIX C	TEAM OF EXPERT
APPENDIX D	RESEARCH TOOL
APPENDIX E	COVER LETTER FOR VALIDITY CERTIFICATE
APPENDIX F	SAMPLE CERTIFICATE FOR TOOL VALIDATION
APPENDIX G	CERTIFICATE FOR TOOL VALIDATION
APPENDIX H	TOPIC APPROVAL LETTER
APPENDIX I	DATA COLLECTION PERMISSION LETTER
APPENDIX J	CONCEPTUAL FRAMEWORK
APPENDIX K	AUTHOR'S GUIDLINE FOR EI TOOL
APPENDIX L	PERMISSION LETTER OF TSE TOOL
APPENDIX M	EMOTIONAL INTELLIGENCE TRAINING MANUAL

Acknowledgement

Thanks to **Almighty Allah**, the Beneficial, the Most Merciful, who provided me with this opportunity, courage and ability to complete this contribution towards knowledge. All the respects, profound gratitude and all our loves for Hazrat Muhammad (S.A.W.W), the last messenger of Allah, whose teaching enabled us to identify our creator and also gave us the golden principles of Islam. After that, I am especially grateful to my esteemed supervisor Dr. Quratul Ain Hina for all the guidance and encouragement she gave me. Without her guidance and support this research work would not have been accomplished. I am thankful to Dr. Khushbakht Hina (NUML), Dr. Saira Nudrat (NUML), Dr. Salma Nazar (FJWU), Dr. Malik Ghulam Bhlol (FJWU), Dr. Muhammad Ajmal (AIOU), Dr. Azhar Mahmood (IIUI), Dr. Imran Yousuf (PMAS-ARID) and Dr. Naeem Aslam (QUA) for their valuable inputs during instrument validation. I also thank my honorable teachers; Dr. Mustafeez Alvi (DEAN), Dr Wajiha Aurangraib, Dr. Marium Din, Dr, Hukam Dad, Dr. Saira Nudrat, Dr. Sajid Ali Yousuf Zai, Dr. Khushbakht Hina, Dr. Farkhanda Tabassum, Dr. Allah Rakha Sagar and Dr. Suffiana Khatoon, who helped me in building the foundation of the study during the course work.

In the end, I would like to acknowledge the support of my fellows (MPhil scholars) especially Sara Siddique, Nida Shahzad, Anam Naseem, Laraib Mehdi and Bushra. I also am grateful to all faculty members, staffs and librarians who supported and helped me in their own ways.

I pray to Almighty Allah to give us the enthusiasm to serve the humanity and do what is right.

Muhammad Kazim

Dedicated to

Every challenging work needs self-efforts as well as guidance of elders especially those, close to our hearts.

I dedicate my efforts to;

Parents

Their affection, love, encouragement and prays, they did day and night made it possible to get such success and honor.

My Brother

His trust and endless support throughout, is the reason where I stand now.

My Beloved Wife

Her infinite affection, love and care is what kept me going and made my dreams come true, made impossible, possible.

My Supervisor

Last but not least I truly respect and thank, Dr. Quratul Ain Hina, (My Supervisor) without her this would have remained incomplete.

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

The 21st century innovations, technology, the vastness of knowledge explosion, challenges and changes have altered our daily life. Many of the educational institutions are also experiencing these changes and are facing many challenges to adapt with these scenarios. For any successful educational institution with changing academic world, factors such as productive teaching and effective learning are highly probable and more desirable. The advancement in education is very demanding nowadays, causing mental and emotional stress, particularly in the field of higher education. Teaching learning process and concerned emotional intelligence have been ignored. Being the fundamental key player in teaching learning transaction, teachers' Emotional Intelligence (EI) and Self-Efficacy (SE) is of great significance as it highly impacts the quality of teaching. That is why it has been claimed that EI is an essential part of a teacher's skill set Corcoran and Tormey (2012) stated that the teachers who have high EI, they create more engaging and inspiring lessons (Akhmetova et al., 2014). Teachers need to be expert in subject knowledge and professional skills. Knowledge of different methods and teaching practices, ability to structure and present the content effectively are key competencies required. But there is also a third attribute that has been generally ignored, which is an unseen attribute that a teacher carries in the classroom and influences the students. It is called teachers' EI and SE. Emotional intelligence has been continuously flaunted as a very strong determiner of effective leadership in the business world. Similarly, it has been predicted that there is a

noteworthy connection between the emotional intelligence of teacher and their self-efficacy as they are considered the leaders of classroom (Kang, 2017).

As Goleman (1998) expressed about EI in his book 'Working with EI' and termed it as "the ability of understanding and managing not only individual's own emotions but also managing others' emotions too. It aims to motivate ourselves and develop good relationship with others. In addition, as per Cherry (2018) EI is an ability of recognizing and managing emotions by an individual. EI consists of the ability to manage, assess and display emotions in appropriate way. It is the ability to create feelings, the capacity to distinguish emotions and the information enclosed in those emotions, and the ability to promote and nourish the development of both emotional and intellectual aspects of the emotion (Mayer & Salovey, 1997). Originally, EI has been also discussed as a way of linking human emotions and their cognitive abilities (Mestre et al., 2016).

There are various studies that demonstrated that EI is linked with academic achievement in many ways including organizational learning. (Guillory et al., 2019), teacher life satisfaction (Landa et al., 2006), teachers' performance (Drew, 2006), job satisfaction (Cobb, 2004), job enjoyment, organizational commitment in teaching (Naderi, 2009), teaching effectiveness (Moafian & Ghanizadeh, 2011), learning of students (Brackett & Mayer, 2003) and SE of teachers (Valente et al., 2020; Leonard & Maulding, 2018; Chikkanarti & Jattennavar, 2018; Chan, 2007; Penrose, Perry & Ball, 2007; Rastegar & Memarpour, 2009).

The Self-Efficacy of teachers is another important attribute that effects the effectiveness of teachers. In order to improve teachers' performance, SE and literacy of emotions are considered as most vital elements. Bandura in one of his work

explained the concept of SE under social learning theory (Henson, 2001). According to Bandura (1977), individuals can achieve their target goals successfully by their SE belief, which means goal achievement is directly influenced by the SE belief. SE belief means individual's thoughts, feelings, motivation and behaviors they show. In other words, SE determines the individual's activities choices their performance related efforts and difficulties.

For Bandura (1993), SE of teachers is the sum of beliefs in the competencies such as, planning, organizing and implementing the designed activities aimed to attain educational objectives. Tschannen-Moran and Hoy (2001) elaborated about the self-efficacy of teachers and stated it as "a judgment of his or her capabilities to bring about desired outcomes of students' engagement and learning, even among those students who may be difficult or unmotivated" (p.783). SE is the belief of teachers that effects students learning. According to Schwarzer and Hallum (2008), high level of teachers' SE is positively related with students' performance, which means higher SE of teachers, indicated higher achievement and performance of students.

It is generally assumed that the effectiveness of educational system is based on competencies and qualifications of teachers in the system. The teachers' expertise is based on SE and lack of SE causes low self-esteem and low confidence. In the teaching context, SE refers to the ability to believe in one's own instruction related knowledge and skills which may lead the students toward better understanding about the topic taught. It was noted that teachers have a positive attitude towards everything if they have high degree of SE and those having higher degree of SE seem to be welcoming to adopt new teaching methods and techniques (Shahzad & Naureen, 2017).

It is a century of inventions and innovations, so with traditional teaching techniques we can't go forward. Presenting creativity in teaching methods is essential, also the

promotion of critical thinking among students is also the need of time. As per Salovey and Mayer (1990) it is indicated that the peoples having high EI and SE usually display characteristics like professional efficiency and individuals believe in their ability of regulating, evaluation and using multiple approaches in different situations. A teacher was solely responsible for the teaching-learning process in the past. But now, teachers' responsibilities and roles are changed from traditional lecture method of teaching to promotion of student friendly environment which can enhance students' critical thinking, decision making and balanced mindset. To accomplish such tasks, among many other characteristics, a teacher must have one quality which is SE of the teacher.

In the field of teaching in Pakistan, we are having the problem of lack of specialized teachers which has mostly affected the quality of education (Malik & Urooj, 2012). The teachers have no knowledge of, how to diagnose the student's need; how to make choice for teaching methodology and how to manage classroom, the quality of education compromised. Literature on the standard of the teacher education suggests that the standard of a teacher is usually reliant on the standard of his/her education and training. Another problem that we face is the lack of intellectual minds in the field of education. It has been observed that creative minds are not concerned in the field of education.

In terms of EI and SE of teachers, Pakistan also faces a great shortage of quality teachers having appropriate EI and SE related insight among them. Most teachers are unaware of their hidden potential and do not capitalize on their domain qualities (Shahzad & Naureen, 2017). There is a great need to make them aware of their hidden qualities such as beliefs in SE. So, they can put them practically in teaching learning processes. Some of these listed problems need immediate redressal so that a strong foundation of teacher education can be laid down in Pakistan which will benefit

towards emergence of a strong nation. Similarly, in order to meet the changes in national and international educational setup, there is a need to treat the personality development of students.

Considering the situation, the study aims to explore the relationship of EI and SE of the university teachers. Teachers need to recognize the importance of EI and SE beliefs and apply them in their teaching learning process.

1.2 Rationale of the Study

Previous researches focused on primary and secondary school teachers EI and other factors of teaching as well the factor of SE (Brackett & Salovey, 2006; Carmeli, 2003; Ghanizadeh, 2009; Landa et al., 2006; Pierce, 2014; Schutte et al., 1998; Ross, 1994; Tschannen-Moran & Hoy, 2001; Wu et al., 2019). A very few studies have been found which considered relationship of EI and SE of university teachers, especially, in Pakistan' context. The environment and nature of university teaching is totally different from that of schools and colleges. For university instructors, the nature of this study may turn out to be quite different as university setting is not the same.

Amirian and Behshad (2016) came to very interesting conclusion after conducting research that explores the emotional intelligence and self-efficacy of Iranian teachers. The outcomes of their study highlighted a constructive significant relationship between teachers' EI and SE. Furthermore, findings of Rastegar and Memarpour (2009), Valente et al., 2020; Leonard, & Maulding, (2018); Chikkanarti & Jattennavar, (2018) also highlighted a positive substantial association between EI and TSE. A study conducted by Adeyemo and Chukwudi (2014) concluded on finding a positive relationship between emotional intelligence, teacher efficacy and effectiveness of pre-service teachers. Some researchers tried to explore the factors affecting emotional

intelligence. One such study concludes that EI and SE of teachers are strongly affected by demographics such as, female have higher level of EI than male teachers (Shuakat, 2017). In opposition, the finding of Shehzad and Mahmood (2013) reveal that there is no any significant difference of EI in regards gender. According to Zai and Munshi (2016) female teachers have more sense of efficacy than male teachers. Arvind et al., (2013) also carried out a research to observe the level of emotional intelligence among teachers based on demographics features including: age, gender qualification and work experience and the finding reveal that educational degree is directly proportional to the level of emotional intelligence among teachers and others demographics have no any significant influences on level of EI. In Additional, there is substantial differences between self-efficacy and teachers based on gender, qualification, school levels and public, private teachers (Alwaleedi, 2017).

In additional there are various researches on emotional intelligence in Pakistan but the population of those studies were not teachers. Most of the researches have been conducted on call center employees, virtual project managers, nurses, bank managers and employees of private sector organizations (Raja, Mohsin, Ehsan, Mirza, Saud, 2010; Naeem, Saif & Khalil, 2008; Ali, 2009).

Whereas, at higher education level, very few researches have been conducted on these variables specially in regards to check the relationships between EI and SE of teachers. Such as, Malik (2014) conducted a research study and highlighted that SE and EI have positive noteworthy relationship. As Farhan and Ali (2016) research also demonstrated a momentous relationship between EI and SE of teachers.

Keeping in mind the previous research, most of the studies relevant to emotional intelligence and self-efficacy were conducted to establish the relationship between the

two in specific areas i.e., either in a very few public sectors in Pakistan or globally about language teachers. No specific study cross examined the relationship in public and private setup universities; hence, the findings are contradictory. So, this gap establishes the substantial reason to further explore the topic. In order to fill this gap, this study was carried out in both private and public sector universities with comparatively larger population. This study has probed into this matter and provided empirical evidence about the current situation as well as recognized the gaps and areas to work for improvement. Teachers will get an opportunity to utilize their EI and SE in order to promote effective teaching.

1.3 Statement of the Problem

As an educational institution, the basic purpose of university is to attain academic excellence and fulfil the goals of the institution and provide skilled workforce to the society. One of the main goals of universities is to provide knowledgeable and skilled individuals who can lead the entire new generation of the nation. These teachers are the backbone of the nation because they preserve and transfer the cultural heritage, train new generation new skills to compete with others and teach ways to live better in this complex competitive world. So, the teachers need to be more knowledge and skilled as well emotionally, psychologically, physically stable. Emotions effects teachers teaching, therefore studying their emotional patterns and EI help them to sustain the best required emotions which can maximize their effectiveness. Furthermore, SE is also necessary for a teacher which can affect their teaching.

In Pakistan the situation is somewhat not good because very few researches had been done considering these key subjects. The unavailability of empirical evidence on university teachers' EI and SE explains the existing gap in the literature as well the

negligence of authorities and researchers in this regard. Therefore, the major objective of this study was to indicate the existing connection of emotional intelligence and teachers' self-efficacy at universities level. This study also investigated the relationship of Emotional Recognition, Emotional Stimuli, Self-Awareness, Social Awareness, Self-Management, Social Skill, Transcendence, Self-Actualization, Emotional Unity and the self-efficacy of teachers. Furthermore, the current study examined the level of emotional intelligence and self-efficacy among teachers.

1.4 Research Objectives

Following objectives were developed in this study

1. To assess the level of Emotional Intelligence of teachers at university level.
2. To assess the level of Self-Efficacy of teachers at university level.
3. To investigate the relationship of Emotional Intelligence and Teachers' Self-Efficacy at university level.
 - 3.1. To investigate the relationship of Emotional Stimuli and Teachers' Self-Efficacy.
 - 3.2. To investigate the relationship of Emotion Recognition and Teachers' Self-Efficacy.
 - 3.3. To investigate the relationship of Self-Awareness and Teachers' Self-Efficacy.
 - 3.4. To investigate the relationship of Self-Management and Teachers' Self-Efficacy.
 - 3.5. To investigate the relationship of Social Awareness and Teachers' Self-Efficacy.

- 3.6. To investigate the relationship of Social Skill and Teachers' Self-Efficacy.
- 3.7. To investigate the relationship of Self-Actualization and Teachers' Self-Efficacy.
- 3.8. To investigate the relationship of Transcendence and Teachers' Self-Efficacy.
- 3.9. To investigate the relationship of Emotional Unity and Teachers' Self-Efficacy.
4. To compare the Emotional Intelligence of university teachers on the basis of gender.
5. To compare the Self-Efficacy of university teachers on the basis of gender.
6. To compare the Emotional Intelligence of teachers on the basis of university sector.
7. To compare the Self-Efficacy of teachers on the basis of university sector.

1.5 Null Hypotheses

H₀₁. There is no statistically significant relationship of Emotional Intelligence & Teachers' Self-Efficacy at university level.

H₀^{1a}. There is no statistically significant relationship between Emotional Stimuli and Teachers' Self-Efficacy at university level.

H₀^{1b} There is no statistically significant relationship between Emotion Recognition and Teachers' Self-Efficacy at university level.

H₀^{1c} There is no statistically significant relationship between Self-Awareness and Teachers' Self-Efficacy at university level.

H_o^{1d} There is no statistically significant relationship between Self-Management and Teachers' Self-Efficacy at university level.

H_o^{1e} There is no statistically significant relationship between Social Awareness and Teachers' Self-Efficacy at university level.

H_o^{1f} There is no statistically significant relationship between Social Skills and Teachers' Self-Efficacy at university level.

H_o^{1g} There is no statistically significant relationship between Self-Actualization and Teachers' Self-Efficacy at university level.

H_o^{1h} There is no statistically significant relationship between Transcendence and Teachers' Self-Efficacy at university level.

H_o¹ⁱ There is no statistically significant relationship between Emotional Unity and Teachers' Self-Efficacy at university level.

Ho2 There is no statistically significant difference in university teachers' Emotional Intelligence on the basis of gender.

Ho3 There is no statistically significant difference in university teachers' Self-Efficacy on the basis of gender.

Ho4 There is no statistically significant difference in university teachers' Emotional Intelligence on the basis of university sector.

Ho5 There is no statistically significant difference in university teachers' Self-Efficacy on the basis of university sector.

1.6 Conceptual Framework

The conceptual framework mainly determines the course of the study. Hence, the conceptual framework of current study was grounded on two models. One of these is the Pyramid of Emotional Intelligence which is a Nine-Layer Model given by Drigas and Papoutsi (2018) and the other one is named as Teacher SE that Tschannen-Moran & Hoy gave in 2001.

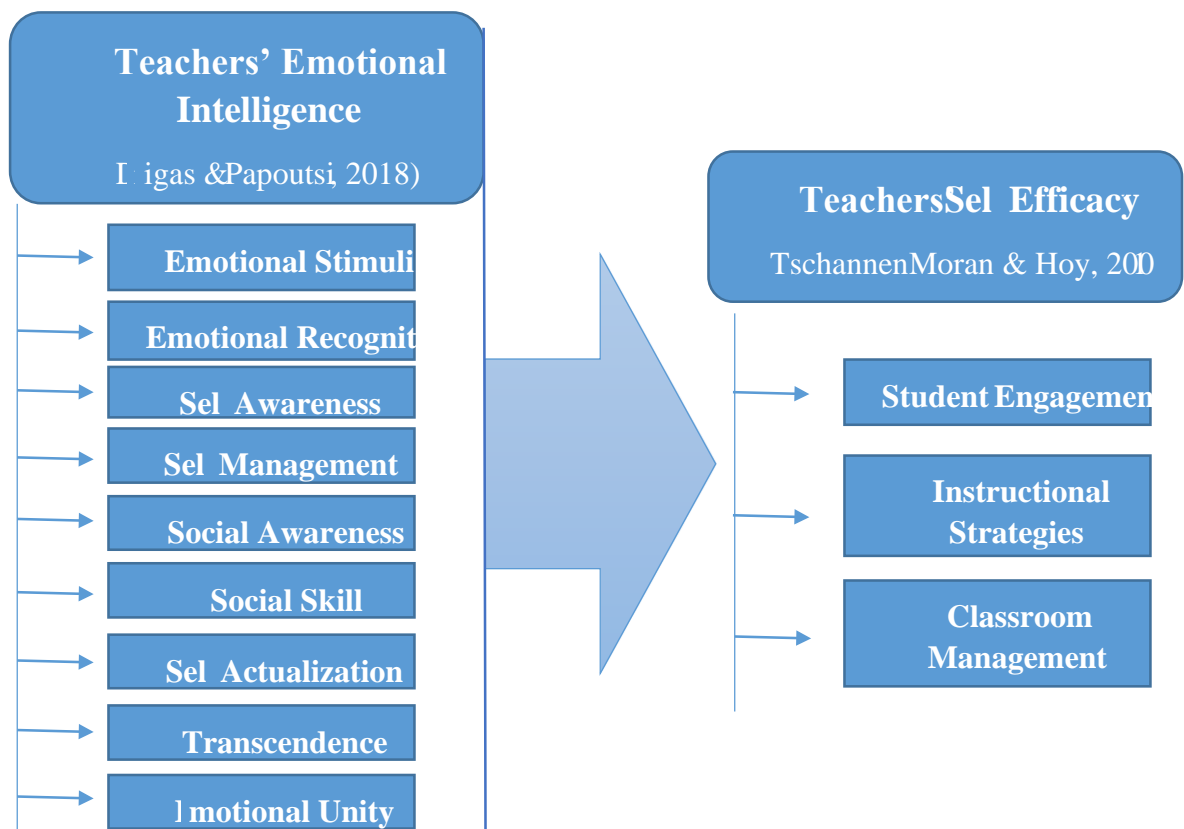


Figure 1 Conceptual Framework of the Study

1.6.1 Teachers' Emotional Intelligence

Considering all the theories of past related to this topic, this is a latest model of emotional intelligence which is given by Drigas and Papoutsi in (2018). This model also deals with emotional intelligence and step by step evaluates the levels of pyramid. This model looks at all the features of EI with reference to ability and the traits in a more classified pattern.

Here the capacity level denotes to both self and social awareness and the way it is managed. The trait level indicates the disposition related to emotions. If we look closely, the pyramid of EI is also constructed on the concepts of intrapersonal and interpersonal intelligence of Gardner (2000). Furthermore, in emotional intelligence pyramid there are two processes cognitive and metacognitive. Cognitive refer to the process of using prevailing knowledge and produce new knowledge. It involves attention, evaluation, memory, problem-solving, perception and language (Coren, 2012). Whereas, metacognitive refers to the ability to evaluate and ponder upon self-performance and competences (Dunlosky & Metcalfe, 2008). It includes self-regulation, metamemory, self-awareness, and self-monitoring (Caro Pineres & Jimenez Builies, 2013). In order to move from one layer of the pyramid of EL to another, cognitive and metacognitive processes take place (See Figure 1).

The pyramid model of emotional intelligence has been shaped with an improved organization. It is more organized compared to evaluation and intervention model having classified levels. It stands firm as a practice for further development and evolution of an individual. This model is widely recognized for having practical application in areas like assessment, evaluation and training instrument in any aspect of life which includes social relationship, health, work, education and academic achievement.

1.6.1.1 Emotional Stimuli. Cognitive mechanism processes the Emotional stimuli and it (cognitive mechanism) determines what emotion to feel and subsequently produce an emotional reaction which may influence the occurrence of the behavior (Drigas & Papoutsis, 2018). Emotional stimuli are generally prioritized in perception, are detected more quickly, and gain access to conscious awareness (Mitchell & Greening, 2012).

1.6.1.2 Emotional Recognition, Perception-Expression of Emotion. Emotional recognition is an ability through which one decodes accurately the feelings and emotions of other people. These expressions are commonly expressed via non verbally (Face, body, voice). The understanding of other people's emotions and how to express these emotions serves a vital role in interactions of humans and critical component of human socio-cognitive capacities (Lewis, Lefevre & Young, 2016).

1.6.1.3 Self-Awareness. Self-Awareness is term which consider the understanding of oneself in a way that one has the insight of his /her thoughts believes motives feelings and emotions. (Ferrari & Sternberg, 1998, Drigas & Papoutsis, 2018). It also considers a psychological situation of knowing own traits and behaviors (Crisp & Turner, 2014).

1.6.1.4 Self-Management. To express one's emotions in an appropriate way is self-management. It is an ability through which one controls his/her reactions so that one can save him from impulsive behaviors and feelings (Drigas & Papoutsis, 2018).

1.6.1.5 Social Awareness. It refers to be aware of needs feelings and concerns of other people and to handle the relationships with other people based upon these feelings and needs (Crisp & Turner, 2014). Social awareness means to know about various ways of handling different situations and to bring some positive changes in daily interactions with others to achieve the goals (Drigas & Papoutsis, 2018).

1.6.1.6 Social Skill, Expertise in Emotions. It is referred as skills that are required to handle the emotions of others so that one can manage the interactions successfully (Drigas & Papoutsis, 2018).

1.6.1.7 University of Emotion, Self-Actualization. Self-actualization is a deep insight of one's own traits and personal developments where an individual realizes his/her potentials and limits at its fullest and the consciousness of an individual's self-

fulfillment (Maslow, 1943). As a whole for mankind, Self-actualizers feel empathy and loyalty that why it's also called universality of emotion (Drigas & Papoutsi, 2018).

1.6.1.8 Transcendence. Transcendence is a state where an individual transcends from one's own needs, feelings and emotions and helps others to fulfill their needs or strengthen their potentials and master the emotions, an individual feels the connections to a larger world and develops an emotional well-being and a global empathy (Drigas & Papoutsi, 2018). As Huitt (2007) in this level transcendence one support others in their self-actualization, self-fulfillment and recognition of their potential.

1.6.1.9 Emotional Unity. It is the last stage where an individual consciously keeps the emotions dominant and see its relations with nature in a way that the individual sees himself as a part of the larger picture where rocks, plants, oceans and so on is not different from him. A realization that, what one does for himself is ultimately to be done for another (Drigas & Papoutsi, 2018).

1.6.2 Teacher Self-Efficacy

According to Tschannen-Moran and Hoy (2001), “a judgment of his or her capabilities bring about desired outcomes of students’ engagement and learning, even among those students who may be difficult or unmotivated” (P.783). Here, they attempted to define the self-efficacy of teachers with reference to teaching profession. It is the sum of belief in the competencies such as, planning, organizing and implementing the designed activities aimed to attain educational objectives.

Moreover, a teacher ground his/her self-confidence in teaching abilities on three main factors. These factors include self-efficacy for student involvement; self-efficacy for classroom administration and self-efficacy for instructional strategies. The more the teacher succeed, the higher the levels of self-efficacy for teaching. Tschannen-Moran

and Hoy's "Teachers' self-efficacy" model widely used by many researchers in their studies both primary and university level such as Abdullahzadeh and Rezaeian used this model at university level in 2020.

1.6.2.1 Instructional Strategies. Instructional strategies refer to the wide ranging array of learning methodologies used by the teachers within learning environments to make students learn the required objectives into manifestations. These methodologies make students more engaged in the learning process thereby making them more self-driven active learners not only in the subject matter but also in the real-life learning prospects.

1.6.2.2 Student Engagement. Students engagement refers to the students' emotional commitment, active participation and cognitive investment in learning. In other words, it refers to the degree of students' attention, interest and passion that show in their learning.

1.6.2.3 Classroom Management. It is a way of organizing resources and pupils in order to teaching and learning process effective and efficient.

1.7 Significance of the Study

This particular research would be primarily helpful for university teachers, students, policy makers and university administrators. This research focuses mainly upon EI and SE of teachers which will influence the teachers' teaching quality. These basic attributes are neglected by the Pakistan' teachers, but this is inevitable for the teachers and authorities to consider these attributes to boost the quality of teaching in our higher education institutions.

This research explored that the development of EI through proper training has a positive impact on psychological outcomes, improve health, teacher efficacy and

wellness (Vesely-Maillefer & Saklofske, 2018). In modern times EI is considered more important than IQ and subject knowledge for a teacher. As Mishra (2017) said that “A high IQ will get you through school, a high EI will get you through life”. This study would enhance the comprehension and significance of emotional intelligence in simplifying learning process and escalating opportunity of success in each feature of a person’s life.

This study would be helpful for the policy makers, in terms of making plan for training sessions of teachers throughout their teaching careers and also would aware them about the existing gaps and areas to be considered, so that they could allocate funds equitably to those areas. The study would provide help to the authorities in reference to guide the teachers for using their EI in a conscious manner for better results as well the teachers themselves can have the idea of using their emotional intelligence and self-efficacy skills while in teaching.

Furthermore, teachers can gain an understanding of how emotional intelligence and self-efficacy could be integrated with academic learning. EI can play a vital role in defining a teacher’s efficiency. Whereas due to effective teaching of teacher students can also get benefit in a sense of their academic achievements.

Since this aspect is neglected in our institutions which can provide the guideline for the institution to organize training session for the university teachers aimed to provide awareness and training regarding EI and SE of university teachers. For administrators this study will provide insight about EL and SE which might aid them in developing plans regarding futures for teachers, during making plans for academic facilities and others services. This research may also aid in helping individuals for making their everyday life successful by increasing their awareness about emotional intelligence and disseminating moral values.

1.8 Methodology

This part of the study deals with methodology and process that was used to conduct this study. It contains research approach, method, design, population, sampling procedures, instruments, data gathering and data scrutiny techniques. The details of the methodology are given below.

1.8.1 Research Approach

The researcher used quantitative research approach in this study which basically involved the descriptive interpretation numerical data for the results. The reason behind selecting this approach was that researcher was interested in collecting numerical data to conclude facts and reveal diverse research patterns.

1.8.2 Research Method

The research can be listed as descriptive in nature because the study has four key objectives i.e., to assess the level of teachers' EI at university level, to assess the level of teacher's SE at university level, to compare the emotional intelligence of university teachers based on demographics and to compare the self-efficacy of university teachers based on demographics. These objectives were related to the analysis of current situation prevailing in the education sector. Descriptive research basically deals with the current issues and problems and emotional intelligence is undoubtedly categorized as one of the prevailing issues of 21st century education, hence, the study cascades in the class of the descriptive research.

In addition to descriptive nature, comparative style was implemented in descriptive research survey because the researcher intended to compare emotional intelligence and self-efficacy of university teachers based on demographics. This is how comparative style of research was involved.

1.8.3 Research Design

When we talk about the research design of this study, it can be stated that the study was correlational and cross-sectional which aims to estimate whether, and to what extent a relationship exists between two or more computable variables. The researcher investigated the relationship of EI and SE of teachers that is why correlational method was used for this study. Due to time constraints, the researcher collected data from the selected participants at a single point in time, therefore, cross-sectional approach was used.

1.8.4 Population of the Study

This Study's population consists of 8696 teachers from both public and private universities within Islamabad. The total number of public sector universities teachers are 7189 whereas the total number of private sector teachers are 1507 (See Appendix A). According to Higher Education Commission the number of recognized public universities in Islamabad were 15 and private universities in Islamabad were 7 (See Appendix B).

1.8.5 Sampling Technique

Researcher used proportionate stratified sampling technique in this study. In stratified sampling, the population is segregated into smaller sub-groups known strata. Stratified sampling involves strategically selecting participants from each subgroup. There are two further types in stratified sampling such as proportionate and non-proportionate stratified sampling. Proportionate stratified sampling is a process of selecting a sample in such a way that identified subgroups in the population are represented in the sample in the same proportion in which they exist in the population while in non-proportionate

stratified sampling select equal-sized samples from subgroups (Gay, Mills & Airasians, 2012).

The reason behind using this sampling technique lies in the fact that the population size of public and private universities was different. This sampling technique allowed the researched to give due representation to each stratum according to the population size. When a research goal is to compare the behavior of participants from different subgroups of the population, stratified sampling is the best approach. In order to save time and money, researcher selected small group from the population that represent the entire population.

In this study, the researcher used proportionate stratified sampling technique by splitting the population into public and private universities and then selected 10% of sample randomly from each strata as per their proportion in the population; i.e, 719 teachers from public sector universities and 151 teachers from private sector universities. So, the sample of study was 870 teachers from the population.

1.8.6 Sample Size

The population contained two stratum- public and private university teachers. According to Gay, Mills and Airasians (2012) if the population is about or beyond 5000 then 500 would be an adequate sample size, which constitute the 10% of population. By considering above mentioned source, as the population of current study was 10% of the total population which is $n=870$ and by using proportionate stratified sampling technique researcher was drawn 10% sample from each stratum which are 719 teachers from public sector universities and 151 from private sector universities in Islamabad.

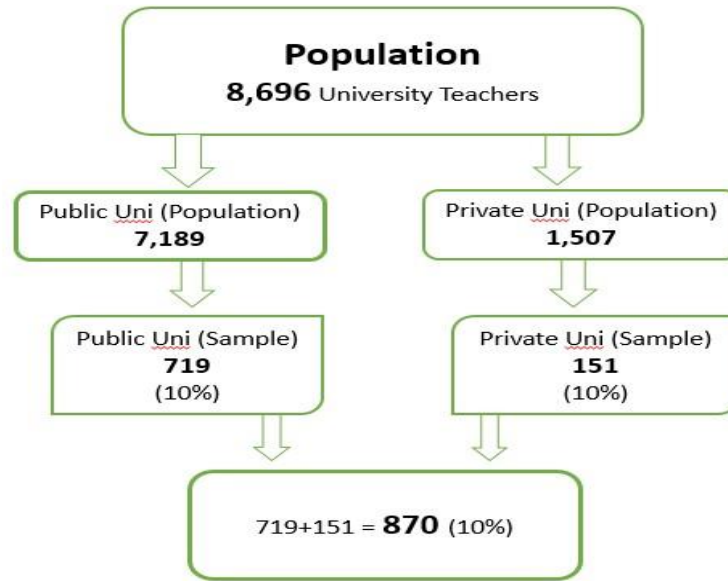


Fig. 1.2 Sample of the Study

1.8.7 Research Instruments

In this study, researcher used 2 sets of questionnaires for the collection of data. Here two different scales were used. One scale was of emotional intelligence which was developed by researcher on the base of emotional intelligence domains presented by Drigas and Papoutsis (2018). Researcher has picked the domains from the framework of Drigas and Papoutsis (2018) and developed his own research tool. The research tool is attached as (Appendix-A). It contains 69 items and rated on 5-point Likert type. Subscales of EI were as follows:

1. Emotional Stimuli
2. Emotional Recognition
3. Self-Awareness
4. Self-Management

5. Social Awareness
6. Social Skills
7. Self-Actualization
8. Transcendence
9. Emotional Unity

Table 1.1

Description of Teacher Emotional Intelligence Scale (TEIS)

Scale	Sub Variables	Items
Emotional Intelligence	Emotional Stimuli	08
	Emotional Recognition	10
	Self-Awareness	10
	Self-Management	07
	Social Awareness	06
	Social Skills	09
	Self-Actualization	06
	Transcendence	06
	Emotional Unity	07
Total Items		69

Table 1.1 showed that the scale of Emotional intelligence scale developed by researcher himself.

This questionnaire had nine sub-scales which include: emotional recognition, emotional Stimuli, self-awareness, social awareness, self-management, social skills, transcendence, self-actualization, and emotional unity. It contained 69 items respectively. To measure Teachers' Self-Efficacy researcher adopted "Teacher Self Efficacy Scale (TSES)" was adapted by Techannen and Hoy (2001).

Table 1.2
Description of Teacher Self-Efficacy Scale (TSES)

Scale	Subscale	Items
Teacher Self-Efficacy	Instructional Strategies	4
	Student Engagement	4
	Classroom Management	4
Total Items		12

Table 1.2 showed about of the scale Teacher Self-Efficacy. This scale consisted of 12 items and had 5 response options from 1 to 5 (Strongly Disagree to Strongly Agree). Furthermore, this tool consisted of three subscales including Student Engagement, Instructional Strategies, and Classroom Management. Each subscale consists of 4 items respectively.

1.8.7.1 Reliability and Validity of Instruments. The self-developed instrument of emotional intelligence was validated by consulting eight research experts and for pilot testing researcher was calculated Cronbach alpha by administrating the questionnaires on 47 teachers. For checking the reliability of the tool, Cronbach alpha coefficient was calculated and for inter item relationships correlation was used as statistical test. Furthermore, researcher modified the less reliable items based on reliability results.

1.8.8 Data Collection

Data was collected through online and personal visits to universities in Islamabad. Due to COVID-19 Pandemic, majority of responses were taken online via google form. Informed consents and willingness of the respondents were taken before hand, in order to fulfil the demand of ethical consideration. For this purpose, the respondents were briefed about the research purpose and they were assured that the information they shared shall be held confidential and would only be used for research purpose.

1.8.9 Data Analysis

After the collection of the data, it was screened for errors and inferential statistical analysis technique applied. In inferential statistics, regression was used to find the one-way relationship between EI and SE of teachers. Individual score was calculated to identify the level of EI and SE of teachers and Independent t-test was used to find the variances among university teachers' EI and SE.

Table No. 1.3

Description of Objectives, Hypothesis, Instruments and Statistical Analysis

Objectives	Hypothesis	Instrument	Data Analysis
1. To assess the level of EI and SE of university teachers.		EIS & TSES	Individual Score
2. To investigate the relationship of EI and SE of university teachers.	There is no statistically significant relationship between EI and SE of university teacher.	EIS & TSES	Regression
3. To compare the Emotional Intelligence and Self-Efficacy of university teachers on gender basis	There is no statistically difference in university teachers' Emotional Intelligence & Self-Efficacy on the basis of gender.	EIS & TSES	Independent t-test
4. To compare the Emotional Intelligence and Self-Efficacy of university teachers on the basis of university sector.	There is no statistically difference in university teachers' Emotional Intelligence & Self-Efficacy on the basis of university sector.	EIS & TSES	Independent t-test

1.9 Delimitations of the Study

The delimitations of the study are listed below:

- The study was delimited to HEC recognized public and private universities of Islamabad only.
- One-way relationship was assessed only in this research study.

1.10 Operational Definitions

In the following lines, the researcher narrated the operational definitions pertaining to research topic.

1.10.1 Emotional Intelligence

For the current research study emotional intelligence will be considered as self-control of individuals on their feelings and emotions as well as others' emotions which makes them able to handle their thinking and action accordingly.

1.10.1.1 Emotional Stimuli: Emotional stimuli for the current study will be considered as a stimulus that compel individuals to specify what emotions needs to feel and how these feelings might affect their reactions and behaviors.

1.10.1.2 Emotional Recognition, Perception-Expression of Emotion: For this study emotional recognition will be considered as an ability of individual to decode the emotions of other peoples properly.

1.10.1.3 Self-Awareness: For the current study self-awareness will be considered as knowing own feelings, emotions, thoughts and believes which aids an individual in realizing his/her self as an individual entity.

1.10.1.4 Self-Management: For the current study self-management will be considered as individuals' ability to convey his/her emotions appropriately and controlling those emotions that might cause impulsive behaviors.

1.10.1.5 Social Awareness, Empathy, Discrimination of Emotion: For the current study Social awareness will be considered as an individuals' ability to aware the needs and feelings of others to react appropriately in certain social situations and ready to modify daily interactions in order to achieve goals.

1.10.1.6 Social Skill, Expertise in Emotions: For the current study social skills will be considered as individuals' skills that might influence the emotions of other individuals' positively for making an interaction successful.

1.10.1.7 Self-Actualization: For the current study universality of emotions will be considered as individuals' ability to know about himself, realizing own potentials and benefits of own self-fulfillment and feel empathy to mankind as a whole.

1.10.1.8 Transcendence: For the current study transcendence will be considered as individuals' ability to help others in their self-actualization and self-fulfillment after getting transcends from own needs and share experience and wisdom with others.

1.10.1.9 Emotional Unity: Emotional unity will be considered as individuals' ability to see the relationship of emotions with the nature and realizing the importance of helping others by doing the same for others what they are doing for themselves and seeing oneself as part of nature and not a separate entity.

1.10.2 Teacher Self-Efficacy

In this study, the term- teacher self-efficacy is considered as teachers' belief in his/her self that he is capable of making plans, organizing plans and implanting those plans in order to achieve learning objectives.

1.10.2.1 Instructional Strategies: For this Study, Instructional Strategies is referred as teacher use different learning methodologies to provide learning environment for students aimed to attain learning objectives.

1.10.2.2 Student Engagement: For the current study students' engagement is referred as students' likeness towards learning activities and to what extent they take part in learning activities.

1.10.2.3 Classroom Management: Classroom management for the current study will be referred as to what extent teachers are able to organize resources, peoples and learning activities effectively.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

In this chapter, researcher deeply reviewed the existing literature which was relevant to the research topic. Moreover, researcher also developed valid arguments as per the topic requirement and supported those arguments by giving existing literature support. Researcher not only reviewed the results of those studies which are in support of his arguments but also reviewed results of contradicting studies too. Researcher has reviewed existing literature relevant to the variables, models associated with those variables and further more relevant researches both in national and international context.

For analyzing the performance of workers at workplace Intelligence Quotient (IQ) was considered as one of the most important components. Most of the organizations were used to select employees for any post just on the basis of their IQ level. It is generally assumed that most of the organizations think that if a person is able to complete a given task, he or she is most suitable for any post in the organization. In contrary to this, Research indicated in his study that ability of performing a task is not enough for indicating the capability and performance of an employee but it also matters that how well a person is able to handle his own self and others at workplace.

It is analyzed that for indicating the top performers of any workplace including educational institutes academic excellence including cognitive intelligence is a one important component but for determining the overall success of an employee

emotional intelligence (EI) also needs to be considered because at workplace we interact with humans and every human has various emotions that is why one's must be aware of dealing with human emotions. It is same as a teacher deals with students in educational institutes but appointing that teacher who only have good grades in his academics and having good teaching skills is not enough but his capability of dealing with his own emotions and emotions and needs of his students' is also a vital necessity.

The trends of the society are getting transformed quickly and one of the recent trend is self-efficacy (SE) which is considered as one's own belief on one's self that he can affect the performance of other persons under his/her supervision. Same as in educational context it is considered as teachers' belief that they can improve the performance of their students. Self-efficacy is being considered as an important component for improving students' performance because, teacher is the only one who knows the academic needs of his/her students 'and emotions of students' that is why if a teacher have a firm believe on his self' then he can easily plan a strategy to improve the academic performance of his students.

Section 1 General Introduction of the Area of Research

2.1 Emotional Intelligences

Emotional intelligence (EI) is a blend of two psychological terms among those one is known as emotions and other is known as intelligence. Different psychologists have given different definitions of emotional intelligence but they agreed upon the meaning of emotional intelligence by considering it as an ability of a person to understand information means that he/she is intelligent whereas, giving coordinated responses towards the environmental stimulus are related to human emotions. On the whole, Mayer, Roberts and Barsade (2008) indicated EI as a capacity of an individual to assist

reasoning by utilizing emotions and emotions related information. Moreover, it also includes reasoning about emotions.

Some peoples think that emotional intelligence is just an ability of becoming aware about ones' own emotions but in actual (EI) is considered as "social intelligence" which is not only dependent on knowing about self-emotions but it also involves the ability to know the emotions' of other persons with whom you interact on daily basis and improving ones' actions and thinking by utilizing that information (cited in Cherry, Fletcher, O'Sullivan, & Dornan, 2014).

2.1.1 Emotion

Our behaviors' get effected by our emotions. When we feel happy, we normally behave positively and when we feel sad, we normally behave negatively. Our feelings and emotions serve an important role in our daily lives. "Emovere" is the original Latin term from which the term emotions have been originated, the meaning of this term is "to evoke". Psychologists explained that emotions are just like a minds' frame work or an excited minds' framework which serves a vital role in controlling and directing our daily life behaviors. In addition to this, it is also highlighted that our emotions compel us to behave as per the wish of our emotions because they dominate our behaviors. In addition to this, a study conducted by Averill (2007) indicated that an individuals' mental and psychological condition is dependent on the emotions they have because emotions are considered as perceptual experiences and if an individual do not have any emotional current, they become unable to live a normal life.

Many of the peoples get confuse in some of the terms which are closely related to emotions like; feelings, moods and affect. Emotional neuroscientists have differentiated these terms from emotions and described them as follow:

2.1.1.1 Feelings. These are considered as subjective emotional representation of individuals' relevant to the incident or situation they personally encountered.

2.1.1.2 Moods. These are considered as diffused forms of feelings and less influential as compare to emotions because moods do not last for a longer time and are temporary.

2.1.1.3 Affect. It is an incorporating term, used to portray the subjects of emotions and states of mind together, despite the fact that it is generally utilized conversely with emotion.

2.1.2 Intelligence

The term "Intelligence" has been derived from the Latin word "intelligere" with having a meaning as see or appreciating. The term intelligence has been used in various distinctive courses having meaning such as, a persons' ability to rationalize, an individuals' potential to understand things, an individuals' ability to do theoretical reasoning, mindfulness, strong memory, arranging information and thinking critically and getting in emotional information.

Legg and Hunter (2006) stated that intelligence gauges the ability to attain goals in a wide range of environments. In addition to this, Anderson (2006) defined intelligence as individuals' ability to think critically, utilize problem solving skills to solve daily life problems, do reasoning and having knowledge relevant to the world.

2.2 History of Emotional Intelligence

Emotions and the notion of emotional intelligence is quite old, many of the fields of research and theory such as sociology, psychology and personality have utilized the term emotional intelligence. On the whole the actually work on emotional intelligence has been started by Darwin's in 1872 in which he described that how much emotions

and emotional expressions are necessary for the survival of human beings (Hess & Thibault, 2009). Moreover, Goleman (1995) explained the concept of (EI) by citing some phrases from Aristotle's work *The Nicomachean Ethics* which are "Anyone can be angry – that is easy. But to be angry with the right person, to the right degree, at the right time, for the right purposes, and the right way – that is not easy" (p.9).

The history of (EI) indicates that for longer time peoples were used to consider and emphasized only on cognitive aspects of intelligence like memory, thinking critically and understanding etc. Later on, researchers also started exploring the non-cognitive aspects of (EI). Moreover, Thorndike in 1920 has bring an advancement in the field of (EI) by introducing a unique term as "Social Intelligence" which means individuals' competence to comprehend other peoples and also deal with them in various interpersonal situations (Thorndike & Stein, 1937). Furthermore, Thorndike divided Emotional intelligence into three dimensions which were: Social intelligence, Abstract Intelligence and Mechanical intelligence. He has also developed instruments for measuring each of the mentioned three intelligences.

Many of the research studies has been done in that era but still after 20 years it has been indicated by Cronbach (1960) that there is a need to define, and measure social intelligence after conducting a deep and extensive research. Researchers started working on this aspect and tried their best to explore social intelligence deeply until Gardner came up with an idea of Multiple intelligences in 1983. Gardner in his theory explained two type of intelligences including interpersonal intelligence which relates to ones' understanding of other peoples and intrapersonal intelligence which relates to personal understanding or understanding of individuals' regarding their own self. Same as, Bar-On (2005) also explained that Gardner has proposed two types of intelligences in his multiple intelligence theory in 1983. Furthermore, he also claimed

that these two types of intelligences (interpersonal and intrapersonal) are same as vital as other type of intelligences that can be measured by using various IQ relevant tests. Moreover, Wechsler (1940) described two type of persons one of them as intellective and others as non-intellective. This concept later on in 1943 has been established that if a person needs to achieve a success in his life, he must not only focus on intellective abilities but also on non-intellective abilities. Cherniss (2000) has linked up this work with Gardner's idea of multiple intelligence in which he claimed that every individual possesses two types of intelligences other than cognitive intelligence among those one is emotional intelligence (intrapersonal) and other is social intelligence (interpersonal).

Gardner introduced the term emotional intelligence but for the very first time Wayne Payne has been used in a thesis titled as "A study of emotion: developing emotional intelligence; self-integration; relating to fear, pain and desire (theory, structure of reality, problem solving, contraction/expansion, tuning in/coming out/letting go)" (Payne, 1985). Whereas, the term of "emotional quotient" was initially utilized in an article of Keith Beasley (Beasley, 1987).

The major extensive research work relevant to exploring the factors which helps individuals' in achieving success in life and at their work place was started in early 1990. Salovey and Mayer (1990) claimed that in that era, emotional intelligence was considered as one of the types of social intelligence. Moreover, they have also described emotional intelligence as putting one's feet in shoes of others' or monitoring and understanding not only their own emotions but also emotions of others at the same time. Because, it makes them able to know others' emotions and also help them in making a plan to help peoples in dealing with their emotions. In addition to this, it is also indicated that not every individual is having a command in knowing their

emotions and others' emotions too because every individual is different from other individual that is why their abilities of think, problem solving and dealing with emotional issues is different too.

In year 2000, Goleman started his extensive researches on Emotional Intelligence and wrote a well-known book "Emotional Intelligence". Goleman was concerned about ideas to improve the Emotional intelligence of students' and providing them knowledge regarding it. That is why he did most of his work after actually visiting schools and explored that what programs are needed to be launched for developing emotional intelligence of students. As per old definition of (EI) it was an ability to knowing about personal and other persons' emotions, discerning them and utilizing that information for improving thinking process and behaviors. Whereas, this definition has been revised later on as "the ability to perceive, express, use and manage emotions to foster personal growth" (Mayer & Salovey, 1997, p, 189). In addition to this, in year 2005 another model of emotional intelligence was introduced by Bar-On which gave a strong theoretical ground for EQI. Moreover, the base of this model was dependent on emotional-social intelligence which includes that how well a person is able to comprehend others and also communicate their feelings towards others. Bar-On model was having four major segments including:

1. Persons' capability to differentiate among various feeling and emotions as well as comprehend and express those feelings and emotions.
2. Persons' ability to identify the feelings of others.
3. Persons' ability to manage and control his feelings and emotions.

4. Persons' ability to not only manage any kind of change they face but also adjust with the issues having interpersonal nature. Moreover, they must be able to create constructive impacts (Bar-On, 2005).

A Brief History of Emotional Intelligence

The concept of Emotional Intelligence has changed drastically in different years and many of the psychologists worked on different aspects of Emotional intelligence and produced something new during their research works. A brief History of Emotional Intelligence is described as follows:

1930s – During this time period idea of “Social intelligence” was introduced by Edward Thorndike.

1940s – The research works done during these years especially extensive work of David Wechsler recommended that one's need to be consider emotional aspects of intelligence for getting overall life achievements.

1950s – The work done during this time period by humanistic analysts including Abraham Maslow came up with an idea of assembling quality of emotions.

1975 – In this time period idea of multiple intelligences were emerged and introduced by Howard Gardner.

1985 – During this time period, the idea of emotional intelligence was initially utilized by Wayne

Payne in thesis of his doctoral degree “An investigation of feeling: creating emotional intelligence; consolidation toward oneself; identifying with dread, ache and craving (theory, structure of actuality, critical thinking, constriction/extension, tuning in/turning out/giving up).”

1987 – During this time period the term “Emotional Remainder” was utilized by Keith Beasley in an article published in Mensa Magazine.

1990 – During this time period the article on “Emotional Intelligence” was written by well-known psychologists Peter Salovey and John Mayer.

1995 – During these years, with the publication of Daniel Goleman’s book entitled “Emotional Intelligence: Why it can matter more than IQ” a drastic advancement was occurred in an idea of Emotional intelligence.

2.3 Why Teachers Need to Be Emotionally Intelligent?

As per the needs of this changing society we need individuals with soft skills and balanced personalities so that they may act as per the demands of the societal needs. As society is changing our expectations from education systems are also changing, in National Education policy of Pakistan (2009) it is clearly stated that now higher educational institutes are not only needs to be focus on producing skilled youth but also focus on improvement of society. We also need to inculcate civic responsibilities and social cohesion among our students for betterment of our society. Here teachers’ role is significant because they are the role models and responsible for making change in the personality of students’ for meeting the expectations of society. Their task is not only to develop students cognitively but also prepare future generations for bringing positive change within the society. For inculcating those skills in students’ first teachers need to have those skills in themselves. Teachers needs to be intellectually professional, have socio-emotional skills and utilize their emotional and social intelligences properly for bringing a rigid change in the personalities of students (Chechi, 2012; Adilogullari, 2011).

While considering emotional aspects for teachers we must consider emotional labor their needs and work load. It is difficult for teachers to deal with all those until they are not emotionally intelligent without which they face troubles at their workplace (Chang, 2009). Teachers work is not easy and they are required to perform multiple roles at their workplace on daily basis which is not possible without being Emotionally intelligent. Similarly, Liljestrom, Roulston and deMarrais (2007) argued that teachers do not do a single job of teaching but they also perform various roles like mentor, friends, protector etc. and for performing those roles effectively teachers are needed to be emotionally intelligent.

Teachers' job is stressful job because of which many teachers quit their jobs. Same as Popworth (2003) indicated that teacher's job is stressful because they interact with various peoples having different natures and problems and they have to deal with all of those within short duration which cause stress and increase burnout among teachers. For dealing with such kind of stressful situations teachers must possess EI skills. On the whole, it is important for a teacher to be emotionally intelligent for dealing with stressful situations and bringing positive change in our society by transforming our future generations.

2.6 The Concept of Self-Efficacy

The Self-efficacy's concept is founded in the recesses of social cognitive theory. Albert Bandura explained self-efficacy as self-organization, self-reflectiveness and self-regulation of individuals based on their self- beliefs (Pajares, F., 2006). As per Bandura, self-efficacy compels individuals to choose activities in which they want to get engage and which they want to avoid.

Moreover, as per Bandura's theory of self-efficacy individuals are smart enough, based on environment and personal actions they interpret the results of their actions (Pajares,1992). In addition to this, it is also added by Bandura (1997) humans continue to learn more regarding their powers through which they can achieve their purposes of life, they are also capable of developing such kind of technologies through which they can transform their ways of living. It appears that the actions that humans have taken over time to exercise more influence over their lives are critical in their emotional well-being. In fact, Bandura added that: The incapability to apply impact over things that unfavorably influence one's life and produces uneasiness, indifference, or desolation, while the capability to achieve anticipated consequences and to avert unsought ones, therefore, delivers a strong incentive for the progress and exercise of personal control. (p. 2) This is the foundation of self-efficacy.

Self-efficacy is also defined by Hanks and Beier (2012) as per them self-efficacy is private judgements regarding one's self that how much he is capable of organizing and executing an action which is necessary for attaining goals. This definition contains three different aspects of self-efficacy the first aspect of this definition is relevant to personal judgements regarding self-capabilities. This aspect can be assessed either by individual itself, nature of task given and by other persons present in that environment (Gist & Mitchell, 1992). Second, aspect is related to dynamic nature of self-efficacy which claims that as far as a person acquire new information and experience his self-efficacy changes over time (Bandura, personal communication, 1997). The third aspect of definition is that while having same skills peoples are able to behave differently by using same skills in different way or by changing the sequence of their skills set (Gist & Mitchell, 1992). On the whole these three aspects are known as social cognitive components based on social cognitive

theory. Bandura (1997) specified that Self-efficacy is a concept resultant from social cognitive theory—a theory postulating a triadic mutual causation model in which behavior, reasoning, and the environment all affect each other in a dynamic manner.

2.5 Teacher Self-Efficacy

In the field of education, one of the important constructs is Teacher Self-Efficacy. The notion of self-efficacy is imperative for teaching and learning same as it is important for other fields. The major idea of self-efficacy was introduced by Albert Bandura which was later on adopted by teachers in the field of education too. Various psychologists have defined teacher self-efficacy in different ways. As per Tschannen-Moran and Hoy (2001), it is a self-belief of a teacher on her capabilities that she will motivate the unmotivated students, engage them and also compel them to achieve the learning outcomes. The refinement of this notion of teacher self-efficacy was done after the progress of Teachers' sense of self-efficacy scale. Moreover, Khan (2012) stated that when we see self-efficacy within the context of teaching it includes sense of self-efficacy teachers have and how much they are confident on their capabilities that they are able to achieve learning outcomes by engaging and motivating unmotivated students.

Siwatu (2011) also described teacher self-efficacy as teachers' self-belief relevant to organizing and executing learning activities successfully or completing a learning relevant task effectively and efficiently. In addition to this, self-efficacy of teacher has also been described as ability of a teacher to have certainty on one-self that she is able to make a difference in the learning of her students (Ashton & Webb, 1986). Another different definition of teacher self-efficacy was also described by Klassen et al., (2011)

who explained that the self-efficacy of teacher is a level of confidence a teacher on herself that she is capable of improving students' learning by influencing them.

On the whole, if we analyze each of the definition of teacher self-efficacy all of these are putting emphasis on teachers' beliefs on their capabilities that they are able to improve students' learning, growth and academic achievement by influencing them positively. Most of the peoples get confuse in differentiating the concept of teacher self-efficacy and teachers' effectiveness that is why there is a need to make a difference among these two concepts. Goodard, Hoy and Hoy (2004) explained teacher effectiveness as teaching successfully whereas, teacher efficacy is relevant to beliefs on one's self that they will attain what they want to attain whether they have a necessary skillset or not. Moreover, it is also explained that teacher self-efficacy is most related to bandura's (1993) views that instead of external criteria, on the basis of past actions and experiences individuals make judgement relevant to their capabilities regarding performing a specific task. Moreover, it is also explained that self-efficacy is related to personal beliefs on their capabilities instead of actual level of capabilities they have (Tschannen-Moran & Hoy, 2007, as cited in Siwatu, Frazier, Osaghae, & Starker, 2011).

2.8 The Importance of Teacher Self-Efficacy

Teacher Self-Efficacy is very significant because teachers are role models for students' and their beliefs on one's self are of greater importance because they decide the future of their students. Bandura (1977) explained that the way a person can perform a task or take an action is influenced by the beliefs he is having relevant to his capabilities which also show him a way to use his skill set appropriately. Moreover, it is also stated that beliefs of teachers on themselves and their students' can have a

great impact on students' achievements that is why it is necessary for teachers to believe on themselves that there are having enough potential to influence their students and improve their future actions. In addition to this, a research study conducted by Ross (1992) stated that the researches took place in academic contexts concluded that there is a major and vital role of self-efficacy beliefs in influencing and improving not only academic success of students but also it brings improvement in students' behaviors. Whereas, instead of this it has also been explained by different researches that teachers' beliefs on one's self and their students are also important for influencing the outcomes of both teachers and students.

The teachers having higher self-efficacy hold a belief on one's self that they are able to be a good instructor. Moreover, they also possess numerous other important qualities which brings a positive change in students' academic achievement. Ashton (1984) and Ashton and Webb (1986) described that teachers with high self-efficacy possess numerous qualities which are described as under:

- For them teaching is a meaningful work and role of teacher is much important in teaching.
- They always plan effectively and for improving students' performance they set high expectations.
- For meeting the needs of students', they always take responsibility of students' learning, critically examine self-performance by considering students' failures and improve their instructional plan accordingly.
- They always think critically and creatively in setting goals not only for themselves but also for students' and for profession of teaching as a whole.

- They always have self-confidence on their abilities that they are able to affect students' learning positively.
- They do not consider their selves separate from students' they always view their students

as their partners of learning.

- They always put extra efforts and show persistence assisting learning of their students.

All of the above-mentioned qualities have a greater effect on teachers' self-belief that they are able to teach every type of student either they are difficult/unmotivated or quick and motivated learners (Berman, McLaughlin, Bass, & Zellman, 1977, as cited in Collier, 2005, p. 352).

More research studies also highlighted other aspects of teacher self-efficacy. These studies stated that there are numerous other attributes that are associated with those teachers who possess high degree of self-efficacy. According to Tschannen-Moran and Hoy (2001), a teacher who holds great level of self-efficacy, are always ready to take on new instructional strategies for involving students in in effective and hands-on learning experiences. Moreover, such kind of teachers are not scared of trying new things for making students' learning experience more effective. In contrary to this, teachers having low level of self-efficacy show resistance in trying new instructional strategies because for them existing practices are easy to use as compare to new strategies for which they are required to put extra efforts in learning those strategies.

Section 2 Models on Emotional Intelligence and Teacher Self-Efficacy

Theoretical Frameworks and Models of Emotional Intelligence

Numerous models relevant to Emotional Intelligence has been introduced by different psychologists. Each model was having its own uniqueness, follow are the details of mentioned models.

2.7 Mayer, Caruso and Salovey's Model of Emotional Intelligence

In this model, emotional intelligence was considered as a subset of three types of intelligences one of them was Social intelligence and other was inter and intra-personal intelligences. This model by Salovey and Mayer (1990) explained Thorndike's perception of emotional intelligence as ability to get information about personal and other persons' feelings, moods, motives, internal state of mind and behaviors and acting according to the need of the information received. Moreover, they considered Gardner's Interpersonal intelligence as monitoring and managing others moods.

Whereas, Intra-personal intelligence as identifying and managing personal feelings and moods. Salovey and Mayer (1990) indicated that two of these concepts are quite similar with emotional intelligence because both of these concepts deals with getting knowledge and managing personal moods and of others too.

Salovey and Mayer (1990) gave the emotional intelligence's concepts as "the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 189). As per them, emotions are one of the important part of our lives. Different peoples go through different kind of emotions in their daily lives. Some of them are having expertise in dealing with their emotions and processing those emotions effectively whereas, some of them are not skilled in dealing with their emotional information. That is why

Salovey and Mayers declared that getting and processing information regarding emotions and taking appropriate actions in certain moods is a skill of an individual which can be improved.

After conducting extensive research studies Salovey and Mayers (1997) updated definition of emotional intelligence and added the concept of “thinking about feelings” in their old definition. As per updated specific definition of EI, thinking about personal feelings was also became the part of Emotional Intelligence. They presented a Four branch model on the basis of this revised definition. The details of this model are described as under:

1. Emotional Intelligence involves persons’ capacity of perceiving, appraising and expressing emotions accurately.
2. It is individuals’ ability to utilize their emotions properly.
3. It includes persons’ capacity of understanding emotions and emotions related knowledge.
4. It is individuals’ ability to improve emotional and intellectual growth through regulating emotional information (Mayer & Salovey, 1997, p. 35).

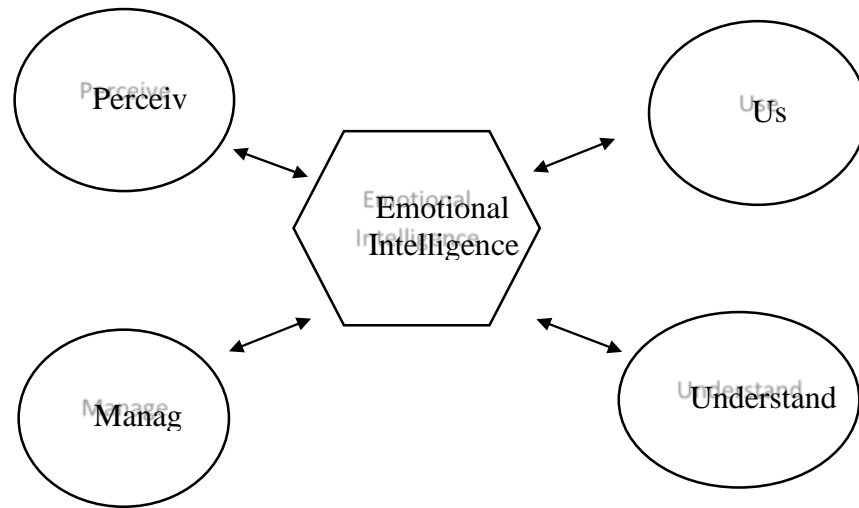


Figure 2.1 Mayer, Caruso and Salovey's Model of EI

On the whole, this revised model was arranged in hierarchically form having a base starts from psychological process leading towards more psychologically integrated process. The branch which is considered as base branch of this model is known as “Identifying emotions” which includes all those skills through which a person can not only identify his feelings but also express his emotions and can identify among phony and real emotional expressions. The second branch in this model is known as “Emotional facilitation of thoughts” it includes the abilities of individuals through which they can utilize their emotions, identify the important events and put efforts for generating those emotions that aids them in decision making. This branch also claims that for dealing with different problems different emotions are required. When we have happy mood we think creatively and solve problems quickly.

The third branch of this model is known as “Emotional understanding” it includes all those skills through which a person can understand complex emotions by understanding the relationship among emotions as well as by recognizing the cause of emotion. The fourth top-level branch of this model is known as “Managing Emotions” it includes individuals’ ability of knowing emotions and then dealing with those

emotions as per need. Moreover, a person become also able to solve those problems which caused by emotions.

2.8 Goleman's Model of Emotional Intelligence

Another model of EI was presented by Goleman in 1998. He utilized the constructs of Salovey and Mayer and presented a new model which was specifically for workplace environments. As per him EI is an ability through which a person can recognize his feelings and also feelings of others, motivates his self and manage his own feelings as well as feelings of others too (Goleman, 1998). In addition to this, he also claims that “emotional intelligence provides a fundamental grounding for the acquisition of a range of emotional competencies defined as ‘learned capabilities based on emotional intelligence that results in outstanding performance at work’” (Goleman, 1998, p.24). His model was consisted of five major domains which include “Self-awareness, Empathy Motivation, Self-regulation, and Social Skills.” Details of these domains are as follow:

1. **Self-Awareness:** This domain includes person's ability to have a confidence on his abilities and present his self in front of others confidently.
2. **Motivation:** This domain deals with person's inner motivation and competency for achieving the targets or meeting the standards of excellence.
3. **Self-Regulation:** This domain includes person's capacity of being trustworthy authentic and reliable.
4. **Empathy:** This domain deals with individuals' ability to understand moods, feelings and non-verbal gestures of others accurately.
5. **Social Skills:** This domain deals with individuals' ability to work cooperatively, feel comfortable in teamwork and boost up team spirit.

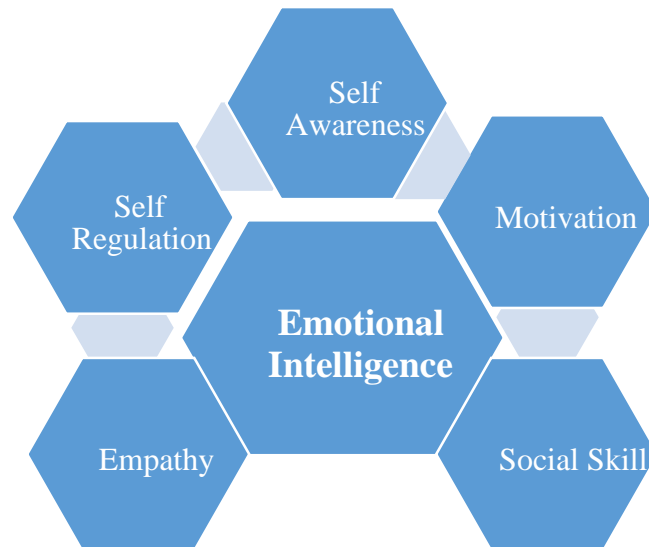


Figure 2.2 Goleman's Model of EI

Goleman (1998) claimed that Emotional Intelligence Quotient (EQ) is necessary as same as IQ is necessary for academic success and EQ plays a vital role in enhancing academic success. Moreover, he also claimed that EQ is more important than IQ for achieving success but for this claim Goleman faced a criticism from the psychologists Mayer et al. (2000). After being criticized Goleman stated that for taking decisions regarding field or profession selection IQ might be more powerful than EI but for identifying the powerful predictor of success EI is more important (Goleman, 2000b). After the collapse of 25 competencies into 20 by Richard Boyatzis, Goleman, revised his model and converted five domains of his model into four (Boyatzis, Goleman & Rhee, 2000). Details of this model is as follow:

2.11.1 Recognition. This domain includes two sub categories including self-awareness and social awareness. Moreover, self-awareness is the ability of an individual to recognize his emotions, assess his own emotions and having a self-confidence. Whereas, Social-awareness includes showing empathy to others, service orientation and having organizational awareness.

2.11.2 Regulation. This domain includes two sub categories including Self-Management and Relationship management. The abilities come under the domain of self-management are Self-control, Trustworthiness, Conscientiousness, Adaptability, Achievement drive and taking initiatives. In addition to this, abilities come under the category of Relationship management are Helping others in development, influencing others, communicate effectively, Able to manage conflicts, having leadership skills, serve as a change catalyst, Build bonds with others, Collaborate with others and work effectively as a team (Goleman, 2000). This model was also being criticized by Mayer et al., (2000) he argued that in the model of Goleman there are a lot of overlapping concepts related to personality and intelligence.

2.9 Bar-On's Model of Emotional Intelligence

According to Bar On (2010), emotional-social intelligence is emotional and social competencies of skills through which he can understand and express not only his self but also others and act accordingly as per daily demands. Different psychologists explained that EI is a skill which can be taught to individuals and it can also develop in individuals over a certain time period (Bar-On, 2006; Nelis, Quoidbach, Mikolajczak & Hansenne, 2009). It is also debated that EI plays a vital role in success of an individual. Moreover, it is also claimed that cognitive and emotional factors contribute equally in success of individuals (Bar On, 2006).

Bar On presented a model having five factors and 15 sub scales. This model is known as "Mixed model" because it is a mix of both mental and non-mental abilities. Details of this model are described as under:

2.12.1 Intrapersonal Scale: This scale includes five sub scales which are Self-Regard (accepting oneself as it is), Emotional Self-Awareness (Understanding one's

emotions), Assertiveness (Expressing emotions effectively), Independence (actualizing one's potential) and Self-Actualization (self-reliant).

2.12.2 Interpersonal Scale: This scale is further consisted of three sub scales which are Empathy (Understanding feelings of others), Social Responsibility (helping and cooperating with others) and Interpersonal Relationship (establishing satisfying relationships).

2.12.3 Stress Management Scale: This major scale is divided into two sub scales which are Tolerating Stress (Managing self-emotions constructively), and having Impulse Control (Controlling one's emotions).

2.12.4 Adaptability Scale: This scale of mix model is further consisted of three sub scales which are Reality-Testing (validating feelings with reality), Flexibility (Solving both personal and interpersonal problems) and Problem-Solving (Adjust feelings as per situations).

2.12.5 General Mood Scale: This scale includes two sub scales which are Optimism (having look at brighter aspects of life) and Happiness (Feeling satisfied with life) (Bar On, 2006). This model was having similarities like Goleman's model that is why this model was widely criticized for its theoretically mapping of personality (Drew, 2007; Brackett & Mayer, 2003).



Figure 2.3 Bar-On's Model of Emotional Intelligence

2.10 An Alternative Model

Based on the previously given models Lewis, Rees, Hudson and Bleakley (2005) divided previous concepts of EI into two separate frameworks because they considered that EI is a Socially constructed trait of an individual. Among those two frameworks one was following the idea of Salovey and Mayer (1990) as per which processing emotional information is ability of an individual which comes under category of EI. Whereas, second framework was following the ideas of Goleman and Bar On as per which a wide range of skills, personality traits and abilities comes under the category of EI. By utilizing these two ideas Lewis et al., (2005) presented an alternative model whose major focus was on problem-based learning within small groups. Some researches challenged this model.

2.11 The Nine-Layer Pyramid Model of Emotional Intelligence

Nine-layer or Pyramid model of EI is the latest model of Emotional Intelligence extracted out of previous theories and models. This model has been given

by Drigas and PaPoutsi (2018). This pyramid model is having steps and it has described ability EI and trait EI model in hierarchical manner. The ability levels deal with self/social awareness and social/self-management. Whereas, the trait levels of this model deals with persons' moods and their association with persons' emotions. This EI pyramid also based on Gardner's concept of interpersonal and intrapersonal intelligences (Gardner, 2000). Moreover, this model is consisted of two type of processes one is cognitive whereas, other one is meta cognitive. The cognitive levels of this pyramid deals with utilization of existing knowledge, generation of new knowledge including attention, evaluation, problem solving, memory and perceptions (Coren, 2012).

In addition to this, meta-cognitive levels deal with individuals' ability to monitor, reflecting on self-performance, and be aware of inner capabilities (Dunlosky & Metcalfe, 2008). Moreover, these levels of pyramid also deal with selfawareness, monitoring one's self, meta-memory and self-regulation (Caro Pineres & Jimenez, 2013). For moving from one layer of pyramid to another layer person encounters various cognitive and meta-cognitive process (See Figure 2.4).

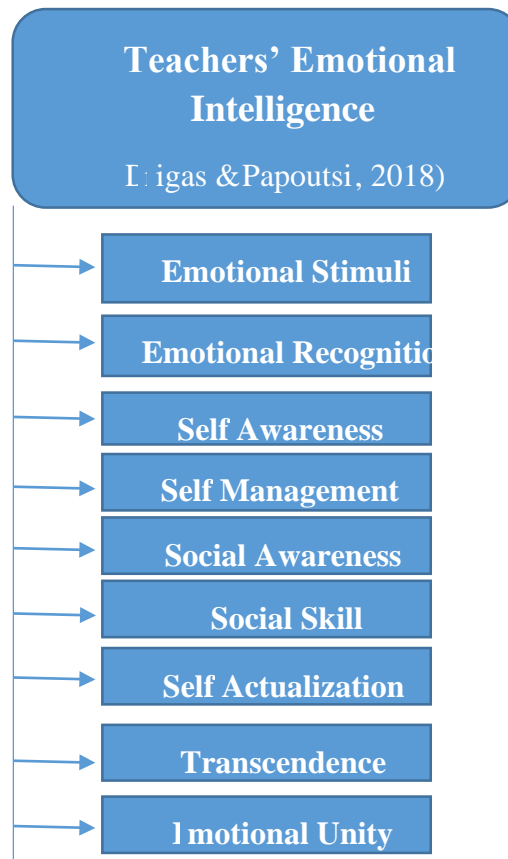


Figure 2.4 Model of Emotional Intelligence

This model is having an amazing classification with more organized hierarchical structures. This model also explains regarding evolution and development of individuals. Moreover, this model is having its significance for practical applications as well including assessment, and evaluation tool for life through which we can assess our work, health, social relations and academic success. Following are the details of each layer of this model:

2.11.1 Emotional Stimuli. Cognitive mechanism processes the Emotional stimuli and it (cognitive mechanism) determines what emotion to feel and subsequently produce an emotional reaction which may influence the occurrence of the behavior (Drigas & Papoutsis, 2018). Emotional stimuli are generally prioritized in perception, are detected more quickly, and gain access to conscious awareness (Mitchell & Greening, 2012).

2.11.2 Emotional Recognition, Perception-Expression of Emotion. Emotional recognition is an ability through which one decodes accurately the feelings and emotions of other people. These expressions are commonly expressed via non verbally (Face, body, voice). The understanding of other people's emotions and how to express these emotions serves a vital role in interactions of humans and critical component of human socio cognitive capacities (Lewis, Lefevre & Young, 2016).

2.11.3 Self-Awareness. Self-Awareness is term which consider the understanding of oneself in a way that one has the insight of his /her thoughts believes motives feelings and emotions. (Ferrari & Sternberg, 1998, Drigas & Papoutsi, 2018). It also considers a psychological situation of knowing own traits and behaviors (Crisp & Turner, 2014).

2.11.4 Self-Management. To express one's emotions in an appropriate way is self-management. It is an ability through which one controls his/her reactions so that one can save him from impulsive behaviors and feelings (Drigas & Papoutsi, 2018).

2.11.5 Social Awareness. It refers to be aware of needs feelings and concerns of other people and to handle the relationships with other people based upon these feelings and needs (Crisp & Turner, 2014). Social awareness means to know about various ways of handling different situations and to bring some positive changes in daily interactions with others to achieve the goals (Drigas & Papoutsi, 2018).

2.11.6 Social Skill, Expertise in Emotions. It is referred as skills that are required to handle the emotions of others so that one can manage the interactions successfully (Drigas & Papoutsi, 2018).

2.11.7 University of Emotion, Self-Actualization. Self-actualization is a deep insight of one's own traits and personal developments where an individual realizes his/her potentials and limits at its fullest and the consciousness of an individual's self-

fulfillment (Maslow, 1943). As a whole for mankind, Self-actualizers feel empathy and loyalty that why it's also called universality of emotion (Drigas & Papoutsi, 2018).

2.11.8 Transcendence. Transcendence is a state where an individual transcends from one's own needs, feelings and emotions and helps others to fulfill their needs or strengthen their potentials and master the emotions, an individual feels the connections to a larger world and develops an emotional well-being and a global empathy (Drigas & Papoutsi, 2018). As Huitt (2007) in this level transcendence one support others in their self-actualization, self-fulfillment and recognition of their potential.

2.11.9 Emotional Unity. It is the last stage where an individual consciously keeps the emotions dominant and see its relations with nature in a way that the individual sees himself as a part of the larger picture where rocks, plants, oceans and so on is not different from him. A realization that, what one does for himself is ultimately to be done for another (Drigas & Papoutsi, 2018).

2.12 Model of Self-Efficacy

2.12.1 A Background the Evolution of the Theory of Self-efficacy

Getting information regarding origination of self-efficacy is necessary for understanding it in better way. Social Cognitive theory is having its roots in Social learning theory and there is a close relation among these two theories. The concept of Self-efficacy was emerged from these two interrelated theories. Based on the scope, these two theories are different from each other. The major focus of SCT is on external and internal factors because of which it is wider in scope as compare to SLT which only focus on external factors.

2.12.2 Social Learning Theory (SLT) Vs Social Cognitive Theory (SCT)

Social learning theory was the concept extracted out of Behaviorism in 1960 and this theory was founded by Albert Bandura. As per Bandura (1977) and Pajares (2002) the major components of Social learning context are observing people and interacting with them. Bandura (1986) used the term Social Cognitive Theory for making a separation among Social learning and theories of behaviorism. According to Pajares (2002) SCT focused on actions of individuals which they usually show during an interaction and the effect of cognitive factors and learning on them.

According to Bandura (1997) a connection of human behavior with learning is caused due to Social cognitive theory and it emphasized on the role of believing on one's self also called self-efficacy. It is different from social learning theory which mainly focus on external factors. Limiting human actions to stimuli and reinforcement mechanism is a function of social cognitive theory which is an addition in the concept of behaviorism. Moreover, based on the concept that environmental factor has an impact on behavior, SCT aids in incorporating cognitive processes for causing a self-discipline among peoples, these cognitive processes based on their past experiences. In addition to this, triangulation has been shown among cognitive, environmental and behavioral factors which are responsible for affecting human behavior. Moreover, it is also indicated that together these factors are responsible for developing self-efficacy by influencing people's cognitive behavior (Bandura, 1986).

2.12.3 Self-efficacy as an Outcome of Social Cognitive Theory

Among the principles of SCT, the most imperative is Self-Efficacy. How people do things is highly associated with the constructive and negative consequences of self-efficacy. As per Bandura (1994), great sense of self-efficacy was seen among the

peoples who was having a firm believe that they can accomplish a goal or do a work effectively. It is because the peoples who are ready to take initiative may initiate such behavior which aids them in accomplishing a task despite of the difficulties they have faced. In addition to this, a huge influence of teacher self-efficacy was reported on quality of class environment, student outcomes and teachers' outcomes during last 40 years (Zee & Koomen, 2016; Tschannen Moran & Woolfolk Hoy, 2001).

2.12.4 The Evolution of the Concept of Teacher Self-efficacy

In 1970's researchers were conducted on self-efficacy by Rand Corporation which was mainly focused on locus of control the concept given by Rotter and Social Cognitive Theory given by Bandura (Armor et al., 1976). Bandura (1977) has influenced the research studies regarding teacher self-efficacy by presenting the concept of self-efficacy to SCT. The theory of self-efficacy presented by Bandura in 1977, activated the research on teacher self-efficacy which mainly focused on "need to differentiate between self-efficacy and outcome expectancies" (Zee & Koomen, 2016, p. 984). The idea laying down in this concept was that task specification is a necessary component of self-efficacy which varies in classrooms, content, students and variables that are present in learning environment. Self-efficacy and outcome expectancy are independent. Outcome expectancy is known as having a firm believe that an explicit behavior will lead to a detailed consequence. That is why the effect of these two are not same on producing a change in behavior.

2.13 Sources of Self-Efficacy

There are numerous ways through which self-efficacy can be created and these ways are known as main sources of influence (Pajares, 2002). The four causes of influence

associated with self-efficacy include command of experiences; verbal encouragement, displaced experiences and physiological and emotional conditions.

2.13.1 Mastery Experience. According to Milner (2002) the most powerful and vital source of efficacy information is known as Mastery Experience. This concept deals with perceptions and explains that when we perceive that we performed successfully it arises our sense of efficacy. In contrary to this, when we feel that we did not perform well and have feelings of failure it reduces our sense of efficacy. These perceptions usually effect our future performance either in positive way or negative way. Moreover, when a person continuously gets successful in performing a same activity or task his self-efficacy becomes enhanced and he put extra efforts into the future tasks. It is same as when a lady learns to drive a car, she become confident on her driving through daily practice and get a mastery over driving by believing on herself.

2.13.2 Vicarious Experiences. Milner (2002) also described another source of influence associated with self-efficacy known as vicarious experiences. It is a concept of watching other peoples who are similar to ourselves and succeeded in their lives by being persistent. Furthermore, it includes observing some other person who models a task for you. If a model will perform well and got success in task, then the observer will also perform well and it will also enhance the self-efficacy of observer. In contrary to this, if the model will not perform well it will reduce the self-efficacy beliefs of person observing him. Vicarious experiences always require a competent and skillful model for an observer to follow him (Bandura, 1994). In addition to this, it has been also explained by Bandura (1994) that peoples always have someone in their mind as a model and they compare their own capabilities with him. Whereas, a skillful model can compel and teach observer effective strategies and skills through which they can

mold themselves as per the demands of the society or environment in which they are living.

2.13.3 Verbal or Social Persuasion. Another cause of influence for self-efficacy is Verbal Persuasion which includes praising or motivating other by saying good words and giving feedback (Milner, 2002). It also explains that when someone convince other person by saying that he is competent and have enough skills to perform a task can enhance self-efficacy of that person. It is needed that person trust and believe on the words of the convincer it will enhance his efficacy but if he does not believe on the words of convincer it will decrease his self-efficacy level (Milner, 2002). Moreover, it is also explained that any type of verbal feedback either in the form of specific help, encouraging others and praising someone on good performance promotes supportive social environment. In contrary to this, lack of praise, lack of feedback from co-workers and non-justified criticism from colleagues causes an unsupportive social environment. Bandura (1994) also stated that for developing skills among peoples and compelling them to get succeed verbal and social persuasion is most vital.

2.13.4 Physiological and Emotional States. Physiological and emotional state is also one of the most important sources of influence for self-efficacy because peoples usually depend on their emotional states while judging their skills and capabilities. Moreover, it also explains that the level of self-efficacy is also dependent on the level of stress and tension peoples can take (Bandura, 1994). In addition to this, it is also stated that when a person is in state of stress and tension, he usually performs poor because he loses his strength and stamina to perform task well that is why the emotional state of person is also an important indicator for evaluating the self-efficacy level of a person. Moreover, it is also stated when person is in good mood it enhances

person's self-efficacy as compare to when person is struggling with some tension or have a bad mood.

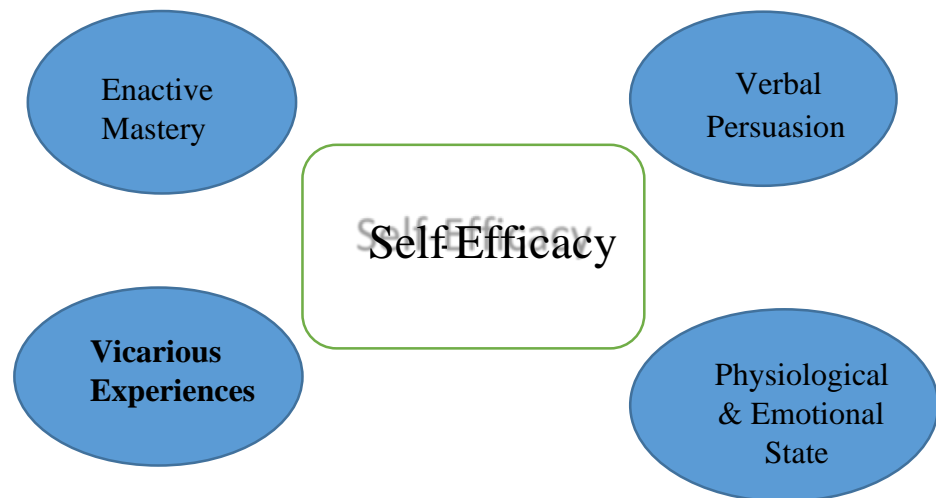


Figure 2.5 Model Sources of Self-Efficacy

All of the above-mentioned factors are vital in developing self-efficacy of an individual. There is a need to be aware about each of the individual factor and how it contributes in enhancing self-efficacy of individuals. Moreover, it is also important because improving self-efficacy leads to improvement in task performance which in turn leads a person towards success.

Section 3 Review of Related Researches

2.14 Relationship of Different Aspects of Teachers' Life with EI

Various researches have investigated the relationship among EI and different aspects of Teachers' life. A research study was conducted by Birol e al., (2009) in which a relationship among EI and performance management was investigated by utilizing a self-constructed measure of EI. As per the results of the study, it has been indicated that there was a constructive correlation among EI and performance management. Moreover, they also indicated that for improving the quality of communication among student and teacher and avoiding and reducing conflicts and stress among students' teachers' EI levels are of greater importance.

Another research study was conducted to investigate how well EI and self-esteem contributes in making teaching practice exercises successful. The sample of the study was 826 students, selected arbitrarily from four different universities. Results of the study indicated that for making teaching practice exercises successful EI and self-esteem are very important contributors (Modupe, 2010). Moreover, another study investigated that how well the EI and life satisfaction are associated to each other. This study was conducted on 52 university teachers. Outcomes of the study highlighted that a solid association or correlation existed among EI and life fulfilment of teachers.

A research study conducted by Jacob, Kemp and Mitchell (2008) has investigated the level of EI among teachers by utilizing Bar on model of ESI. Results of the study indicated that teachers are having un-satisfactory self-management skills. Moreover, their social and self-awareness is quite low. It has also been concluded that teachers were not self-motivated and have a negative mood towards rising as an effective teacher. This study also recommended that teachers need trainings regarding EI.

2.15 Relationship between Emotional Intelligence and Teachers'

Self-Efficacy

Bandura (1997) attributed the development of one's self-efficacy to higher levels of self-awareness, self-regulation, and control of emotions. These factors, being very related to the theory of emotional intelligence, have sparked interest in the relationship between the two theories. Diverse studies have been done regarding the relationship between emotional intelligence and self-efficacy in the past decade (Annamaria & Letizia, 2008; Rastegar & Memarpour, 2009). One of these research studies by Annamaria and Letizia (2008) examined the connection between EI and occupational self-efficacy of 169 Italian teachers. They have used Bar on Emotional Quotient Inventory as a tool of research. Results of the study indicated that intrapersonal skills foretold the occupational efficacy in a better way.

Another research study was conducted on 158 secondary school teachers and investigated perceived emotional intelligence as a predictor for self-efficacy in general and in terms of helping others. Outcomes of the study concluded that in general empathetic sensitivity was indicated as vital predictor for self-efficacy in terms of helping others. Moreover, another study conducted by Chan (2008) has investigated another angle of this phenomenon in which he took 273 Chinese in service and prospective teachers as a sample of the study and assessed the role of EI and self-efficacy in coping strategies. Outcomes of the study indicated that for active coping strategies interpersonal and intrapersonal EI is indicated as significant predictor.

Another research study has examined the connection between EI of teachers and their self-efficacy. 248 pre-service teachers were picked as study samples. Consequence of the study indicated that there is a constructive association between EI of teachers and

their Self-efficacy (Gurol et al., 2010). In addition to this, a research study was conducted in Iran and researcher selected 89 EFL teachers as a sample of the study for investigating the relationship among EI and Self-efficacy. For this study researcher utilized EQ-I and Teachers' sense of Efficacy scale. Results of the study pointed out that there are three good predictors of self-efficacy which are emotional self-awareness, interpersonal relationship and skills of problem solving (Moafian & Ghanizadeh, 2009).

A research study conducted to investigate correlation among EI and self-efficacy. For investigating the relationship, they have used the reactions of teachers towards teaching situations scale and Teaching Efficacy Scale (TES). For this study they picked 211 teachers as well as principals as a study sample. Findings of the study determined that there is a strong positive correlation among EI and TSE (Penrose et al., 2007). In addition to this, another study has explored the relationship among EI and TSE among 72 Iranian teachers. Results of the study showed a strong positive relationship among two variables (Rastegar & Memarpour, 2009). The latest studies on EI and SE has also indicated a strong positive relationship among two variables at university level (Valente et al., 2020; Leonard, E. E., & Maulding Green, 2018; Chikkanarti & Jattennavar, 2018; Amiriran & Behshad, 2016; Sarkhosh & Reazei, 2014).

2.16 Demographic Variables Affecting EI and Teachers' Self-Efficacy

Since it has been proved that EI is impacted by some personal variables including age, gender, educational level, teaching experience, marital status and type of institution, hence, the research also finds the variances in EI scores of teachers with reference to their circumstances. Various studies discussed above has indicated a

positive relationship among EI and TSE. In contrary to this some studies have also indicated that various personal variables do effect teachers self-efficacy and it is also indicated that different demographic variables including gender, age, education, teaching experience, type of university and marital status also effect teachers' emotional intelligence.

Research studies conducted to explore the effect of demographic variables on EI and TSE has indicated that demographic variables has a greater effect on these two variables. Shuakat (2017) conducted a research study and the outcomes of the study indicated that there is a greater level of EI among females as compare to males. In contrary to this, the results of a research study specified no substantial alteration existed in the EI of teachers on the basis of gender (Shehzad & Mahmood, 2013). Moreover, the findings of one study claims that the sense of self efficacy is greater in female teachers as compare to male teachers (Zia & Munshi, 2016). In addition to this, a research study was conducted to explore the relationship among EI and Demographic variables.

Outcomes of the study indicated that there is a strong association among EI and educational degree whereas rest of demographic variables including age, gender and work experience has no association with EI (Arvind, Soofi, Ruwaiya & Rabani, 2013). In addition to this, a study conducted by Alwaleedi (2017) specified that teacher self-efficacy is strongly influenced by demographic variables such as gender, qualification, school level and public and private institutes.

Moreover, a bulk of researches is available in which the association among age and EI has been investigated. The results of most of the researches indicated that EI of person increases with the increase in his age (Penrose et al., 2007; Ghanizadeh & Moafian, 2010). In contrary to this, there are various researches which indicated a

totally opposite results and indicated a no relationship among age of an individual and his EI (Birol, et al., 2009; Kafetsios & Zampetakis, 2008).

Numerous researchers have been done to investigate the association among gender and EI of teachers. Most of the researches indicated that females are more Emotionally intelligent as compare to males. Moreover, it is also indicated that on sub factors of EI including interpersonal EQ, emotional self-awareness and whole EI females scores slightly high as compare to males (Palmer, Manocha, Gignac & Stough, 2003). In contrary to this, the research studies also indicated that males are better as compare to females on adapting situations and on components of emotion regulation (Alnabhan, 2008). Moreover, studies also indicated that males are having more self-control as compare to females and they can tolerate stress strongly as compare to females (Sánchez-Ruiz, Pérez-González & Petrides).

As far as researcher has reviewed the literature regarding university types (public and private) and EI and SE at university level there is no such research which has explored this. There were very less researches who investigated EI difference among public and private secondary school teachers. Outcomes of the study indicated that no substantial difference existed among EI of teachers on the basis of school type. The researches on this area are quite limited and needed to explore further.

2.17 Research Studies on Emotional Intelligence in Pakistan

Within Pakistani context there are many researches which has worked on various variables in lined with EI including reliability, empathy, self-efficacy, job stress, performance, conflict management etc (Bhatti, 2009; Naqvi, 2011; Siraj ud Din, Khan, Rehman & Bibi, 2011). There are various researches on emotional intelligence in Pakistan but the population of those studies were not teachers. Most of the researches

have been conducted on call center employees, virtual project managers, nurses, bank managers and employees of private sector organizations (Raja, Mohsin, Ehsan, Mirza, Saud, 2010; Naeem, Saif & Khalil, 2008; Ali, 2009).

Whereas, at higher education level EI is still untouched and not explored in Pakistani context. Moreover, the relationship of EI with TSE is also not being investigated at higher educational institutes of Pakistan. Therefore, the primary aim of this research is to gauge the affiliation between teachers' emotional intelligence and their self-efficacy at university level in Islamabad, Pakistan.

CHAPTER 3

METHODS AND PROCEDURES

This part of study deals with methodology and process that was used to conduct this research, it contains research approach, method, population, sampling procedures, instruments, the process of data collection & data analysis techniques. The details of methodology are given below.

3.1 Research Approach

For this research, quantitative research approach was used which basically involved the descriptive interpretation numerical data for the results. The reason behind selecting this approach was researcher's interest in collecting numerical data to conclude facts and reveal diverse research patterns. This study was correlational and cross-sectional which aims to collect data to estimate whether, and to what extent a relationship occurs between two or more computable variables. The researcher investigated the relationship among EI and SE of teachers. That is why correlational method was used for this study. Due to time constraints, the researcher collected data from the selected participants at a single point in time, therefore, cross-sectional approach was used. In this study researcher used questionnaires for collecting the data and the result was based on maximum sample size that was representative of the whole population. Additionally, the researcher had clearly defined research objectives and hypothesis. Before data collection, all aspects of the study were carefully designed. The gathered data was in the form of figures, numeric and statistics, which are further organized in tables, chart and figures.

The researcher used questionnaires for collecting the responses of respondents. The items had Five Point Likert Scale. Thus, answers were coded in range 1 to 5 i.e., varying from Strongly Disagree to Strongly Agree and evaluated using statistical test to make the conclusion and findings of the study.

3.1.1 Research Method

The research was descriptive by method because there are four major objectives of the study i.e., to assess the level of emotional intelligence of teachers at university level, to assess the level of self-efficacy of teachers at university level, to compare the emotional intelligence of university teachers based on demographics and to compare the self-efficacy of university teachers based on demographics. These objectives were related to the analysis of current situation prevailing in the field of education. Descriptive research is basically the research that deals with the current issues and problems. Thus, emotional intelligence is one of the current topics of discussion in 21st century education, so the research falls in the category of the Descriptive research.

In addition, in descriptive research survey, Comparative style was adopted because the researcher compared emotional intelligence and self-efficacy of university teachers based on demographics. In this way, this research also involved Comparative style of research as well.

3.1.2 Research Design

This study was correlational and cross-sectional which aims to determine whether, and to what extent a relationship exists between two or more computable variables. The researcher investigated the relationship of EI and SE of teachers. that is why correlational method was used for this study. The researcher used cross-sectional

approach. In cross-sectional approach study took place at a single time frame, the study involves looking at people who differ on one key characteristic in the same time era. (Wang & Cheng, 2020). Cross sectional studies do not follow individuals over time. They are usually inexpensive and easy to conduct unlike longitudinal studies, which looks at a group of people over an extended period. Cross-sectional studies are used to describe what is happening at the present moment. The reasons behind using this approach in current study is that; the population of current study consisted of teachers from lecturer to professor at different ages ranging from 20 to 51 above, and different teaching experiences ranging from 0 to 16 above. Due to time limitation the researcher collected data from all the four categories of teachers with different ages and different experiences at same time era, as it was next to impossible for the researcher to follow up and collect data of a lecturer till he becomes a professor. Thus keeping in mind the above mentioned reasons and limitations the researcher had used the cross-sectional approach.

3.2 Overview of Research Objectives

Seven main research objectives were formulated for the purpose to explore the problem of the study. The research study objectives are listed below:

3.2.1 Objective No.1 To assess the level of Emotional Intelligence of teachers at university level.

The researcher explored this objective in many articles and researches and observed that emotional intelligence is of utmost importance for teachers in this modern era because teachers have high level of emotional intelligence produce more engaging and motivating lessons.

3.2.2 Objective No.2 To assess the level of Self-Efficacy of teachers at university level.

The researcher identified this objective in many researches and observed that teacher's self-efficacy has a vibrant role in effective teaching in order to accomplish learning objectives because teachers have high level of self-efficacy do their task effectively and efficiently.

3.2.3 Objective No.3 To investigate the relationship of Emotional Intelligence and Teachers' Self-Efficacy at university level.

This objective came in the discussion during the literature review with reference to both quantitative and qualitative approaches. The major aim of this study was to indicate the existing relationship of emotional intelligence and teachers' self-efficacy at universities level. The researcher was keenly interested to find out any significant relationship of Emotional Stimuli, Self-Awareness, Emotional Recognition, Self-Management, Social Skills, Social Awareness, Self-Actualization, Emotional Unity, Transcendence, and Teacher Self-Efficacy.

3.2.4 Objective No.4 To compare the Emotional Intelligence of university teachers on the basis of gender.

In Objective No.4, the researcher was interested to explore any significant difference of university teachers' emotional intelligence between gender. Because it is generally assuming that male teachers have high level of emotional intelligence than female teachers. That why researcher was interested to explore it.

3.2.5 Objective No. 5 To compare the Self-Efficacy of university teachers on the basis of gender.

In objective No.5, the researcher identified this objective from many researches. The researcher observed that there were contradictory findings regards to compare teacher's self-efficacy on the basis of gender. So, Researcher was interest to find out any significant different of university teachers' self-efficacy on the basis of gender specially in the context of Pakistan.

3.2.6 Objective No.6 To compare the Emotional Intelligence of university teachers on the basis of university sector.

In objective No.6, the researcher was interested to identify any significant difference university teacher emotional intelligence between public and private universities. because the nature of their job and university environment are different. Public sector teachers are permanent employees of government. They are not directly answerable to their employer for most of the conducts whereas private university teachers are directly answerable to their managers. This obligation may make them put deliberate effort to become emotionally intelligent.

3.2.7 Objective No 7 To compare the Self-Efficacy of university teachers on the basis of university sector.

In objective No.7, the researcher identified this objective from many researches. The researcher observed that there were contradictory findings regards to compare teacher's self-efficacy on the basis of university sector. So, Researcher was interest to find out any significant different of university teachers' self-efficacy on the basis of gender specially in the context of Pakistan.

3.3 Population of the Study

The study's population encompassed all those teachers who were teaching at both public and private sector universities located in the vicinity of Islamabad that are

recognized by HEC. It consisted of 8696 teachers from public and private universities in Islamabad. The total number of public sector universities teachers were 7189 whereas the total number of private sector teachers were 1507 (See Appendix A). According to Higher Education Commission the number of recognized public universities in Islamabad were 15 and private universities in Islamabad were 7 (See Appendix B).

3.4 Sampling Technique

Researcher used proportionate stratified sampling technique in this study. In stratified sampling, the population is segregated into smaller sub-groups known strata. Stratified sampling involves strategically selecting participants from each subgroup. There are two further types in stratified sampling such as proportionate and non-proportionate stratified sampling. Proportionate stratified sampling is a process of selecting a sample in such a way that identified subgroups in the population are represented in the sample in the same proportion in which they exist in the population while in non-proportionate stratified sampling select equal-sized samples from subgroups (Gay, Mills & Airasians, 2012). The reason behind using this sampling technique lies in the fact that the population size of public and private universities was different. This sampling technique allowed the researched to give due representation to each stratum according to the population size. When a research goal is to compare the behavior of participants from different subgroups of the population, stratified sampling is the best approach. In order to save time and money, researcher selected small group from the population that represent the entire population.

In this study, the researcher used proportionate stratified random sampling technique by splitting the population into public and private universities and then selected 10% of

sample randomly from each strata as per their proportion in the population; i.e, 719 teachers from public sector universities and 151 teachers from private sector universities. So, the sample of study was 870 teachers from the population.

3.5 Sample

Basically, sampling enables a researcher to infer information from a fragment of population about the problem instead of measuring response from whole population. Generally, the population is vast and it is impossible for the researcher to study all its members, thus, a small portion of sample is chosen by the researcher by using any sampling technique which is appropriate for their study. In this study, researcher used proportionate stratified random sampling technique to segregate population into two stratas like private sector and public sector universities. According to Gay, Mills and Airasians (2012) if the population is about or beyond 5000 then 500 would be an adequate sample size, which constitute the 10% of population. By considering above mentioned source, as the population of current study was 10% of the total population which is $n=870$ and by using proportionate stratified sampling technique researcher was drawn 10% sample from each stratum which are 719 teachers from public sector universities and 151 from private sector universities in Islamabad.

The rate of return was 74% which are 645 teachers of the total population. 518 teachers were from public sector universities and 127 teachers were from private sector universities.

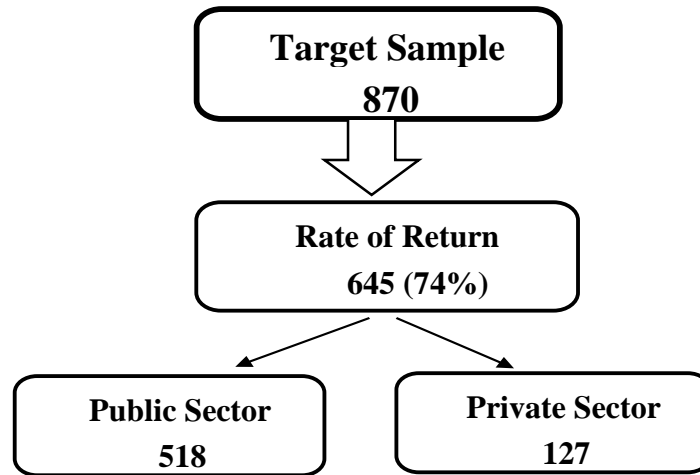


Fig. 3.1 Sample of the Study

3.6 Tool Construction

For the purpose of data collection, researcher used two set of questionnaires. Two different scales were utilized for this research. One scale was of emotional intelligence which was developed by researcher on the base of emotional intelligence domains presented by Drigas and Papoutsis in 2018. Second one was adapted by Techannen and Hoy (2001). The conceptual framework selected for the study represents the “Emotional Intelligence” and “Teachers’ Self-Efficacy”. Emotional Intelligence consisted of nine sub domains and Teachers’ Self-Efficacy based on three sub domains. Thus, the questionnaire was also divided in twelve sub sections. Overall, the questionnaire was separated into two portions which were Demographic Information and Emotional Intelligence and Teachers’ Self-Efficacy Scale.

3.6.1 Demographic Information

This section related to demographic information was based on items related to Gender, University Type, Age, Academic Qualification, Professional Qualification, Teaching

Experience, Marital Status, Job Status and Designation. This information provided basic information about the background of the respondents.

3.6.2 Emotional Intelligence Scale

The part related to Emotional Intelligence and Teachers' Self-Efficacy Scale. On initial stage 69 closed ended items were developed by the researcher for the Emotional Intelligence Scale and there are 12 closed ended items for Teachers' Self-Efficacy Scale which was adapted. The details of the items are as presented in table No. 3.1 and table No. 3.2.

Table 3.1

List of items (Initial Version) Teachers' Emotional Intelligence Scale (TEIS)

Scale	Major Sections	No of Items	Item Coding
Teachers' Emotional Intelligence	Emotional Stimuli	08	ES1 – ES8
	Emotional Recognition	10	ER1 – ER10
	Self-Awareness	10	SA1 – SA10
	Self-Management	06	SM1 – SM6
	Social Awareness	06	SCA1 – SCA6
	Social Skill	09	SS1 – SS9
	Universality Self-Actualization	06	USA1 – USA6
	Transcendent	06	T1 – T6
	Emotional Unity	07	EU1 – EU7

Table 3.1 showed that the initial form of the Teachers' Emotional Intelligence Scale (TEIS) was grounded on nine major sections. Emotional Stimuli was containing 08 questions, Emotional Recognition was containing 10, and Self-Management, Social Awareness, Universality Self-Actualization, Transcendent were containing 06

questions, Social Skill was 09 and Emotional Unity was containing 07 questions. There are 03 questions were revers in Self-Management.

3.6.3 Teachers' Self-Efficacy Scale

Table 3.2

List of items (Initial Version) "Teacher Self-Efficacy Scale (TSES)

Scale	Major Sections	No of Items	Item Coding
Teacher Self-Efficacy Scale	Student Engagement	04	SE1 – SE4
	Instructional Strategies	04	IS1 – IS4
	Classroom Management	04	CM1 – CM4

Table 3.2 showed that the initial version of Teacher Self-Efficacy Scale (TSES) that was founded on three major sections. Each section was containing 04 questions.

3.6.4 Validation of the Tool

For the purpose of validation of the tool, researcher sent the tool to the experts belonging to the field of education. The tool was improved in the light of their valuable review (Appendix F).

3.6.5 Pilot Testing / Study

To check the reliability of the instrument, researcher conducted pilot trail. At first stage, the tool was circulated among 70 respondents from the sample respondents. 47 out of 70 respondents returned the questionnaires with complete information. The data gained through the pilot trail was coded and analyzed through Statistical Package for Social Sciences (SPSS) 25th Version.

3.6.6 Reliability of the Instrument

The data collected in pilot study was analyzed and tabulated to measure the strength of the scale and to improve the items for finalization of the tool. In this regard, Cronbach Alpha Reliability Test, Item-total Correlation and Inter-Section Correlation were calculated.

Table 3.3

Cronbach Alpha Reliability of Emotional Intelligence Scale Pilot Testing (n= 47)

Scale	Major Section	Items	Cronbach Alpha Reliability
Emotional Intelligence		69	.952
	Emotional Stimuli	08	.676
	Emotional Recognition	10	.826
	Self-Awareness	10	.808
	Self-Management	06	.626
	Social Awareness	06	.619
	Social Skill	09	.868
	Self-Actualization	06	.651
	Transcendent Emotional Unity	07	.829

The Table 3.3 displayed that the reliability of the “Teachers’ Emotional Intelligence Scale (EIS) was 0.952 while the reliability of the major sections was Emotional Stimuli 0.676, Emotional Recognition 0.826, Self-Awareness 0.808, Self-Management 0.626, Social Awareness 0.619, Social Skill 0.868, Universality Self-Actualization 0.651, Transcendent 0.841, and Emotional Unity” was 0.829.

Table 3.4

Item-total Correlation of Teachers' Emotional Intelligence Scale Pilot Testing (n = 47)

Items Codes	r	Items Codes	r	Items Codes	r
ES1	.452**	SA1	.487**	SCA3	.687**
ES2	.612**	SA2	.606**	SCA4	.589**
ES3	.625**	SA3	.550**	SCA5	.612**
ES4	.197	SA4	.497**	SCA6	.080
ES5	-.037	SA5	.415**	SS1	.556**
ES6	.543**	SA6	.577**	SS2	.541**
ES7	.609**	SA7	.541**	SS3	.613**
ES8	.624**	SA8	.480**	SS4	.660**
ER1	.570**	SA9	.423**	SS5	.580**
ER2	.698**	SA10	.305**	SS6	.601**
ER3	.511**	SM1	.554**	SS7	.523**
ER4	.447**	SM2	.518**	SS8	.554**
ER5	.456**	RSM3	.124	SS9	.372**
ER6	.531**	SM4	.494**	USA1	.365**
ER7	.430**	RSM5	.068	USA2	.536**
ER8	.592**	SM6	.423**	USA3	.637**
ER9	.589**	RSM7	.165	USA4	.599**
ER10	.477**	SCA1	.580**	USA5	.344**
T1	.600**	SCA2	.503**	USA6	.503**
T2	.616**	EU1	.709**	EU6	.540**
T3	.520**	EU2	.391**	EU7	.562**
T4	.674**	EU3	.433**		
T5	.498**	EU4	.557**		
T6	.678**	EU5	.791**		

Correlation is significant at the 0.01 level (2 tailed). **

Correlation is significant at the 0.05 level (02-tailed) *

The Table 3.4 showed Item-Correlation Teachers' Emotional Intelligence Scale

(TEIS). The maximum correlation was of items No EU5 (.791**) and the lowermost correlation was of the Item No. ES5 (-.037).

Table 3.5

*Intersection Correlation of Teachers' Emotional Intelligence Scale Pilot Testing
(n = 47)*

	Emotional Stimuli	Emotional Recognition	Self-Awareness	Self-Management	Social Awareness	Social Skill	Universality	Self-Actualization	Transcendence	Emotional Unity	Teachers' Emotional Intelligence
Emotional Stimuli	1										
Emotional Recognition	.546**	1									
Self-Awareness	.454**	.789* *	1								
Self-Management	.253	.106	.152	1							
Social Awareness	.470**	.659* *	.716**	.313*	1						
Social Skill	.493**	.521* *	.439*	.471**	.513**	1					
Universality	.466**	.681* *	.542**	.149	.570**	.612**	1				
Self-Actualization								1			
Transcendence	.466**	.681* *	.542**	.149	.570**	.612**	1.000**	1			
Emotional Unity	.508**	.573* *	.560**	.152	.570**	.543**	.660**	.660**	1		
Teachers' Emotional Intelligence	.709**	.835* *	.793**	.390**	.783**	.795**	.796**	.796**	.777**	1	

Correlation is significant at the level 0.01 level (2-tailed). **

Correlation is significant at the 0.05 level (2-tailed). *

The table 3.5 showed that all the sections were correlated with one another significantly and statistically. The maximum correlation was found between

Universality Self-Actualization and Transcendence (1.000**) while the lowest correlation was found between Self-Management and Self-Recognition (.106).

Table 3.6

Cronbach Alpha Reliability of Teacher Self-Efficacy Scale (n = 47)

Scale	Major Section	Items	Cronbach Reliability	Alpha
Teacher		12	.903	
SE Scale				
	Student Engagement	04	.773	
	Instructional Strategies	04	.880	
	Classroom Management	04	.900	

The table 3.6 displays that the reliability of the Teacher Self-Efficacy Scale was 0.903 while the reliability of the Major Section were Student Engagement, Instructional Strategies, and Classroom Management were 0.773, 0.880 and 0.900 respectively.

Table 3.7

Item-total Correlation of Teacher Self-Efficacy Scale (n = 46)

Items	r	Items	r	Items	r
Codes		Codes		Codes	
SE1	.681**	IS1	.802**	CM1	.723**
SE2	.700**	IS2	.778**	CM2	.803**
SE3	.613**	IS3	.846**	CM3	.679**
SE4	.404**	IS4	.757**	CM4	.767**

The table 3.7 showed that Item-total Correlation of Teacher SE Scale. The maximum correlation was of items No IS3 (.846**) and the lowermost correlation was of the item No. SE4 (.404**).

Table 3.8

Intersection Correlation of Teacher Self-Efficacy Scale (n = 46)

	SE	IS	CM	Teacher
SE	1			
IS	.507**	1		
CM	.328*	.773**	1	
Teacher Self-Efficacy	.724**	.923**	.847**	1

** . Correlation is significant at the 0.01 level (2 tailed).

Table 3.8 showed that all the sub sections were correlated with one another significantly and statistically at the 0.01 significance level.

3.6.7 Revision / Final Version of Research Tool

The table 1.7 shows that 6 out of 69 items were having less than 0.30 level of correlation. These items were ES4 (.197), ES5 (-.037), RSM3 (.124), RSM5 (.068), RSM7 (.165), and SCA6 (0.80). The reason behind negative item ES5 (-.037) was that it was difficult for respondent to understand and response, so researcher molded the item in easy way for the final version. For the purpose of tool improvement weak items were improved for finalized version of the questionnaire.

The following tables 3.9 and 3.10 shows the final version of the research tool.

Table 3.9

List of items (Final Version) Teachers' Emotional Intelligence Scale (EIS)

Scale	Major Sections	Items	Item Coding
Emotional Intelligence	Emotional Stimuli	08	ES1 – ES8
	Emotional Recognition	10	ER1 – ER10
	Self-Awareness	10	SA1 – SA10
	Self-Management	06	SM1 – SM6
	Social Awareness	06	SCA1 – SCA6
	Social Skill	09	SS1 – SS9
	Self-Actualization	06	USA1 – USA6
	Transcendent	06	T1 – T6
	Emotional Unity	07	EU1 – EU7

The Table 3.9 showed that the detail of items that are included in the final version of Teachers' Emotional Intelligence Scale (EIS) tool. There were total 69 items.

Table 3.10

List of items (Final Version) Teacher Self-Efficacy Scale (TSES)

Scale	Major Sections	Items	Item Coding
Teacher Self-Efficacy Scale	Student Engagement	04	SE1 – SE4
	Instructional Strategies	04	IS1 – IS4
	Classroom Management	04	CM1 – CM4

The tables 3.9 and 3.10 showed the detail of the items that are included in the last and final version of the instrument. There are total 81 items.

3.6.8 Scoring of the Research Tool

Researcher developed the Teachers' Emotional Intelligence Scale (TEIS) for the purpose to assess the level of emotional intelligence of university teachers. It contained 9 sub dimensions i.e., Emotional Stimuli, Emotional Recognition, Self-Awareness, Self-Management, Social Awareness, Social Skill, Self-Actualization, Transcendent and Emotional Unity. This scale was rated on 5-point Likert scale. Respondents were asked to respond against the option ranging from 5 to 1 indicating their preferences of responses (5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree). In additional the responses were scored by calculating the score obtained by the respondents. There were 69 items included in the scale. Thus the minimum possible score was 69 (1 x 69 = 69) and the highest

possible scores was 345 ($5 \times 69 = 345$). This rang (69– 345) was divided into three levels that were Low, Average and High level. The scoring of the responses to calculated the level of emotional intelligence was based on the following division:

Score 69 – 160 = Low

Score 162 – 254 = Average

Score 255 – 345 = High

Table 3.11

Scoring for the Level of Teachers' Emotional Intelligence

Variable	Level of Teachers' Emotional Intelligence	Score
Teachers' Emotional Intelligence	Low	69 – 160
	Average	162 – 254
	High	255 – 345

Researcher adapted the Teacher Self-Efficacy Scale for assessing the level of Self-Efficacy of university teachers. This scale contained 3 sub dimensions; Instructional Strategies, Student Engagement, and Classroom Management. The scale was rated on 5-point Likert scale. Respondents were asked to respond against the options ranging from 5 to 1 indicating their preferences of responses (5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree).

Further the responses were scored by calculating the score obtained by the respondents. There were 12 items included in the scale. Thus, the minimum possible

score was 12 ($1 \times 12 = 12$) and the highest possible scores was 60 ($5 \times 12 = 60$). This rang (12 – 60) was divided into three levels that were Low, Average and High.

The scoring of the responses to calculated the level of teachers' self-efficacy was based on the following division:

Score 12 – 28 = Low

Score 29 – 45 = Average

Score 46 – 60 = High

Table 3.12

Scoring for the level of Teachers' Self-Efficacy

Variable	Level of Teachers' Self-Efficacy	Score
Teachers' Self-Efficacy	Low	12 – 28
	Average	29 – 45
	High	46 – 60

3.7 Data Collection

Data was collected through online and personal visits to universities in Islamabad. Due to COVID-19 pandemic majority of responses were got online via google form. Informed consents and willingness of the respondents were taken before hand in order to fulfil the demand of ethical consideration. For this purpose, the respondents were briefed about the research purpose and they were assured that the information they shared will be kept confidential and would be used only for the purpose of research. Due to COVID-19 pandemic researcher on visits to universities got near to no

response most of the universities even did not allow me entrance. Thus, researcher went online and sent over 7500 emails to public and private universities' teachers in Islamabad. Out of the email sent researcher was only responded by round about 370 via email and got 285 in hard copy.

3.8 Data Analysis

The data was gathered using questionnaires which was later coded and screened for errors. By the assistance of Statistical Package for Social Sciences (SPSS) Version 25th. it was analyzed and tabulated. For this purpose, Cronbach Alpha Reliability Test, Regression, Mean and “t” test were enforced. the objectives No.1 and 2 were to identify the level of EI and SE of teachers. Thus, for this purpose individual score was calculated. Objective No.3 was to find out the relationship of EI and SE of university teachers, for this purpose regression was used. The objectives No 4, 5 and 6 were to compare the male – female and public – private university teachers' EI and SE. Thus the independent sample t-test was applied by using inferential statistics, for the purpose of comparison. The t-test is used when researcher is not aware of the true population, mean and standard deviation. The independent t-test is an inferential statistical test, also known as two sample two t-test, denotes whether a statistically significant difference exists between the means in two correlated groups. Here in the current study the male and female were considered as two independent samples. The results received from these tests have been displayed in tabulated from in chapter IV. The table follow describes the statistical test that was applied for the hypotheses testing.

Table 3.13

Description of Objectives, Hypothesis, Instruments and Statistical Analysis

Objectives	Research Questions	Statistical Analysis
	Hypotheses	
1. To assess the level of EI of university teacher.		Individual Score
2. To assess the level of SE of university teachers.		Individual Score
3. Investigate the relationship of EI and SE of university teachers.	H ₀₁ There is no statistically significant relationship between EI and SE of university teacher.	Regression
4. To compare the Emotional Intelligence of university teachers on the basis of gender.	H ₀₂ There is no statistically difference in university teachers' Emotional Intelligence on the basis of gender.	Independent t-test
5. To compare the Self-Efficacy of university teachers on the basis of gender.	H ₀₃ There is no statistically difference in university teachers' Self-Efficacy on the basis of gender	Independent t-test
6. To compare the Emotional Intelligence of university teachers on the basis of university sector.	H ₀₄ There is no statistically difference in university teachers' Emotional Intelligence on the basis of university sector.	Independent t-test
7. To compare the Self-Efficacy of university teachers on the basis of university sector.	H ₀₅ There is no statistically difference in university teachers' Self-Efficacy on the basis of university sector.	Independent t-test

3.9 Delimitations of the Research Study

Due to limited time and resources, the study was delimited to:

1. Only public and private sector universities in Islamabad.
2. Only HEC recognized universities in Islamabad.
3. Only one-way relationship was assessed in this current study.

CHAPTER 4

ANALYSIS AND INTERPRETATION OF THE DATA

This chapter presents analysis and interpretation of data in tabulated forms. It has been divided into five main sections for the data analysis based on objectives and hypotheses.

4.1 Summary of the Analysis

The analysis of the data is further divided into five sections given below:

Section I

Section I deals with the tables related to tool of the research. It includes tables of reliability and correlation of the tool.

Section II

Section II deals with the demographic information collected through the data collection.

Section III

Section III is based on the analysis of data against Objective No. 1 that is to assess the level of EI of university teachers based on demographics. In this section the individual scores of the respondents were calculated and these scores were divided into three levels i.e. low, average and high. Thus the tables were generated accordingly and results are drawn.

Section IV

Section IV is based on the analysis of data against Objective No. 2 that is to assess the level of SE of university teachers based on demographics. In this section the individual scores of the respondents were calculated and these scores were divided into three levels i.e. low, average and high. Thus the tables were generated accordingly and results are drawn.

Section V

Section V is based on the analysis of data against Objective No. 3 that is to investigate the relationship of EI and SE of university teachers. The regression was used for find out the one-way relationship.

Section VI

Section VI is based on the analysis of data against Objective No. 4 that is to compare the EI and SE of university teachers on the basis of gender. The Independent t test was used for the comparison.

Section VII

Section VI is based on the analysis of data against Objective No. 5 that is to compare the SE of university teachers on the basis of gender. The Independent t test was used for the comparison.

Section VIII

Section VIII is based on the analysis of data against Objective No. 6 that is to compare emotional intelligence of university teachers on the basis of university sector. The Independent t test was used for the comparison.

Section IX

Section IX is based on the analysis of data against Objective No. 7 that is to compare self-efficacy of university teachers on the basis of university sector. The Independent t test was used for the comparison.

Section I

4.2 Tool Construction

4.2.1 Reliability of the Instrument

The collected data from this study was analyzed and were represented in table form to test the items' strength. Cronbach Alpha Reliability Test, Item-total Correlation and Inter-Section Correlation were calculated for this reason.

Table 4.1

Cronbach Alpha Reliability of Teachers' Emotional Intelligence Scale Final Tool (n=645)

Scale	Major Sections	Items	Cronbach Alpha Reliability
Teachers' Emotional Intelligence		69	.932
	Emotional Stimuli	08	.757
	Emotional Recognition	10	.762
	Self-Awareness	10	.708
	Self-Management	07	.725
	Social-Awareness	06	.613
	Social Skill	09	.745
	Self-Actualization	06	.611
	Transcendent	06	.713
	Emotional Unity	07	.726

The table 4.1 displays that the Cronbach Alpha Reliability of the "Teachers' Emotional Intelligence Scale (TEIS) was 0.932 while the reliability of the Sub

Sections were Emotional Stimuli 0.757, Emotional Recognition 0.762, Self-Awareness 0.708, Self-Management 0.704, Social Awareness 0.613, Social Skill 0.745, Self-Actualization 0.611, Transcendent” 0.713, and Emotional Unity was 0.726.

Table 4.2

Item-total Correlation of Teachers' Emotional Intelligence Scale (n = 645)

Items	R	Items	R	Items	R
Codes		Codes		Codes	
ES1	.515**	SA1	.452**	SCA3	.367**
ES2	.537**	SA2	.395**	SCA4	.376**
ES3	.537**	SA3	.343**	SCA5	.356**
ES4	.447**	SA4	.330**	SCA6	.363**
ES5	.522**	SA5	.492**	SS1	.340**
ES6	.557**	SA6	.362**	SS2	.269*
ES7	.423**	SA7	.505**	SS3	.428**
ES8	.416**	SA8	.491**	SS4	.283
ER1	.448**	SA9	.512**	SS5	.368**
ER2	.488**	SA10	.467**	SS6	.308**
ER3	.401**	SM1	.214*	SS7	.400**
ER4	.504**	SM2	.210*	SS8	.353**
ER5	.526**	SM3	.073*	SS9	.451**
ER6	.509**	SM4	.176*	USA1	.493**
ER7	.525**	SM5	.130*	USA2	.471**
ER8	.362**	SM6	.182*	USA3	.537**
ER9	.473**	SM7	.098*	USA4	.462**
ER10	.493**	SCA1	.417**	USA5	.305**
T1	.493**	SCA2	.371**	USA6	.417**
T2	.526**	EU1	.572**	EU6	.457**
T3	.479**	EU2	.430**	EU7	.493**
T4	.493**	EU3	.504**		
T5	.451**	EU4	.496**		
T6	.528**	EU5	.538**		

Correlation is significant at the 0.01 level (2-tailed).**

Correlation is significant at the 0.05 level (2-tailed)*

The table 4.2 displays the Item-total Correlation of Teachers’ Emotional Intelligence Scale (TEIS). The highest correlation was of items No EU1 (.572**) and the lowermost was of the item No. SM3 (.073).

Table 4.3

Intersection Correlation of Teachers’ Emotional Intelligence Scale (n = 645)

	Emotional Stimuli	Emotional Recognition	Self-Awareness	Self-Management	Social Awareness	Social Skill	Universality	Emotion SA	Transcendence	Emotional Unity	Emotional Intelligence
Emotional Stimuli	1										
Emotional Recognition	.645**	1									
Self-Awareness	.660**	.697**	1								
Self-Management	.105*	.129*	.129*	1							
Social Awareness	.476**	.465**	.481**	.125*	1						
Social Skill	.364**	.422**	.414**	.150*	.352**	1					
Universality	.591**	.614**	.599**	.070*	.470**	.449**	1				
Emotion SA								1			
Transcendence	.665**	.641**	.587**	.087**	.450**	.370**	.560**	.620	1		
Emotional Unity	.637**	.680**	.629**	.118*	.471**	.410**	.620	.602**	.811**	1	
Emotional Intelligence	.814**	.846**	.829**	.277*	.642**	.620**	.768**	.773**	.811**	.811**	1

** Correlation is significant at the 0.05 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The table 4.3 displays that all the sectors have significant statistically correlation with one another. The maximum correlation was found between “Emotional Intelligence”

and “Emotional Recognition” (.829**) while the lowermost correlation was found between “Self-Management” and “Emotional Stimuli” (.105).

Table 4.4

Cronbach Alpha Reliability of Teacher Self-Efficacy Scale (n = 645)

Scale	Major Sections	Items	Cronbach Alpha Reliability
Teacher SE Scale		12	.880
	Student Engagement	04	.723
	Instructional Strategies	04	.837
	Classroom Management	04	.857

The table 4.4 displays that the reliability of the Teacher Self-Efficacy Scale was 0.880 while the reliability of the Major Section was Student Engagement, Instructional Strategies, and Classroom Management were 0.723, 0.837 and 0.857 respectively which is indicating that these items are indicating good reliability.

Table 4.5

Item-total Correlation of Teacher Self-Efficacy Scale (n = 645)

Items	r	Items	r	Items	r
Codes		Codes		Codes	
SE1	.609**	IS1	.743**	CM1	.672**
SE2	.640**	IS2	.725**	CM2	.733**
SE3	.604**	IS3	.764**	CM3	.666**
SE4	.436**	IS4	.725**	CM4	.719**

The table 4.5 displays the Item-total Correlation of Teacher SE Scale. The maximum correlation was of item No IS2 and item of No IS4 (.764**) and the lowermost correlation was of the item No. SE4 (.436**).

Table 4.6

Intersection Correlation of Teacher Self-Efficacy Scale (n = 645)

	SE	IS	CM	Teacher SE
SE	1			
IS	.488**	1		
CM	.342*	.711**	1	
Teacher SE	.735**	.898**	.834**	1

** . Correlation is significant at the 0.01 level (2-tailed).

The table 4.6 described that sub dimensions of Teacher Self-Efficacy Scale (TSES) were correlated with one another significantly and statistically. The level of significance between these sub dimensions was 0.01. The maximum correlation was between Teacher Self-Efficacy Scale (TSES) and Instructional Strategies (.898). The lowermost correlation was between Classroom Management and Student Engagement (.342).

Section II

4.3 Demographics of the Sample

Table 4.7

Gender wise Distribution of the Sample (n = 645)

Gender	Frequency	Percentage
Male	278	43.1
Female	367	56.9
Total	645	100

Table 4.7 elaborate that 645 respondents were total in number and in which 278 (43.1 %) were male and 367 (56.9%) were female teachers who are serving in Islamabad City at university level. On the basis of population female teachers are more in number than male teachers that why the ratio of female teachers' responses high than male teachers.

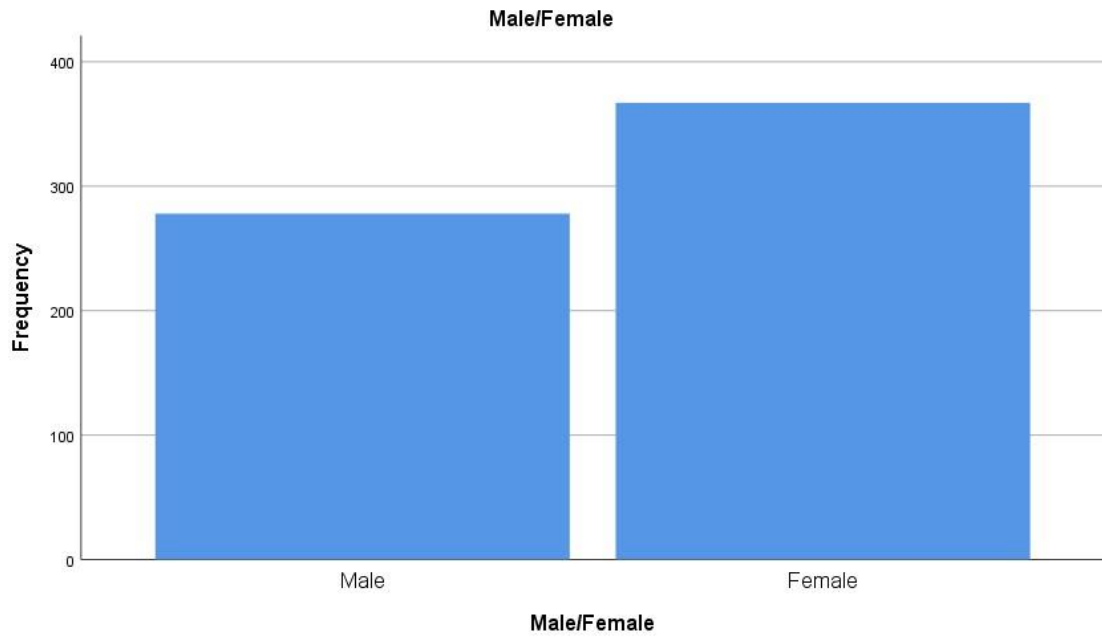


Fig. 4.1 Gender wise Distribution of the sample (n = 645)

Table 4.8

University wise Distribution of the Sample (n = 645)

University	Frequency	Percentage
Public	518	80.3
Private	127	19.7
Total	645	100

Table 4.8 shows that there were total 645 teachers contributed as sample. Among which 518 (80.3) teachers belonged to public sector universities in Islamabad and 127 (19.7%) teachers were from private universities in Islamabad. It was observed that public university teachers were in majority than private universities.

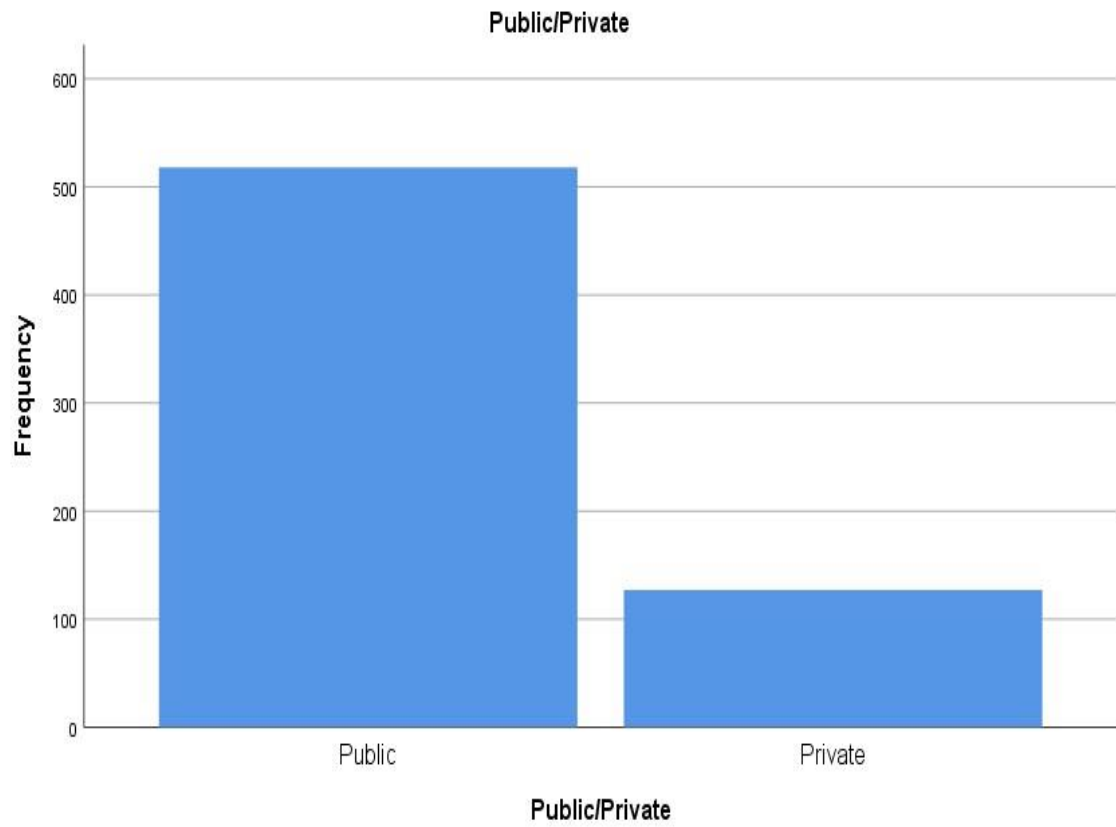


Fig. 4.2 University Sector Wise Distribution of the Sample (n = 645)

Section III

4.4 Level of University Teachers' Emotional Intelligence

Objective No.1: To assess the level of Emotional Intelligence of university teachers.

Table 4.9

Level of University Teachers' "Emotional Intelligence" (EI) (n = 645)

Variable	Level of University Teachers' EI	Score	N	Percentage
	Low	69 – 160	00	0%
Emotional Intelligence	Average	161 – 252	283	44.3 %
	High	253 - 345	362	56.6 %

Table 4.9 shows that the level of university teachers' emotional intelligence into three levels such as low (69-160), average (161-252) and high (253-285). 362 (56.6%) respondents' emotional intelligence was high level, 283 (44.3%) respondents were at average level of EI and there is no respondent in the low level of EI. Majority (56.6 %) those who responded had high level of emotional intelligence (EI) related to the (TEIS) (Table 4.9).

Section IV

4.5 Level of University Teachers' SE

Objective No.2: To assess the level of Self-Efficacy of university teachers.

Table 4.10

Level of University Teachers' Self-Efficacy (TSE) (n = 645)

Variable	Level of University Teachers' SE	Score	N	Percentage
Teacher Self-Efficacy	Low	12 – 28	00	0 %
	Average	29 – 45	89	13.8 %
	High	46 – 60	556	86.2 %

Table 4.10 indicated that the level of university teachers' self-efficacy was classified into three levels such as low (12-28), average (29-45) and high (46-60). 556 (86.2 %) respondents had high level of self-efficacy, 89 (13.8%) respondents were found at average level of self-efficacy and there is no respondent was in low level of teacher self-efficacy. Majority (89%) of the respondents were having high level of self-efficacy. (Table 4.10).

Section IV

4.6 Relationship of Emotional Intelligence and Teacher Self-Efficacy

Objective No. 3: To investigate the relationship of EI and Teacher SE at university level.

Ho¹: There is no statistically significant relationship between emotional intelligence and teachers' self-efficacy at university level.

Table 4.11

Relationship between EI and Teachers' SE (n = 645)

VI	VII	R ²	β	t	Sig.
EI	TSE	.017	0.129	3.29	.001

*p < 0.05, **p < 0.01

Table 4.11 shows the one-way relationship between (EI) and teachers' SE. The Emotional Intelligence has 1.7 % variation in Teachers' Self-efficacy and the remaining is in consequence to some other reasons. While the coefficient ($\beta = 0.129$) displays that this relationship is positive and statistically significant at 0.001 level. Furthermore, it is also indicated that if the level of teachers' SE will increase the emotional intelligence will also increase. Therefore, the Hypothesis No. Ho¹ that there is no statistically significant relationship of emotional intelligence and teachers' self-efficacy at university level is rejected.

Objective No. 3.1 To investigate the relationship of emotional stimuli and Teachers' self-efficacy at university level.

H₀^{1a}: There is no statistically significant relationship between emotional stimuli (ES) and teachers' SE (TSE) at university level.

Table 4.12

Relationship of Emotional Stimuli and Teachers' SE (n = 645)

VI	VII	R²	β	t	Sig.
EI	TSE	.003	.052	1.320	.187

*p < 0.05, **p < 0.01

Table 4.12 shows the one-way relationship between emotional stimuli (ES) and teachers' self-efficacy. The contribution of emotional stimuli had 0.3 % variation on teachers' self-efficacy. While the coefficient ($\beta = .052$) shows very weak relationship and t-value ($t = 1.320$) were observed statistically insignificant at .187 level of significance. Thus the hypothesis No. H₀^{1a}: "there is no statistically significant relationship between emotional stimuli (ES) and teachers' self-efficacy (TSE) at university level" is failed to reject at the .187 level of significance. Which indicates that if emotional stimuli will increase teachers' self-efficacy. it will be increased slightly but it is not considerable.

Objective No. 3.2: To investigate the relationship of ER and Teacher SE at university level.

H₀^{1b}: There is no statistically significant relationship between emotional recognition (ER) & teachers' self-efficacy (TSE) at university level.

Table 4.13

Relationship of ER and Teachers' SE (n = 645)

VI	VII	R²	β	t	Sig.
EI	TSE	.008	.087	3.29	.026

***p <0.05, **p <0.01**

Table 4.13 shows the one-way relationship between emotional recognition (ER) and teachers' self-efficacy. The contribution of emotional recognition had 0.8 % variation on teachers' self-efficacy. The coefficient ($\beta = .087$) shows positive and very weak relationship and t-value ($t = 3.29$) were observed statistically significant at .026 level of significance. Therefore, the Hypothesis No. H₀^{1b}: "there is no statistically significant relationship between emotional recognition (ER) and teachers' self-efficacy (TSE) at university level is rejected. Furthermore, it is indicated that increase in level of emotional recognition will cause increase in the level of teachers' self-efficacy.

Objective No. 3.3: To investigate the relationship of self-awareness and Teachers' SE at university level.

Ho^{1c}: There is no statistically significant relationship between self-awareness (SA) and teachers' self-efficacy (TSE) at university level.

Table 4.14

Relationship of Self-Awareness and Teachers' SE (n = 645)

VI	VII	R²	β	t	Sig.
EI	TSE	.006	.080	2.026	.043

*p < 0.05, **p < 0.01

Table 4.14 shows the one-way relationship between emotional self-awareness (SA) and teachers' self-efficacy. The contribution of self-awareness had 0.6 % variation on teachers' self-efficacy. While the coefficient ($\beta = .080$) shows positive and very weak relationship and t-value ($t = 2.026$) were observed statistically significant at .043 level of significance. For this reason, the hypothesis No. Ho^{1c}: "there is no statistically significant relationship between self-awareness (SA) and teachers' self-efficacy (TSE) at university level is rejected. Moreover, it is also indicated that increase in the level of self-awareness will cause increase in the level of teachers' self-efficacy.

Objective No. 3.4: To investigate the relationship of SM and Teachers' SE at university level.

H₀^{1d}: There is no statistically significant relationship between self-management (SM) and teachers' self-efficacy (TSE) at university level.

Table 4.15

Relationship of Emotional Management and Teachers' SE (n = 645)

VI	VII	R²	β	t	Sig.
EI	TSE	.001	.032	.032	.410

*p < 0.05, **p < 0.01

Table 4.15 shows the one-way relationship between emotional management and teachers' self-efficacy. The contribution of emotional management had 0.1 % variation on teachers' self-efficacy. While the coefficient ($\beta = .032$) shows that this relationship is very weak and t-value ($t = .032$) were observed statistically insignificant at .410 level of significance. Thus, the hypothesis No. H₀^{1d}: "there is no statistically significant relationship between self-management (SM) & teachers' SE at university level is failed to reject. It is also interpreted as the increase in the level of self-management will cause a slightly increase in the level of teachers' self-efficacy which is not considerable.

Objective No. 3.5: To investigate the relationship of social awareness and Teachers' SE at university level.

H₀^{1e}: There is no statistically significant relationship between social awareness and teachers' self-efficacy (TSE) at university level.

Table 4.16

Relationship of Social Awareness and Teachers' SE (n = 645)

V r	VI r	F	f	Si ~	
EI	TSE	.023	.152	3.895	.000

*p < 0.05, **p < 0.01

Table 4.16 shows the one-way relationship between social awareness and teachers' self-efficacy. The contribution of social awareness had 2.3 % variation on teachers' self-efficacy. The coefficient ($\beta = .152$) shows positive relationship and t-value ($t = 3.895$) was statistically significant at $P < .001$ level of significance. Thus, the hypothesis No. H₀^{1e}: "there is no statistically significant relationship between self-awareness (SA) & teachers' SE at university level is rejected. Result indicated that the more social awareness, the more teacher self-efficacy he/she have. It is further also interpreted as if the level of social awareness will increase it will also cause increase in the level of teachers' self-efficacy.

Objective No. 3.6: To investigate the relationship of social skill and Teachers' SE at university level.

H₀^{1f}: There is no statistically significant relationship between social skill and teachers' self-efficacy (TSE) at university level.

Table 4.17

Relationship of Social Skill and Teachers' SE (n = 645)

VI	VII	R²	β	t	Sig.
EI	TSE	.029	.171	4.392	.000

*p < 0.05, **p < 0.01

Table 4.17 shows the one-way relationship between social skill and teachers' self-efficacy. The contribution of social skill had 2.9 % variation on teachers' self-efficacy. The coefficient ($\beta = .171$) shows positive relationship and t-value ($t = 4.392$) was statistically significant at $p < .001$ level of significance. Thus, the hypothesis No. H₀^{1f}: "there is no statistically significant relationship between social skill and Teachers' self-efficacy (TSE) at university level is rejected. Result indicated that if the level of social skill will increase it will also cause increase in the level of teachers' self-efficacy. That the more social skill, the more teacher self-efficacy he/she have.

Objective No. 3.7: To investigate the relationship of self-actualization and Teachers' SE at university level.

H₀^{1g}: There is no statistically significant relationship between self-actualization and teachers' self-efficacy (TSE) at university level.

Table 4.18

Relationship of Self-Actualization and Teachers' SE (n = 645)

VI	VII	R²	β	t	Sig.
EI	TSE	.016	.125	3.184	.002

*p < 0.05, **p < 0.01

Table 4.18 shows the one-way relationship between self-actualization and teachers' self-efficacy. The contribution of self-actualization had 1.6 % on teachers' self-efficacy. The coefficient ($\beta = .125$) shows positive relationship and t-value ($t = 3.184$) was significant, statistically at 0.02 level of significance. For this reason, the hypothesis No. H₀^{1g}: there is no statistically significant relationship between self-actualization and teachers' self-efficacy (TSE) at university level is rejected. Result also indicated that increase in the level of self-actualization will cause increase in the level of teachers' self-efficacy. The more self-actualization, the more teacher self-efficacy he/she have.

Objective No. 3.8: To investigate the relationship of transcendence and teachers' SE at university level.

H₀^{1h}: There is no statistically significant relationship between transcendence and teachers' self-efficacy (TSE) at university level.

Table 4.19

Relationship of Transcendence and Teachers' SE (n = 645)

VI	VII	R²	β	T	Sig.
EI	TSE	.009	.095	2.417	.016

*p < 0.05, **p < 0.01

Table 4.19 shows the one-way relationship between transcendence and teachers' self-efficacy. The contribution of transcendence had 0.9 % variation on teachers' self-efficacy. The coefficient ($\beta = .095$) shows positive relationship and t-value ($t = 2.417$) was statistically significant at .016 level of significance. Thus, the hypothesis No. H₀^{1h}: there is no statistically significant relationship b/w transcendence & teachers' self-efficacy (TSE) at university level is rejected. Result also indicated that increase in the level of transcendence will cause increase in the level of teachers' self-efficacy. the more transcendence, the more teacher self-efficacy he/she have.

Objective No. 3.9: To investigate the relationship of emotional unity and teachers' SE at university level.

H₀^{li}: There is no statistically significant relationship between emotional unity and teachers' self-efficacy (TSE) at university level.

Table 4.20

Relationship of Emotional Unity and Teachers' SE (n = 645)

V1	VII	R²	β	t	Sig.
EI	TSE	.007	.081	2.071	.039

*p <0.05, **p <0.01

Table 4.20 shows the one-way relationship between emotional unity and teachers' self-efficacy. The contribution of emotional unity had 0.7 % variation on teachers' self-efficacy. The coefficient ($\beta = .171$) shows positive relationship and t-value ($t = 2.071$) was statistically significant at .039 level of significance. Thus, the hypothesis No. H₀^{li}: "there is no statistically significant relationship between emotional unity and teachers' self-efficacy (TSE) at university level is rejected. Result also indicated that if the level of emotional unity will increase it will also cause increase in the level of teachers' self-efficacy. the more emotional unity, the more teacher self-efficacy he/she have.

Section VI

Section VI is about the analysis of data against:

Objective No. 4: To compare the emotional intelligence of teachers at university level on the basis of gender.

Ho²: There is no statistically significant difference in university teachers' Emotional Intelligence on the basis of gender.

Table 4.21

Gender wise Comparison of University Teachers' Emotional Intelligence (n = 645)

Variable	Group	n	Mean	t	df	Sig.
EI	Male	278	3.59			
	Female	367	3.72	-3.48	643	.001

*p <0.05, **p <0.01

Table 4.21 displays that independent-sample t-test was conducted to compare the emotional intelligence between male and female university teachers. A significant difference in the teachers' emotional intelligence between male (M = 3.59) and female (F = 3.72) teachers; $t(643) = -3.48$, $p = .001$ was observed. Female teachers have been observed to hold significantly higher emotional intelligence compared to male teachers.

Section VII

Section VII is founded on the basis of analysis of data.

Objective No. 5: To compare self-efficacy of university teachers on the basis of gender.

Ho³: There is no statistically significant difference in university teachers' self-efficacy on the basis of gender.

Table 4.22

<i>Gender wise Comparison of University Teachers' Self-Efficacy (n = 645)</i>						
Variable	Group	n	Mean	t	df	Sig.
EI	Male	278	4.164	.023	643	.982
	Female	367	4.163			

*p <0.05, **p <0.01

Table 4.22 shows that an independent-sample t-test was carried out to compare self-efficacy (SE) between male and female university teachers. No significant difference in the teachers' SE between male (M = 4.164) & female (F = 4.163) teachers; $t(643) = .023$, which is greater than 0.05 was observed. Result revealed no gender difference while comparing self-efficacy. Thus the hypothesis No. Ho^{1k}: there is no statistically significant difference in university teachers' self-efficacy on gender basis is failed to reject.

Section VIII

Section VIII comprises the analysis of data against:

Objective No. 6: To compare emotional intelligence of university teachers on the basis of basis of university sector.

H₀⁴: There is no statistically significant difference in university teachers' emotional intelligence on the basis of university sector.

Table 4.23

University sector wise Comparison of University Teachers' Emotional Intelligence (n = 645)

Variable	Group	n	Mean	t	df	Sig.
EI	Public	518	3.60			
	Private	127	3.93	-7.424	643	.000

*p <0.05, **p <0.01

Table 4.23 displays that an independent-sample t-test was carried out to compare the emotional intelligence between male and female university teachers on the basis of university sector. A significant difference in the teachers' emotional intelligence between male (M = 3.60) and female (F = 3.93) teachers; $t(643) = -7.424$, $p < .001$ which is less than 0.05 was observed. Result revealed that female teachers from private university have significantly higher emotional intelligence than male teachers from public university. Thus, the hypothesis No. H₀^{1L}: there is no statistically significant difference in university teachers' self-efficacy on the basis of university sector is rejected.

Objective No. 7: To compare self-efficacy of university teachers on the basis of basis of university sector.

Ho⁵: There is no statistically significant difference in university teachers' self-efficacy on the basis of university sector.

Table 4.24

University sector wise Comparison of University Teachers' Self-Efficacy

(n = 645)

Variable	Group	N	Mean	T	df	Sig.
TSE	Public	518	4.162	-.140	643	.889
	Private	127	4.169			

*p <0.05, **p <0.01

Table 4.24 displays that an independent-sample t-test was carried out to compare the self-efficacy between male and female university teachers on the basis of university sector. No significant difference in the teachers' self-efficacy between male (M = 4.162) and female (F = 4.169) teachers; $t(643) = -.140$, Sig. value is .082 which is greater than 0.05 level of significant. Result revealed no university wise difference while comparing self-efficacy. Thus the hypothesis No. Ho^{1k}: there is no statistically significant difference in university teachers' self-efficacy on the basis of university sector is failed to reject.

CHAPTER 5

SUMMARY, FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

This Chapter has been segregated into five sections including the summary and findings, the discussions about the results, conclusions of the study and proposed recommendation according to the findings.

5.1 Summary

The research was basically conducted to study the connection of EI and TSE of teachers teaching at university level. The following major objectives were achieved during the study:

1. To assess the level of Emotional Intelligence of teachers at university level.
2. To assess the level of Self-Efficacy of teachers at university level.
3. To explore the relationship of Emotional Intelligence and Teachers' Self-Efficacy at university level.
4. To compare the Emotional Intelligence of university teachers on the basis of gender.
5. To compare the Self-Efficacy of university teachers on the basis of gender.
6. To compare the Emotional Intelligence of teachers on the basis of university sector.
7. To compare the Self-Efficacy of teachers on the basis of university sector.

Furthermore, with reference to the variables and objectives of the study, a main and nine sub hypotheses were formulated. The conceptual framework of current study was created on two models; one of these is the Nine-Layer Pyramid of Emotional Intelligence Model which was given by Drigas and Papoutsi (2018) and the second one is Teacher SE which given by Tschannen Moran & Hoy (2001). Emotional Intelligence model consist of nine dimensions such as emotional stimuli, Emotional Recognition, Self-Management, Self-Awareness, Social Awareness, Social Skill, Universality of Emotion: Self-Actualization, Emotional Unity and Transcendence that were based on 69 items. While the teacher self-efficacy model consists of 3 dimensions i.e., classroom management, student engagement and instructional strategies.

The researcher developed the Teachers' Emotional Intelligence Scale (TEIS) as the instrument for data collection. The measuring scale comprised nine sub variables related to emotional intelligence and were gauged with the help of 69 items. The scale of the teachers' self-efficacy (TSES) developed by Techannen and Hoy, (2001) was also adapted. This scale consisted of 12 items. Eight experts who belonged to education field validated the tools and their validation certificates were obtained and annexed. The research tool was further enhanced with slight changes in the light of expert's valuable feedbacks. The pilot testing was completed on initial responses of 45 respondents from university level to estimate the reliability of the tool.

The population of this study was based on 8696 teachers from public and private HEC recognized universities in Islamabad. The total number of public sector universities teachers are 7189 whereas the total number of private sector teachers are 1507. According to Higher Education Commission the number of recognized public universities in Islamabad were 15 and private universities in Islamabad were 7. Proportionate stratified sampling technique was used by the researcher to select the

required sample for the study. Here, public and private university teachers were contemplated as the two strata of the population that were given due representation in the study according to the proportion or number of teachers they had. The sample consisted 10% of the original population of public and private universities limiting the numbers of respondents to 719 from public universities and 151 from private sector universities in Islamabad. 645 (74%) responses were received via online and hard copy both. The researcher collected the data both in person and using online medium. The data collected was analyzed using Item-total correlation, Cronbach's Alpha Reliability, Individual score, inter section correlation, regression and independent t-test using Statistical Package for Social Sciences (SPSS) 25th Version. Therefore, the generated results were analyzed for interpretation and related recommendations were given in the light of interpreted data.

5.2 Findings

1. The Whole Cronbach's Alpha reliability of the EI scale was 0.932. The tool is further separated into nine major variables (Emotional Stimuli, Self-Awareness, Emotional Recognition, Self-Management. Social Awareness, Universality of emotion; Self-Actualization, Social Skill, Transcendent and Emotional Unity). The Cronbach's Alpha reliability of these nine sub variables were 0.57, 0.762, 0.708, 0.725, 0.613, 0.745, 0.611, 0.713, 0.726 respectively (Table 4.1).
2. Total correlation of the item encompassed in Emotional Intelligence scale was calculated and the findings suggested that all the items were significantly correlated with each other.as the maximum correlation was of item No. EU1 was (0.572**). The level of significance of correlation

between all the items was 0.01 (Table 4.2) which is interpreted as highly significant level. All the sub-sections of the scale were also significantly correlated where the highest correlation of (0.829**) was found between “Emotional Intelligence Scale” and “Emotional Recognition” (Table 4.3).

3. The overall Cronbach’s Alpha reliability of the Teacher Self-Efficacy scale was 0.880.

While the Cronbach’s Alpha reliability of major sub-variables of the tool (Instructional Strategies, Student Engagement and Classroom Management) was 0.837, 0.723 and 0.857 respectively (Table 4.4). Item-total correlation involved in Teacher Self-Efficacy Scale was calculated and significant correlated at 0.01 level was found between all related items, the highest correlation was of item No IS2 and item of No IS4 (.764**) (Table 4.5). All the sub-sections of the scale were also significantly correlated as well as the highest correlation was found between Teacher Self-Efficacy and Instructional Strategies (0.898**).

4. There were total 645 respondents reported in which 518 (80%) faculty members from public sector universities and 127 (19.6%) respondents reported from private sector universities were included as sample (Table 4.8). Moreover, there were 278 (43%) male faculty and 367 (56.8%) female faculty were taken as sample of the study (Table 4.7).

Objective No.1 To assess the level of Emotional Intelligence of university teachers.

5. The majority (56.6%) of teachers were found having above average level of EI, (44.3%) respondents were at the average level of emotional intelligence and no respondent was found in the below average level of emotional intelligence (Table 4.9),

Objective No.2 To assess the level of Self-Efficacy of university teachers.

The majority (89%) of the respondents were found having above average level of self-efficacy. (Table 4.10).

Objective No. 3 To explore the relationship of Emotional Intelligence and Teacher Self-Efficacy at University Level.

6. It was found that Emotional Intelligence represents 1.7% percent variation in Teacher Self-Efficacy which further discovered that this outcome was positive and considered statistically significant having 0.001 level of significance (Table No. 4.11).

3.1 To explore the relationship of emotional stimuli and Teachers' self-efficacy at university level.

7. The Emotional Stimuli represent 0.3% variation in DV Teacher Self Efficacy. It also revealed that t-value ($t = 1.320$) was observed statistically insignificant at 187 level of significance (Table No. 4.12).

3.2 To Explore the relationship of Emotional Recognition and Teacher Self- Efficacy at university level.

8. It was found that the Emotional Recognition has 0.8 % variation in Teacher Self Efficacy. In additional it also revealed that this relationship is positive and t-value ($t = 3.29$) was observed statistically significant at .026 level of significance (Table No. 4.13).

3.3 To explore the relationship of self-awareness and Teachers' SE at university level.

9. It was found that the Self-Awareness has 0.6 % variation in Teachers' Self-Efficacy. It also revealed that this relationship is positive and very week and

t-value ($t = 2.026$) was observed statistically significant at .043 level of significance (Table No. 4.14).

3.4 To explore the relationship of Self-Management and Teachers' Self-Efficacy at university level.

10. It was found that the Self-Management has 0.1 % variation in Teachers' Self Efficacy. Furthermore, it revealed that this relationship is very week and t-value ($t = .032$) was observed as statistically significant having .410 level of significance (Table No. 4.15).

3.5 To explore the relationship of social awareness and Teachers' SE at university level.

11. It was found that the Social Awareness has 2.3 % variation in Teachers' Self-Efficacy and

this relationship is positive and t-value ($t = 3.895$) was found statistically significant having $P < .001$ level of significance (Table No. 4.16).

3.6 To explore the relationship of social skill and Teachers' Self-Efficacy at university level.

12. It was found that the social skill has 2.9 % variation in Teachers' Self-Efficacy and it also revealed that this relationship is positive and t-value ($t = 4.392$) was observed statistically significant at $p < .001$ level of significance (Table No. 4.17).

3.7 To explore the relationship of self-actualization and Teachers' Self-Efficacy at university level.

13. It was found that the self-actualization has 1.6 % variation in Teacher Self-Efficacy. Furthermore, it revealed that this relationship is positive and t-value ($t = 3.184$) was found statistically significant having 0.02 level of significance (Table No. 4.18).

3.8 To explore the relationship of Transcendence and Teachers' Self-Efficacy at university level.

14. It was found that the Transcendence 0.9 % variation in Teacher Self-Efficacy and in addition it revealed that this relationship is positive and t-value ($t = 2.417$) was observed statistically significant at .016 level of significance (Table No. 4.19).

3.9 To investigate the relationship of Emotional Unity and Teachers' Self-Efficacy at university level.

15. It was found that the Emotional Unity has 0.7 % variation in Teachers' Self-Efficacy. Furthermore, it revealed that this relationship is positive and t-value ($t = 2.071$) was found statistically significant having .039 level of significance (Table No. 4.20).

Objective No. 4 To compare the Emotional Intelligence of university teachers on the basis of gender.

17. A statistically significant difference of emotional intelligence was found between male and female teachers (Table 4.21).

Objective No. 5 To compare the Self-Efficacy of university teachers on the basis of gender.

18. No statistically significant difference of self-efficacy between male and female" teachers was found (Table 4.22).

Objective No. 6 To compare the Emotional Intelligence of university teachers on the basis of university sector.

19. A statistically significant difference of emotional intelligence between public and private university teachers was found (Table 4.23).

Objective No. 7 To compare the Self-Efficacy of university teachers on the basis of university sector.

20. No statistically significant difference of self-efficacy between public and private university teachers was found (Table 4.24).

5.3 Discussion

This study mainly intended at investigating the relationship of Emotional Intelligence with Teachers' Self-Efficacy. In this regard, correlational design was adopted where two broad areas were specifically explored. Firstly, Level of university teachers' EI and SE. Secondly, the relationship of EI and TSE, and thirdly Comparison of university teachers' EI and SE on basis of gender and university type were explored. Researcher developed TEIS and adapted TSES as instrument for data collection of the study. The validation of these instruments was provided by six experts in the field of education and psychology and 645 responses were received during the process of data collection. The researcher collected the data both in person and via online. The data was analyzed using a number of test including: Item-total correlation, Cronbach's Alpha Reliability, Individual score, Inter section correlation, regression and independent t-test through Statistical Package for Social Sciences (SPSS) 25th Version.

The first main objective of the study focused on assessing the level of emotional intelligence of teachers at university level. Most of the teachers were found having high level of emotional intelligence. These findings of the study were in line with the study

of Aka & Sarier (2020) who also demonstrated that the emotional level of Physical education teachers was above medium level. In additional similar study conducted in Pakistan university teachers in Punjab have satisfactory level of emotional intelligence (Shahzad, 2012).

The second major objective focused on assessing the level of self-efficacy of teachers at university level. It was found that mostly teachers had high level of self-efficacy.

The third major objective revolved around exploring the relationship between emotional intelligence and teacher self-efficacy at university level. The connection is discussed in two phases. First of all, the relationship of EI and TSE and secondly relationship with subscales of EI and TSE will be discussed. A significant relationship was found to be prevalent between emotional intelligence and teacher self-efficacy among university teachers. It is supported by many other studies such as finding of Wu et al., (2019) also discovered that there is positive correlated with self-efficacy. It also suggested that higher EI is positively correlated with a higher level of SE. Gurol et al., (2010) studied the association between teachers' emotional intelligence (EI) and their self-efficacy and found there were positive correlation. In additional the findings of (Valente et al., 2020; Leonard, E. E., & Maulding Green, 2018; Chikkanarti & Jattennavar, 2018, Amirian & Behshad, 2016; Sarkhosh & Rezaee, 2014; Mouton et al., 2013; Vesely et al., 2013; Nikoopour et. al., (2012) Koçoğlu, 2011; Moafian & Ghanizdeh, 2009; Rastegar & Memarpour, 2009; Penrose et al., 2007, Okech, 2004; Perry Ball & Stacey, 2004; Perry & Ball, 2005) also demonstrated that emotional intelligence has positive relation to teachers' self-efficacy.

Teachers' emotional stimuli was not significant correlated with teacher self-efficacy.

Teachers' emotional recognition was significant correlated with teacher self-efficacy.

Similar finding found by Chikkanarti & Jattennavar, (2018), their finding demonstrated significant relationship between emotional awareness and self-efficacy.

Teachers' self-awareness was positively correlated with teachers' SE. Moafian, and Ghanizadeh, (2009) also augment this finding. The saying of Aristotle about teachers is very pertinent that getting into a state of rage is very easy "but to be angry with the right person and to the right degree and at the right time and for the right purpose, and in the right way – that is not within everybody's power and is not easy". The teacher who are emotionally aware with the realization that how their emotions affect others; who are self-sufficient and free from emotional reliance; who have awareness of their strengths and weaknesses; who strive to achieve their goal and who has the tendency to express their emotions constructively, can better meet up with the demands of their profession.

Crescent (2007) stated that the teachers with self-awareness are more keen to observe their own behavior factually and they are always open at learning new things. Furthermore, Fer (2004) stated that self-awareness can benefit teachers in accepting their limitations and work towards making their capacities better. Teachers' Self-Management was not significantly correlated with teacher self-efficacy. Sahin (2017) also found that the dimension of emotional intelligence (self-control) do not significant correlated with teacher self-efficacy level. More interestingly these findings are not in line with the findings of Crescent (2007) who states that an emotionally intelligent teacher is more liable to demonstrate patience, motivate students by highlighting their strengths and by exerting their efforts on productive tasks.

It was found that Teachers' social awareness positively correlated with Teachers' self-efficacy and it was also found that Teachers' social skill positively correlated with Teachers' self-efficacy. Moafian, and Ghanizadeh, (2009) also found these findings.

According to them teachers' interpersonal relationship (social skill) was found good predictor of teacher self-efficacy. In addition Sahin (2017) found that sociality (sub dimension of emotional intelligence) positively and significantly predicts the self-efficacy of teachers. Thus it can be argued that with improving social awareness, the teachers' self-efficacy will also increase. According to Petrides and Furnham (2003) people can manage their relationship well and show empathy which have high level of sociability. Furthermore, Ciftci and Taskaya (2010) found that there is a positive correlation between self-efficacy of teachers and their communication skill. As individuals having high levels of sociability feel more comfortable in dealing with conflicts with others.

It was found that self-actualization of teachers is positively correlated with the self-efficacy of teachers. Similar study conducted by Hashemi and Ghanizadeh (2011) on emotional intelligence and self-efficacy on university students and found that the component of EI self-actualization was the positive predictor of student self-efficacy. It was also found that the Transcendence of teachers was positively correlated to Teachers' SE. It was found that the Teachers' emotional unity was positively correlated to Teachers' SE.

The fourth major objective was intended to compare the emotional intelligence of university teacher based on their gender. A significant difference regarding emotional intelligence was found between teachers both male and female. Female teachers were found having higher EI compared to male teachers. These findings are in accordance with Shahzad (2012) and Anari (2012) Ciarrochi et al., (2001) who also acknowledged gender differences in their study but in contrast with the finding of Aka, Sarier (2020), Karamehmetoglu (2017), Aka & Sarier (2020), Shehzad and Mahmood (2013), Fabio

and Palezzechi (2008), Matthews, (2012) who discovered that there was no substantial difference according to gender.

Taking the motherly nature of females into account, it can be speculated that this could be the reason for having better liaison with others especially their students. The social setup of Pakistan is more inclined towards joint family arrangement where females are raised in a way that could cope with the social situations and exhibit more patience while dealing with others. This arrangement can be another reason for them to show better emotional intelligence.

Considering the male dominating society of Pakistan, findings of this study are very encouraging for female teachers working at higher education level as it is indicated that they are not lagging behind their male counterparts in terms of emotional intelligence. It is also indicated in the study that female teachers are better in meeting the demands of teaching profession and equally capable in handling difficult situations which breaks the stereotypical thinking that they are frail and subjected to be the victim of gender discrimination while getting job position. These findings suggest no cause for females to stop entering this profession.

The fifth major objective was to compare the self-efficacy of university teacher based on their gender. No statistically substantial difference of self-efficacy was found between male and female teachers. These findings are similar to the findings of the study by Sak, (2015), Matthews, ((2012), Felfe and Schyns (2002) who also discovered “no significant difference between both male and female teachers self-efficacy with reference to the student engagement or instructional strategies. In additional, the finding of Shaukat & Iqbal (2012) showed that there was no substantial difference on instructional strategies and student involvement exists between male and female

teachers. More notably, male teachers are significantly found better at managing classrooms compared to female teachers.

The sixth major objective was to compare the emotional intelligence of university teacher based on the university sector they are teaching in. A significant difference of emotional intelligence was found between public and private university teachers. Private university teachers were observed having higher emotional intelligence compared to the teachers teaching in public university. Similar finding also found by Shahzad (2012) that revealed private sector universities were better emotional intelligence than those from public sector universities. In contrast, the findings of Birol, et al. (2009a, 2009b) concluded otherwise. Their study demonstrated no substantial difference of emotional intelligence level of those working either in public or private sector. Bothe the teachers belonging to any sector had similar emotional intelligence.

It is argued here that the difference in teachers' EI is the outcome of the recruitment policies of human resource management (HRM) in both public and private sector where the emphasis is on cognitive intelligence or academic qualification only. Very less attention is being paid towards the emotional well-being of teachers while recruiting them. It is very less likely for a teacher to be terminated once they are hired due to lack of socio-emotional deficiency. On the contrary, in private sector universities, teachers' socio-emotional skills are also taken in to consideration along with their cognitive intelligence during the recruitment process and they are evaluated through various procedures including demonstration; presenting situational problems and asking them about the strategies to get through it. The reason behind adopting this procedure is evident as in private sector, students hold the status of being major stake holders and their contentment is imperative for the smooth running of matters. Hence, the job of teacher depends on the students' evaluation of their teaching and they are always

required to perform best. Iqbal, Arif and Abbas (2011) also hinted towards the same point by highlighting the performance appraisal practices in private sector. They concluded that such practices are better than public sector universities.

Teachers need to work hard to come up to the standards of performance appraisal in private sector. This is the main reason that teachers are obligated to be more cooperative, adaptive and persistent to uphold healthy liaison with others and particularly with their students. Another reason of better EI in teachers of private university is the non-permanent nature of their job compared to public sector universities. The public sector university teachers have more secure job as they are not directly accountable to their employer for most of the conducts or behavior they display whereas, private university teachers do not have such privilege in terms of job security and they are answerable to their employers, directly. This obligation makes them extra careful to develop emotional intelligence for survival, success and progress in their professional life.

The seventh major objective was to compare the self-efficacy of university teacher based on their university sector. No statistically substantial difference of self-efficacy was found between public and private university teachers. In contrast, Zamir, Arshad and Nazir (2017), conducted same study at elementary level and found that school teachers from private sector had higher self-efficacy (SE) than public school teachers. Furthermore, Fayyaz, (2008) observed a significant correlation between self-efficacy between public and private college teachers. There are various reasons for this difference including different culture of private and public sector. According to Rehmani (2010) the teaching profession in Pakistan is a low status job, teachers are specialized but pays are low especially in public sector, that's why the best talent is not attracted to the industry and professional teachers have less opportunities to growth.

5.4 Conclusion

Emotional intelligence is ultimate requirement for teachers of 21st century. The focus of first objective was on assessing the level of emotional intelligence of university teachers. Based on findings, it was concluded that majority of teachers are found to possess high level of emotional intelligence. The second objective focused on assessing the level of SE of university teachers. Based on findings, it was determined that majority of teachers are found to have high level of self-efficacy. The third objective was focusing on investigating the relationship of EI and Teacher SE at university level. It was concluded that emotional intelligence positively correlated with teachers' self-efficacy. It was also concluded that the sub-dimensions of emotional intelligence including emotional recognition, Self-Awareness, Social Awareness, social skill, self-actualization, Transcendence, Emotional Unity all these sub-variables were positively correlated with teachers' self-efficacy but two dimensions of EI; emotional stimuli and self-management were not correlated with teachers' self-efficacy.

The fourth objective intended to compare the emotional intelligence of university teachers based on their gender. The findings led to the conclusion that female teachers were highly emotional intelligent compared to the male university teachers. The fifth objective aimed at comparing the Self-Efficacy of university teachers based on their gender. The finding suggested that no statistically significant difference of self-efficacy was found between male and female teachers.

The sixth objective compared the Emotional Intelligence of university teachers on the basis of university sector they are teaching in. It was concluded that teachers from private sector universities were higher emotional intelligence than those from public sector universities. The seventh objective aimed at comparing the Self-Efficacy of

university teachers based on university sector. The finding suggested that no statistically significant difference of self-efficacy was found between public and private university teachers.

5.5 Recommendations

The findings and conclusions of the study lead to the following recommendations:

1. It is recommended that to incorporate emotional intelligence training into the university for teachers to retain their emotional intelligence. Researcher proposed emotional intelligence training manual for teachers. (See Appendix L).
2. Separate awards, appreciation certificate may be allocated to the teachers who have strong EI during the course of years in order to motivate others.
3. It is recommended that teachers may retain their emotional intelligence through examine how their actions will affect others and to share their views and experiences with colleagues. (See Appendix L)
4. Separate marks/weightage may be included in Annual PERs / Performance Evaluation Report of teachers for emotional intelligence and self-efficacy. This linking of EI & SE with the PERs will professionally motivate the teachers to work on their emotional intelligence and self-efficacy.
5. A general perception prevails that female teachers are not able to meet the professional demands of teaching particularly at higher education level. But the finding of this study suggests the contrary as they are better adjusted compared to their male counterparts. They have better interpersonal skills and this is the main reason that they are able to build a better liaison with

their students. Hence, it is recommended that female teachers may be given more opportunities to teach at university level and show their potential.

6. It is recommended that authorities of public sector universities may conduct training session, workshop and seminar on emotional intelligence in order to enhance public sector university teachers' EI.
7. It is recommended that system of mentoring may be introduced for the professional development of public sector university teachers i.e., know the strength, supporting others and look for new opportunities.
8. During the recruitment process, the EI of teachers may be equally given due consideration together with qualification as the university teachers lack sufficient emotional

skills.

9. The in-service male teachers may be provided with trainings to overcome their weakness and enhance their emotional intelligence as literature suggests that EI can be enhanced with the help of professional development training sessions, workshops seminars, and conferences. The teaching profession is a stressful job; thus, the ability to regulate and manage emotions in the classroom is a very important factor.
10. It is also recommended that EI and related skills may be considered and made an integral part of teacher education curriculum for both in-service and pre-service teachers.
11. It is also recommended that a module on emotional intelligence be included in the curriculum for training pre-service teachers.
12. Seminar awareness session may periodically be conducted for the public university faculties emphasizing the important of Emotional Intelligence.

5.6 Recommendations for Future Research

1. The setting of current research was Islamabad city, hence have limited implications. These results cannot be generalized to the university teachers of entire province. Therefore, it is recommended that further research may be conducted in future to explore the topic using a bigger sample and catering a greater target area.
2. The findings of this research indicated male having less emotional intelligence compared to female teachers. This finding is in conflict with the findings of many other researches, hence, it is recommended that future research may be conducted to explore this topic with reference to male teachers focusing on finding the causes of it.
3. Similar research can be conducted on the teacher of elementary school level to see the implications of the problem at grass root level.

5.7 Limitation of the Research Study

1. Due to pandemic spread-out of COVID-19 researcher did not get his required sample. The required sample was 870 but researcher ended up with only 645.

REFERENCES

- Ali, A. (2009). *The Moderating role of job characteristics on emotional intelligence and performance*. PhD thesis, Foundation University, Islamabad.
- Alnabhan, M. (2008). Assessing the high school teachers' emotional intelligence in Karak district of Jordan. *Gifted and Talented International*, 23(1), 81-86. Abstractretrieved from <http://www.eric.ed.gov/>
- Aka, S. T., & Sarier, A. (2020). Study on Emotional Intelligence Levels of Physical Education Teachers in Terms of Various Variables. *International Education Studies*, 13(3), 111-120
- Akhmetova, J. B., Kim, A. M., & Harnisch, D. L. (2014). Using mixed methods to study Emotional Intelligence and Teaching Competencies in higher education. *Social and Behavioural Sciences*, 128, 516-521. <https://doi.org/10.1016/J.SBSPRO.2014.03.198>
- Amirian, S. M. R., & Behshad, A. (2016). Emotional intelligence and self-efficacy of Iranian teachers: A research study on university degree and teaching experience. *Journal of Language Teaching and Research*, 7(3), 548-558
- Anari, N. N. (2012). Teachers: emotional intelligence, job satisfaction, and organizational commitment. *Journal of workplace Learning*.
- Anderson, R. (2006). Body intelligence scale: Defining and measuring the intelligence of the body. *The Humanistic Psychologist*, 34(4), 357-367.
- Annamaria, D. & Letizia, P. (2008). Emotional intelligence and self-efficacy in a sample of Italian high school teachers. *Social Behavior & personality: An International Journal*, 36(3), 315-327
- Ashton, P. (1984). Teacher efficacy: A motivational paradigm for effective teacher education. *Journal of Teacher Education*, 35(5), 28-32.
- Ashton, P. T., & Webb, R. (1982). Teachers' sense of efficacy: Toward an ecological model. Paper presented at the annual meeting of the American Educational Research Association, New York.

- Austin, E.J., Farrelly, D., Black, C., & Moore, H. (2007). Emotional intelligence, Machiavellianism and emotional manipulation: Does EI have a dark side? *Personality and Individual Differences*, 43(1), 179-189.
- Baig, S. (2011). The personal values of school leaders in Pakistan: A contextual model of regulation and influence. *The Journal of Values Based Leadership*, 4(2).
- Bandura, A. (1977b). Social learning theory. In B.B. Wolman & L. R. Pomroy (Eds.), *International Encyclopedia of psychiatry, psychology, psychoanalysis, and neurology* (Vol. 10). New York: Van Nostrand Reinhold.
- Bar-On, R. (2005). The Bar-On Model of Emotional, Social Intelligence (ESI). Article retrieved November 15, 2019, from <http://www.eiconsortium.org>
- Bar-On, R. (2005). The Bar-On model of emotional-social intelligence. In P. Fernández-Berrocal and N. Extremera (Guest Editors), Special Issue on Emotional Intelligence. *Psicothema*, 17.
- Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, 18, supl., 13-25.
- Bar-On, R., Brown, J.M., Kirkcaldy, B.D., & Thome, E.P. (2000). Emotional expression and implications for occupational stress; an application of the Emotional Quotient Inventory (EQ-i). *Personality and Individual Differences*, 28, 1107-1118. Retrieved from www.elsevier.com/locate/paid
- Basit, A., Fazalur Rahman, Jumani, N. B., Chishti, S. H., & Malik, S. (2010). An analysis of conflict resolution strategies in Pakistani schools. *International Journal of Academic Research*, 2(6), 212-218.
- Bay, D., & McKeage, K. (2006). Emotional intelligence in undergraduate accounting students: Preliminary assessment. *Accounting Education*, 15 (4), 439- 454. DOI: 10.1080/09639280601011131
- Beasley, K. (1987). The Emotional Quotient. *Mensa Magazine - United Kingdom Edition*. Retrieved November 12, 2019, from http://www.algarveowl.com/EQ/iq_eq.htm
- Benson, G., Ploeg, J., & Brown, B. (2010). A cross-sectional study of emotional intelligence in baccalaureate nursing students. *Nurse Education Today*, 30, 49-53.

- Bhatti, R. (2009). Interpersonal relationships: Students, teachers and librarians in university libraries of Pakistan. *Library Review*, 58 (5), 362 - 371.
- Birol, C., Atamtürk, H., Silman, F., Atamtürk, A. N., & Sensoy, S. (2009a). A comparative analysis of teachers' perceptions of emotional intelligence and performance management in the secondary schools of the TRNC. *Procedia Social and Behavioral Sciences*, 1, 2600-2605. Retrieved from www.sciencedirect.com
- Birol, C., Atamtürk, H., Silman, F., & Sensoy, S. (2009b). Analysis of the emotional intelligence level of teachers. *Procedia Social and Behavioral Sciences*, 1, 2606– 2614. Retrieved from www.sciencedirect.com
- Boyatzis, R.E., Goleman, D., & Rhee, K.S. (2000). Clustering competence in emotional intelligence. In R. Bar-On, & J.D.A. Parker (Eds.), *The Handbook of Emotional Intelligence*. California: Jossey- Bass
- Brackett, M. A., Mayer, J.D., & Warner, R. M. (2004). Emotional intelligence and its relation to everyday behavior. *Personality and Individual Differences* 36, 1387– 1402. Retrieved from www.elsevier.com/locate/paid
- Bradberry, T. R., & Su, L. D. (2006). Ability-versus skill-based assessment of emotional intelligence. *Psicothema*, 18, 59-66.
- Butt, M. N. (2011). *Impact of Non-verbal Communication on Students' Learning Outcomes*. PhD thesis, Sarhad University of Science and Information Technology, Peshawar.
- Caro Pineres, M. F., & Jimenez Builes, J. A. (2013). Analysis of models and metacognitive architectures in intelligent systems. *Dyna*, 80(180), 50-59.
- Chan, D.W. (2004). Perceived emotional intelligence and self-efficacy among Chinese secondary school teachers in Hong Kong. *Personality and Individual Differences*, 36, 1781-1795
- Cherniss, C. (2000). Emotional Intelligence: What it is and why it Matters? Paper presented at the Annual Meeting of the Society for Industrial and Organizational Psychology, New Orleans, LA, April 15, 2000. *Consortium for Research on Emotional Intelligence in Organizations - Emotional Intelligence*, 1-14.
- Cherry, M.G., Fletcher, I., O'Sullivan, H., & Dornan, T. (2014). Emotional intelligence in medical education: A critical review. *Medical Education*, 48, 468-478.

- Chughtai, A. A., & Zafar, S. (2006). Antecedents and consequences of organizational commitment among Pakistani university teachers. *Applied H.R.M. Research*, 11(1), 39-64.
- Chikkanarti, K. S., & Jattennavar, K. S. (2018). Relationship between emotional intelligence and self-efficacy in research among Dharwad physical education teachers.
- Ciarrochi, J. V., Chan, A.Y.C., & Caputi, P. (2000). A critical evaluation of the emotional intelligence construct. *Personality and Individual Differences*, 28, 539-561.
- Ciarrochi, J., Forgas, J.P., & Mayer, J.D. (2001). *Emotional intelligence in everyday life: A scientific inquiry*. London: Taylor & Francis.
- Çiftçi S, Taşkaya SM (2010). The relationship between the pre-service classroom teachers' self-efficacy and communication skills. *E-J. New World Sci. Acad.* 5(3):921-928.
- Collier, M. D. (2005). An ethic of caring: The fuel for high teacher efficacy. *The Urban Review*, 37(4), 351-359.
- Coren, S. (2012). Sensation and perception. *Handbook of Psychology, Second Edition*, 1.
- Cronbach, L.J. (1960). *Essentials of Psychological testing* (2nd Ed.). New York: Norton.
- Corcoran, R. P., & Tormey, R. (2012). *Developing emotionally competent teachers: Emotional intelligence and pre-service teacher education*. Peter Lang.
- Day, A. L., & Carroll, S. A. (2004). Using an ability-based measure of emotional intelligence to predict individual performance, group performance, and group citizenship behaviours. *Personality and Individual Differences*, 36, 1443-1458
- Dulewicz, V., & Higgs, M. (2004) Can emotional intelligence be developed? *The International Journal of Human Resource Management*, 15 (1), 95 – 111. DOI: 10.1080/0958519032000157366
- Dunlosky, J., & Metcalfe, J. (2008). *Metacognition*. Sage Publications, Thousand Oaks, CA, USA.
- Dyer-Abernathy, J., Ortlieb, E., & Cheek, E. H. (2013). An analysis of teacher efficacy and perspectives about elementary literacy instruction. *Current Issues in Education*, 16(3), 1140

- Esturgo-Deu, M. E., & Sala-Roca, J. (2010). Disruptive behaviour of students in primary education and emotional intelligence. *Teaching and Teacher Education*, 26, 830837.
- Fabio, A.P., & Palazzeschi, L. (2008). Emotional intelligence and self-efficacy in a sample of Italian high school teachers. *Social Behaviour and Personality*, 36(3), 315–336.
- Farooq, A. (2003). *Effect of emotional intelligence on academic performance. A doctoral dissertation*. University of Karachi.
- Fatima, A., Imran, R., & Zaheer, A. (2010). Emotional intelligence and job satisfaction: Mediated by transformational leadership. *World Applied Science Journal*, 10(6), 612620.
- Fayyaz, S. (2008). Relationship between Emotional Intelligence and Self-efficacy among Government and Private College Teachers, Lahore: Department of Psychology and Applied Psychology, University of the Punjab unpublished thesis of Master of Applied Psychology.
- Franco, M. G. (n.d.). Teachers and emotional intelligence: How a training in emotional intelligence can help. *9th European Congress of Psychology*. Retrieved from www.citma.pt/Uploads/Abstract%5B1%5D%5B1%5D.pdf
- Felfe, J., & Schyns, B. (2002). The relationship between employees' occupational self-efficacy and perceived transformational leadership: Replication, an extension of recent results. *Current Research in Social Psychology*, 7(9), 137–162.
- Fer, S. (2004). Qualitative evaluation of emotional intelligence in-service program for secondary school teachers. *The Qualitative Report*, 9 (4), 562-588. <http://www.nova.edue/ssss/QR/QR9-4/fer.pdf>
- Gardner, L. (2005). *Emotional intelligence and occupational stress. A doctoral dissertation*. Swinburne University
- Gay, L. R., Mills, G. E., & Airasian, P. W. (2012). *Educational research competencies for analysis and applications*. Merrill/Pearson.
- Ghanizadeh, A., & Moafian, F. (2010). The role of EFL teachers' emotional intelligence in their success. *ELT Journal*, 64 (4), 424-435. Abstract doi: 10.1093/elt/ccp084

- Goddard, R. D., LoGerfo, L., & Hoy, W. K. (2004). High school accountability: The role of perceived collective efficacy. *Educational Policy, 18*, 403-425.
- Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam Books.
- Goleman, D. (2000b). Emotional intelligence: Issues in paradigm building. In D. Goleman, & C. Cherniss (eds.), *The Emotionally Intelligent Workplace: How to Select for, Measure, and Improve Emotional Intelligence in Individuals, Groups, and Organizations*. San Francisco, CA: Jossey-Bass.
- Golman, D. (1995). *Emotional Intelligence*. New York: Bantam Books.
- Grubb III, W. L. & McDaniel, M. A. (2007). The fakability of Bar-On's emotional quotient inventory short form: Catch me if you can. *Human Performance, 20*(1), 43-59
- Gurol, A., Ozercan, M. G., & Yalçın, H. (2010). A comparative analysis of pre-service teachers' perceptions of self-efficacy and emotional intelligence. *Procedia Social and Behavioral Sciences, 2*(1), 3246-3251.
- Hashemi, M. R., & Ghanizadeh, A. (2011). Emotional intelligence and self-efficacy: A case of Iranian EFL university students. *International Journal of Linguistics, 3*(1), 1-16.
- Hanif, R. (n.d). Role of self-efficacy in teacher stress and job performance of women school teachers. *Presented at 28th ISPA Colloquium, 15-19th July, Hangzhou, China*.
- Hess, U., & Thibault, P. (2009). Darwin and Emotion Expression. *American Psychologist, 64*(2), 120-128.
- Hwang, F. F. (2007). *The relationship between emotional intelligence and teaching effectiveness*. A doctoral dissertation. Texas A&M University- Kingsville. Retrieved from <http://proquest.umi.com/dissertations>
- Jacobs, S., Kemp, A., & Mitchell, J. (2008). Emotional intelligence: Hidden ingredient for emotional health of teachers. *Africa Education Review, 5*(1), 131-143. DOI: 10.1080/18146620802144842
- Jaeger, A. J. (2004). The place for emotional growth in professional education. *Journal of Public Affairs Education, 10*(1), 43-65. Retrieved from <http://www.jstor.org/stable/40215636>

- Kafetsios, K. (2004). Attachment and emotional intelligence abilities across the life course. *Personality and Individual Differences, 37*, 129–145
- Kafetsios, K., & Zampetakis, L. A. (2008). Emotional intelligence and job satisfaction: Testing the mediatory role of positive and negative affect at work. *Personality and Individual Differences, 44*, 712-722
- Kang, A. (2017). *Emotional intelligence, environment, and teacher self-efficacy: A look into the effects of teacher emotional intelligence and socioeconomic status of school on teacher self-efficacy in K-12 public schools*. The College of William and Mary.
- Karamehmetoğlu, M. (2017). *Investigation of the Role of Emotional Intelligence Levels of Physical Education Teachers in Determining Professional Self-Efficacy and Problem Solving Skills* (Master thesis, Marmara University).
- Khan, S. (2012). The relationship between teachers' self-efficacy and students' academic achievement at secondary level. *Language in India, 12*(10), 436-449.
- Klassen, R. M., Tze, V. M. C., Betts, S. M., & Gordon, K. A. (2011). Teacher efficacy research 1998–2009: Signs of progress or unfulfilled promise? *Educational Psychology Review, 23*(1), 21–43. <http://doi.org/10.1007/s10648-010-9141-8>.
- Koçoğlu, Z. (2011). Emotional intelligence and teacher efficacy: A study of Turkish EFL preservice teachers. *Teacher Development, 15*(4), 471-484.
- Landa, J. M. A., Lopez-Zafra, E., Martinez de Antonana, R., & Polido, M. (2006). Perceived emotional intelligence and life satisfaction among university teachers. *Psicothema, 18*, 152-157.
- Legg, S., & Hutter, M. (2007). A collection of definitions of intelligence. *Frontiers in Artificial Intelligence and applications, 157*, 17.
- Lewis, N. J., Rees, C. E., Hudson, J. N., & Bleakley, A. (2005). Emotional intelligence medical education: measuring the unmeasurable? *Advances in Health Sciences Education, 10*(4), 339-355.
- Leonard, E. E., & Maulding Green, W. (2018). Are Leader Behavior and Emotional Intelligence related to Teacher Efficacy? *The Journal of Values-Based Leadership, 11*(2), 10.

- Liang, Y.H. (2007). *The relationship between personality type and emotional intelligence in a sample of college and university faculty in Taiwan* (ppt of doctoral dissertation defense). Texas A&M University– Kingsville.
- Malik, M. E., Nawab, S., Naeem, B., & Danish, R. Q. (2010). Job satisfaction and organizational commitment of university teachers in public sector of Pakistan. *International Journal of Business and Management Vol. 5(6)*, 17-26.
- Malik, S. K., & Urooj, T. (2012). Status of teacher education in Pakistan - A problem centered approach.
- Matthews, G., Zeidner, M., & Roberts, R.D. (2002). *Emotional intelligence: Science and myth*. Massachusetts. The MIT Press.
- Matthews, S. (2012). The relationship between emotional intelligence and self-efficacy amongst teachers in the Western Cape.
- Mayer, J. D., Caruso, D., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence, 27*, 267–298.
- Mayer, J.D., & Salovey, P. (1997). What is emotional intelligence? In P.Salovey & D. Sluyter (Eds.) *Emotional development and emotional intelligence: Implications for educators* (pp.3-31). New York: Basic Books.
- Mayer, J.D., Roberts, R.D., & Barsade, S.G. (2008). Human abilities: Emotional intelligence. *The Annual Review of Psychology, 59*, 507-536.
- McIntyre, H. H. (2010). Gender differences in the nature and linkage of higher-order personality factors to trait and ability emotional intelligence. *Personality and Individual Differences, 48*, 617-622.
- Mehmood, N. (2019). Factors Impacting EFL Teachers' Self-Efficacy: A Theoretical Perspective. *English Language Teaching, 12(4)*, 39-48.
- McIntyre, H. H. (2010). Gender differences in the nature and linkage of higher-order personality factors to trait and ability emotional intelligence. *Personality and Individual Differences, 48*, 617-622.

- Moafian, F., & Ghanizadeh, A. (2009). The relationship between Iranian EFL teachers' emotional intelligence and their self-efficacy in Language Institutes. *System*, 37, 708–718.
- Modupe, H. E. (2010). Emotional intelligence and self – Esteem as predictors for success in teaching practice exercise. *Academic Leadership: The Online Journal*, 8 (3). ISSN: 1533-7812.
- Mouton, A., Hansenne, M., Delcour, R., & Cloes, M. (2013). Emotional intelligence and self-efficacy among physical education teachers. *Journal of Teaching in Physical Education*, 32(4), 342-354.
- Mustaq, N., Shakoor, A., Azeem, M. & Zia, N. (2012). Self-Esteem's difference among primary, elementary, secondary and higher secondary schools' teachers. *International Journal of Humanities and Social Science*, 2(1), 200-205.
- Naeem, H., Saif, M.I., & Khalil, W. (2008). Emotional intelligence and its impact on service quality – empirical evidence from the Pakistani banking sector. *International Business & Economics Research Journal*, 7(12), 55-61.
- Naqvi, I. (2011). Teaching quality in higher education: What do we need to improve? *Interdisciplinary Journal of Research in Business*, 1(4), 37-42.
- Nauman, S., Elahi, M., Bhatti, Z, A., & Khalid, U. (n.d). Role of Emotional Intelligence in Virtual Project Management.
- Nelis, D., Quoidbach, J., Mikolajczak, M., & Hansenne, M. (2009). Increasing emotional intelligence: (How) is it possible? *Personality and Individual Differences*, 47, 3641. Retrieved from www.elsevier.com/locate/paid
- Nikoopour, J., Farsani, M. A., Tajbakhsh, M., & Sadat Kiyae, S. H. (2012). The Relationship between Trait Emotional Intelligence and Self-efficacy among Iranian EFL Teachers. *Journal of Language Teaching & Research*, 3(6).
- Okech, A. P. (2004). *An exploratory examination of the relationships among emotional intelligence, elementary school science teachers, self-efficacy, length of teaching,*

- experience, race/ ethnicity, gender and age* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (Accession Order No. 305045327)
- Palmer, B. R., Manocha, R., Gignac, G., & Stough, C. (2003). Examining the factor structure of the Bar-On Emotional Quotient Inventory with an Australian general population sample. *Personality and Individual Differences*, 35, 1191–1210. Retrieved from www.elsevier.com/locate/paid
- Parker, J. D. A., Duffy, J. M., Wood, L. M., Bond, B. J., & Hogan, M. J. (2005). Academic achievement and emotional intelligence: predicting the successful transition from high school to university [Abstract]. *Journal of the First-Year Experience & Students in Transition*, 17(1), 67-78.
- Parker, J. D.A., Creque R. E., Barnhart, D.L., Harris, J. I., Majeski, S. A., Wood, L. M., et al., (2004). Academic achievement in high school: Does emotional intelligence matter? *Personality and Individual Differences* 37, 1321–1330.
- Payne, W. L. (1985). *A Study of Emotion: Developing Emotional Intelligence; Self-Integration; Relating to Fear, Pain and Desire (Theory, Structure of Reality, Problem-Solving, Contraction/Expansion, Tuning In/Coming Out/Letting Go)* (Doctoral dissertation, Union for Experimenting Colleges and Universities).
- Penrose, A., Perry, C., & Ball, I. (2007). Emotional intelligence and teacher self-efficacy: The contribution of teacher status and length of experience. *Issues in Educational Research*, 17(1), 107-126.
- Perry, C., Ball, I., & Stacey, E. (2004). Emotional intelligence and teaching situations: Development of a new measure. *Issues in Educational Research*, 14(1), 29-43.
- Perry, C., & Ball, I. (2005). Emotional intelligence and teaching: Further validation evidence. *Issues in Educational Research*, 15(2), 175-192.
- Petrides KV, Furnham A (2003). Trait emotional intelligence: Behavioral validation in two studies of emotion recognition and reactivity to mood induction. *Eur. J. Personality* 17(1):39-57.
- Raja,A., Mohsin, W., Ehsan, N., Mirza, E., & Saud, M. (2010). Impact of Emotional Intelligence and Work Attitude on Quality of Service in the Call Centre Industry of Pakistan. *Proceedings of the 2010 IEEE ICMIT*, 402-407.

- Ranjha, A. Y. & Shujja, S. (2010). Emotional intelligence and psychological adjustment of nurses serving in emergency and non-emergency wards. *Journal of Behavioural Sciences*, 20(2), 150-155.
- Rastegar, M., & Memarpour, S. (2009). The relationship between emotional intelligence and self-efficacy among Iranian EFL teachers. *System*, 37, 700–707.
- Rehana, R. (2018). *Impact of emotional intelligence on student's stress at university level* (Doctoral dissertation, National University of Modern Languages, Islamabad).
- Sak, R. (2015). Comparison of self-efficacy between male and female pre-service early childhood teachers. *Early Child Development and Care*, 185(10), 1629-1640.
- Salovey, P. & Mayer, J.D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality*, 9, 185-211
- Sahin, H. (2017). Emotional Intelligence and Self-Esteem as Predictors of Teacher SelfEfficacy. *Educational Research and Reviews*, 12(22), 1107-1111.
- Salovey, P., & Grewal, D. (2005). The science of emotional intelligence. *Current Directions in Psychological Science*, 14(6), 281-285.
- Sarkhosh, M., & Rezaee, A. A. (2014). How does university teachers' emotional intelligence relate to their self-efficacy beliefs. *Porta Linguarum: revista internacional de didáctica de las lenguas extranjeras*, (21), 85-100.
- Sezgin, F., & Erdogan, O. (2018). Humility and forgiveness as predictors of teacher selfefficacy. *Educational Research and Reviews*, 13(4), 120-128.
- Shah, M. (2012). *Teacher collegiality and commitment in high- and low-achieving secondary schools in Islamabad, Pakistan*. GRIN Verlag.
- Shahzad, S. (2012). *Relationship Between Teachers' emotional Intelligence and Their Teaching Effectiveness* (Doctoral dissertation, University of The Punjab).
- Shaukat, S., & Iqbal, H. M. (2012). Teacher Self-Efficacy as a Function of Student Engagement, Instructional Strategies and Classroom Management. *Pakistan Journal of Social & Clinical Psychology*, 9(3).

- Siraj ud Din, Khan, B., Rehman, R., & Bibi, Z. (2011). An investigation of conflict management in public and private sector universities. *African Journal of Business Management*, 5(16), 6981-6990.
- Siwatu, K. (2011). Pre-service teachers' culturally responsive teaching self-efficacy forming experiences: A mixed methods study. *The Journal of Educational Research*, 104(5), 360–369. <http://doi.org/10.1080/00220671.2010.487081>
- Siwatu, K., Frazier, P., Osaghae, O., & Starker, T. (2011). From maybe I can to yes I can: Developing pre-service and in-service teachers' self-efficacy to teach African-American students. *The Journal of Negro Education*, 80(3), 209-222
- Tabassum, F. & Ali, M. A. (2012). Professional self-esteem of secondary school teachers. *Asian Social Science*, 8 (2), 206-210.
- Tapia, M. & Marsh, G.E. II. (2006). The effects of sex and grade-point average on emotional intelligence. *Psicothema*, 18, 108-111.
- Taştan, S. B., Davoudi, S. M. M., Masalimova, A. R., Bersanov, A. S., Kurbanov, R. A., Boiarchuk, A. V., & Pavlushin, A. A. (2018). The impacts of teacher's efficacy and motivation on student's academic achievement in science education among secondary and high school students. *EURASIA Journal of Mathematics Science and Technology Education*, 14(6), 2353-2366.
- Thorndike, R.L. (1936). Factor analysis of social and abstract intelligence. *Journal of Educational Psychology*, 27, 231-233.
- Thorndike, R. L., & Stein, S. (1937). An evaluation of the attempts to measure social intelligence [abstract]. *Psychological Bulletin*, 34, 275-284.
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 77(7), 783-805.
- Tschannen-Moran, M., & Woolfolk-Hoy, A. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, 23(6), 2022-48
- Tschannen-Moran, M., Woolfolk-Hoy, A., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 21(7), 747-766.

- Van Rooy, D. L., Alexander, A., & Viswesvaran, C. (2005). Group differences in emotional intelligence scores: Theoretical and practical implications. *Personality and Individual Differences*, 38, 689-700.
- Valente, S., Veiga-Branco, A., Rebelo, H., Lourenço, A. A., & Cristóvão, A. M. (2020). The relationship between emotional intelligence ability and teacher efficacy. *Universal Journal of Educational Research*, 3(8), 916-923.
- Vesely, A. K., Saklofske, D. H., & Leschied, A. D. (2013). Teachers—The vital resource: The contribution of emotional intelligence to teacher efficacy and well-being. *Canadian Journal of School Psychology*, 28(1), 71-89.
- Wang, X., & Cheng, Z. (2020). Cross-sectional studies: strengths, weaknesses, and recommendations. *Chest*, 158(1), S65-S71.
- Wechsler, D. (1940). Non intellectual factors in general intelligence. *Psychological Bulletin*, 37(1), 444-445.
- Wessell, J., Larin, H., Benson, G., Brown, B., Pleog, J., Williams, R., & Martin, L. (2008). Emotional- social intelligence in health science students and its relationship to leadership, caring and moral judgments. *The International Journal of Allied Health Sciences and Practice*, 6(1), 1-9. Retrieved from <http://ijahsp.nova.edu>
- Wu, Y., Lian, K., Hong, P., Liu, S., Lin, R. M., & Lian, R. (2019). Teachers' emotional intelligence and self-efficacy: Mediating role of teaching performance. *Social Behavior and Personality: an international journal*, 47(3), 1-10.
- Zahid, Q., Wasim, N., & Raziq, S. (2008). Impact of Emotional Intelligence on Quality of Service in the Software Industry of Pakistan. In *11th QMOD Conference. Quality Management and Organizational Development Attaining Sustainability From Organizational Excellence to Sustainable Excellence; 20-22 August; 2008 in Helsingborg; Sweden* (No. 033, pp. 641-650). Linköping University Electronic Press.
- Zeidner, M., Matthews, G., & Roberts, R. D. (2009). What we know about emotional intelligence: *How it affects learning, work, relationships, and our mental health*. New York: MIT Press.

APPENDIX A

LIST OF POPULATION

S.No	University	Sector	Total
1	Air University	Public	135
2	Allama Iqbal Open University	Public	184
3	Bahria University	Public	556
4	COMSATS	Public	2475
5	Federal Urdu University of Arts, Science & Technology	Public	497
6	Institute of Space Technology	Public	138
7	International Islamic University	Public	663
8	National Defense University	Public	67
9	National University of Modern Languages	Public	680
10	National University of Science and Technology	Public	1135
11	Pakistan Institute of Development Economics (PIDE)	Public	53
12	National University of Technology (NUTECH), Islamabad	Public	37
13	Pak Institute of Engineering & Applied Science	Public	161
14	Quaid-i-Azam University Shaheed Zulfiqar Ali Bhutto	Public	285
15	Medical University Capital University of Science & Technology	Public	123
16	Foundation University, Islamabad	Private	165
17	Muslim Youth University	Private	201

17	National University of Computer	Private	32
18	& Emerging Sciences	Private	367
19	Riphah International University		
	Shifa Tameer-e-Millat University		
20	Sir Syed (CASE) Institute of	Private	467
21	Technology, Islamabad	Private	227
22		Private	48

Total		8696
Public		7189
Private		1507

APPENDIX B

HEC Recognized Universities and Degree Awarding Institutions in Islamabad

Name	Sector	Chartered By	Discipline	Province	City
Air University	Public	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
Allama Iqbal Open University	Public	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
Bahria University	Public	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
COMSATS Institute of Information Technology	Public	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
Federal Urdu University of Arts, Sciences & Technology	Public	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
Institute of Space Technology	Public	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
International Islamic University	Public	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
National Defense University	Public	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
National University of Modern Languages	Public	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
National University of Sciences & Technology	Public	Government of Pakistan	General	Islamabad Capital Territory	Islamabad Activate
National University of Technology (NUTECH), Islamabad	Public	Government of Pakistan	Engineering & Technology	Islamabad Capital Territory	Islamabad
Pakistan Institute of Development Economics (PIDE)	Public	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
Pakistan Institute of Engineering & Applied Sciences	Public	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
Quaid-i-Azam University	Public	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
Shaheed Zulfikar Ali Bhutto Medical University	Public	Government of Pakistan	Medical	Islamabad Capital Territory	Islamabad
Capital University of Science & Technology	Private	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
Foundation University, Islamabad	Private	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
Muslim Youth University	Private	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
National University of Computer & Emerging Sciences	Private	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
Riphah International University	Private	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
Shifa Tameer-e-Millat University	Private	Government of Pakistan	General	Islamabad Capital Territory	Islamabad
Sir Syed (CASE) Institute of Technology, Islamabad	Private	Government of Pakistan	General	Islamabad Capital Territory	Islamabad

APPENDIX C

TEAM OF EXPERT

S. No	Name	University	Designation
1.	Dr. Naeem Aslam	NIP QAU ISB	Lecturer
2.	Dr. M. Ajmal	AIOU ISB	HOD
3.	Dr. Azhar Mahmood	IIUI	Associate Prof
4.	Dr. Malik Ghulam Behlol	FJWU RWP	Acting HOD
5.	Dr. Imran Yousuf	PMAS-Arid RWP	Chairman
6.	Dr. Khushbakht Hina	NUML ISB	Assistant Prof
7.	Dr. Saira Nudrat	NUML ISB	Assistant Prof
8.	Dr. Salma Nazar	FJWU RWP	Assistant Prof

APPENDIX D
RESEARCH TOOL

Serial No: _____

Relationship of Emotional Intelligence and Teachers' Self-Efficacy
At University Level

Dear Respondent,

I am M.Phil scholar (Education) conducting a research on above mentioned topic. I requested you to fill this attached questionnaire. The first part of questionnaire consists of demographic information. The remaining 2nd part of the questionnaire deals with emotional intelligence and 3rd part deals with teachers' self-efficacy.

This questionnaire is made for a research purpose. I will keep your responses confidential and information that you are provided. I respect the autonomy and dignity of yourself.

Muhammad Kazim
M.Phil Scholar (Education)
Department of Education,
NUML, Islamabad, Pakistan

DEMOGRAPHICS:

1. **University Type** Public Private

2. **Gender** Male Female

3. **Age** 20-30 31-40 41-50 51+

4. **Academic Qualification**

MA/MSc M.Phil PhD Post Doc

5. **Professional Qualification**

B.Ed M.Ed B.S.Ed M.S.Ed

Any other _____

6. **Designation**

Lecturer Asst. Prof Assoc. Prof Professor

7. **Job Status** Permanent Contract Visiting

8. **Experience** 0-5 6-10 11-15 16+

9. **Marital Status** Single Married Divorced

Teachers' Emotional Intelligence Scale (TEIS)

INSTRUCTION:

Please mark your responses against **1** to **5** that indicate your response like (**1**= Strongly Disagree, **2**= Disagree, **3**= Neutral, **4**= Agree, **5**=Strongly Agree).

Sr No.	Code	1. Emotional Stimuli					
		SD	D	N	A	SA	
		Emotional stimuli considered as a cause that compel individuals to specify what emotions needs to feel and what not to feel.					
1	ES1	I can differentiate between good and bad moods of people.	1	2	3	4	5
2	ES2	I feel happy when my students show good performance in class.	1	2	3	4	5
3	ES3	I feel happy when my students show positive behavior towards me.	1	2	3	4	5
4	ES4	I feel happy when my students satisfy with my teaching.	1	2	3	4	5
5	ES5	I feel happy when my students shares with me their problems.	1	2	3	4	5
6	ES6	I feel happy when my authorities show positive behavior towards me.	1	2	3	4	5
7	ES7	I get worried on the problem of my colleagues.	1	2	3	4	5
8	ES8	I can act as per the need of the situations.	1	2	3	4	5
		2. Emotional Recognition					
		Emotional recognition will be considered as an ability of individual to recognize and decode the emotions, feelings of other peoples which they represent through verbal and nonverbal channels (i.e. face, body, voice).					
9	ER1	I feel emotions of others through their facial expression.	1	2	3	4	5
10	ER2	I can read the facial expression of my students in class.	1	2	3	4	5
11	ER3	I notice the modes of my colleagues.	1	2	3	4	5
12	ER4	I motivate people to face the challenges of job when they are stressed.	1	2	3	4	5
13	ER5	I feel when somebody gets angry with me.	1	2	3	4	5
14	ER6	I offer help to others when I see them in problem.	1	2	3	4	5
15	ER7	I notice the tone of voice when someone is talking to me aggressive.	1	2	3	4	5
16	ER8	I try to communicate my point of view if someone angry with me.	1	2	3	4	5
17	ER9	I can recognize the discomfort of people around me.	1	2	3	4	5
18	ER10	I try to relax the environment if I feel someone around me is not comfort.	1	2	3	4	5
		3. Self-Awareness					
		Self-awareness will be considered as knowing own feelings, emotions, thoughts and believes which aids an individual in realizing his/her self as an individual entity.					
		SD	D	N	A	SA	

19	SA1	I am sensitive to my emotion.	1	2	3	4	5
20	SA2	I give importance to my emotions.	1	2	3	4	5
21	SA3	I can indicate my emotions whenever it affects my performance.	1	2	3	4	5
22	SA4	I enjoy every moment of my life.	1	2	3	4	5
23	SA5	I can identify the reason of my anxious feelings.	1	2	3	4	5
24	SA6	I am aware of my strengths.	1	2	3	4	5
25	SA7	I am aware of my weakness.	1	2	3	4	5
26	SA8	I try to learn good habits to be a better person.	1	2	3	4	5
27	SA9	I listen my friends when they critic me.	1	2	3	4	5
28	SA10	I reflect on my daily teaching practices.	1	2	3	4	5
		4. Self-Management Self-management will be considered as individuals' ability to convey his/her emotions appropriately and controlling those emotions that might cause impulsive behaviors.	SD	D	N	A	SA
29	SM1	I can manage my stressful feelings.	1	2	3	4	5
30	SM2	I can control my behavior in difficult situation.	1	2	3	4	5
31	SM3	I mostly take decision by considering the result when I am emotional.	1	2	3	4	5
32	SM4	I am able to express my emotions when I need to.	1	2	3	4	5
33	SM5	I am able to change my mood quickly when I get disturbed.	1	2	3	4	5
34	SM6	I stay focused under pressure situations.	1	2	3	4	5
35	SM7	I don't act aggressively when I receive negative behaviors from others.	1	2	3	4	5
		5. Social Awareness Social awareness will be considered as an individuals' ability to aware the needs and feelings of others to react appropriately in certain social situations and ready to modify daily interactions in order to achieve goals.	SD	D	N	A	SA
36	SCA1	I consider others point of view while giving opinion regarding something.	1	2	3	4	5
37	SCA2	I believe that individuals are different not difficult.	1	2	3	4	5
38	SCA3	I show empathy with others feelings.	1	2	3	4	5
39	SCA4	I can predict about others' sadness even if they do not say anything.	1	2	3	4	5
40	SCA5	I want to help others specially when they are upset.	1	2	3	4	5
41	SCA6	I do not like to disturb my collogues when they are in sad mood.	1	2	3	4	5
		6. Social Skill Social skills will be considered as individuals' skills that might influence the emotions of other individuals' positively for making an interaction successful.	SD	D	N	A	SA
42	SS1	My collogues share their issue with me.	1	2	3	4	5

43	SS2	I like to talk multiple topics in social gatherings.	1	2	3	4	5
44	SS3	I can make strong relationships with others.	1	2	3	4	5
45	SS4	I like to meet new people.	1	2	3	4	5
46	SS5	I like to talk to new people.	1	2	3	4	5
47	SS6	I like to spend time with others colleagues.	1	2	3	4	5
48	SS7	I like to work in team.	1	2	3	4	5
49	SS8	I am generally polite when talking to others.	1	2	3	4	5
50	SS9	I like finding out what is similar between myself and other people.	1	2	3	4	5
		<p style="text-align: center;">7. Universality of Emotion: Self-Actualization</p> <p>Universality of emotions will be considered as individuals' ability to know about oneself realizing their own potentials and benefits for own self-fulfillment and feel empathy to mankind as a whole.</p>	SD	D	N	A	SA
51	USA1	I mostly consider those things which may affect my self-fulfillment.	1	2	3	4	5
52	USA2	I want to contribute something to society.	1	2	3	4	5
53	USA3	I like to done sufficient tasks as expected.	1	2	3	4	5
54	USA4	I always feel empathy towards my students.	1	2	3	4	5
55	USA5	I think being popular among people is important.	1	2	3	4	5
56	USA6	I am dedicated to goals in my life.	1	2	3	4	5
		<p style="text-align: center;">8. Transcendence</p> <p>Transcendence will be considered as individuals' ability to help others in their self-actualization and self-fulfillment after getting transcends from own needs and share experience and wisdom with others.</p>	SD	D	N	A	SA
57	T1	I share my knowledge with others if this can be helpful to them.	1	2	3	4	5
58	T2	I am extremely empathetic towards other people.	1	2	3	4	5
59	T3	I always encourage people to deal with their problems.	1	2	3	4	5
60	T4	I share my experiences of life with others in order to help them.	1	2	3	4	5
61	T5	I mostly help other people in dealing their problems.	1	2	3	4	5
62	T6	I always motivate others in their goals.	1	2	3	4	5
		<p style="text-align: center;">9. Emotional Unity</p> <p>Emotional unity will be considered as individuals' ability to see the relationship of emotions with the nature and realizing the importance of helping others by doing the same for others what they are doing for themselves. Seeing oneself as part of nature and not a separate entity.</p>	SD	D	N	A	SA
63	EU1	I want to make the world a better place by helping others.	1	2	3	4	5
64	EU2	I believe I am as a part of the world with no limits or boundaries in time or space.	1	2	3	4	5

65	EU3	I try my best not to harm other people through my behavior(s).	1	2	3	4	5
66	EU4	I often think about a perfect world where everyone and everything live together in peace.	1	2	3	4	5
67	EU5	I feel happy while working with others in natural setting.	1	2	3	4	5
68	EU6	I give same suggestions to others which I follow myself for dealing with difficulties.	1	2	3	4	5
69	EU7	I feel deep joy when I have an opportunity to get united with all the exist.	1	2	3	4	5
Teachers' Self-Efficacy Scale							
Sr No.		1. Student Engagement	SD	D	N	A	SA
		Students' engagement is referred as students' likeness towards learning activities and to what extent they take part in learning activities.					
70	SE1	I can motivate those students who show low interest in university.	1	2	3	4	5
71	SE2	I can get students to believe they can do well in university work.	1	2	3	4	5
72	SE3	I can help my students value learning.	1	2	3	4	5
73	SE4	I can assist families in helping their children do well in university.	1	2	3	4	5
		2. Instructional Strategies	SD	D	N	A	SA
		Instructional Strategies is referred as teacher use different learning methodologies and strategies to provide learning environment for students aimed to attain learning objectives.					
74	IS1	I can craft good questions for my students.	1	2	3	4	5
75	IS2	I can use a variety of assessment strategies.	1	2	3	4	5
76	IS3	I can provide an alternative explanation or example when students are confused.	1	2	3	4	5
77	IS4	I can implement alternative strategies in my classroom.	1	2	3	4	5
		3. Classroom Management	SD	D	N	A	SA
		It referred as to what extent teachers are able to organize resources, peoples and learning activities effectively.					
78	CM1	I can control disruptive behavior in the classroom.	1	2	3	4	5
79	CM2	I can get students to follow classroom rules.	1	2	3	4	5
80	CM3	I can calm a student who is disruptive or noisy.	1	2	3	4	5
81	CM4	I can establish a classroom management system with each other group of students.	1	2	3	4	5

APPENDIX E**COVER LETTER FOR VALIDITY CERTIFICATE****Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level**

Subject: Request for Validity Certificate

Respected Sir/ Madam

I have attached my questionnaires developed for the purpose of research titled as “Relationship of Emotional Intelligence and Teachers’ Self-Efficacy at University Level.”

- Emotional Intelligence questionnaire developed in the light of the Model presented by Drigas and Papoutsi (2018) named as “The Pyramid of Emotional Intelligence: The NineLayer Model”. They have categorized emotional intelligence into nine levels (Emotional Stimuli, Emotional Recognition, Self-Awareness, Self-Management, Social Awareness, Social Skill, Universality of Emotion: Self-Actualization, Transcendence, Emotional Unity).
- Teacher self-efficacy scale of Tschannen-Moran & Hoy (2001) has been adapted. They have categorized teacher self-efficacy into three dimensions (Instructional Strategies, Student engagement, Classroom management).

Kindly check my questionnaires, its content and construction, provide your valuable suggestions for its improvement and certify its validity by filling the certificate attached at the end of the document.

Muhammad Kazim
M.Phil Scholar, Deptt of Education,
National University of Modern Languages,
Islamabad, Pakistan

APPENDIX F

SAMPLE CERTIFICATE FOR TOOL VALIDATION

CERTIFICATE OF VALIDITY

(The Pyramid of Emotional Intelligence Scale)



Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level

By Mr. Muhammad Kazim,
M.Phil Scholar, Department of Education, Faculty of Social Sciences
National University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar in the light of the model presented by Drigas and Papoutsi (2018). His questionnaire has been assessed by me and I find it to have been designed adequately to assess the Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level. The questionnaire has 9 levels of Emotional Intelligence (Emotional Stimuli, Emotional Recognition, Self-Awareness, Self-Management, Social Awareness, Social Skill, Universality of Emotion: Self-Actualization, Transcendence, Emotional Unity). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, developed for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name	
Designation	
Institute	
Signature	

CERTIFICATE OF VALIDITY

(Teachers' Sense of Efficacy Scale)



Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences

National University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire adapted from Tschannen-Moran & Hoy (2001) by the scholar. His questionnaire has been assessed by me and I find it to have been designed adequately to assess the Teachers' Self-Efficacy at University Level. The questionnaire has 3 dimensions of Teacher Self-Efficacy (Instructional Strategies, Student engagement, Classroom management). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, adapted for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name	
Designation	
Institute	
Signature	

APPENDIX G

CERTIFICATES FOR TOOLS VALIDATION

CERTIFICATE OF VALIDITY
(Teachers' Sense of Efficacy Scale)



**Relationship of Emotional Intelligence and Teachers' Self-Efficacy at
University Level**

By Mr. Muhammad Kazim,
M.Phil Scholar, Department of Education, Faculty of Social Sciences
National University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire adapted from Tschannen-Moran & Hoy (2001) by the scholar. His questionnaire has been assessed by me and I find it to have been designed adequately to assess the Teachers' Self-Efficacy at University Level. The questionnaire has 3 dimensions of Teacher Self-Efficacy (Instructional Strategies, Student engagement, Classroom management). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, adapted for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name DR. NAEEM ASLAM
Designation PMDCP, PhD Psychology,
Lecturer National Institute of Psychology
Centre of Excellence
Institute Quard-i-Azam University Islamabad
Signature [Handwritten Signature]

CERTIFICATE OF VALIDITY
(The Pyramid of Emotional Intelligence Scale)



**Relationship of Emotional Intelligence and Teachers' Self-Efficacy at
University Level**

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences

National University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar in the light of the model presented by Drigas and Papoutsi (2018). His questionnaire has been assessed by me and I find it to have been designed adequately to assess the Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level. The questionnaire has 9 levels of Emotional Intelligence (Emotional Stimuli, Emotional Recognition, Self-Awareness, Self-Management, Social Awareness, Social Skill, Universality of Emotion: Self-Actualization, Transcendence, Emotional Unity). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, developed for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name DR. NAEEM ASLAM
 Designation Lecturer, National Institute of Psychology
Centre of Excellence
Quaid-i-Azam University Islamabad
 Institute Quaid-i-Azam University Islamabad
 Signature [Handwritten Signature]

CERTIFICATE OF VALIDITY
(The Pyramid of Emotional Intelligence Scale)



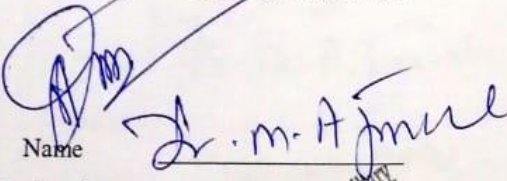
**Relationship of Emotional Intelligence and Teachers' Self-Efficacy at
University Level**

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences National
University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar towards his thesis has been assessed by me and I find it to have been designed adequately to assess the Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level. The questionnaire has 9 levels of Emotional Intelligence (Emotional Stimuli, Emotional Recognition, Self-Awareness, Self-Management, Social Awareness, Social Skill, Universality of Emotion: Self-Actualization, Transcendence, Emotional Unity). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, developed for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.


 Name _____
 Designation _____
 Institute _____
 Signature _____
Dr. Muhammad Ajmal Chaudhry
CHAIRMAN
 Department of Distance,
 & Non Formal Education
 Alama Iqbal Open University, Islamabad

CERTIFICATE OF VALIDITY

(Teachers' Sense of Efficacy Scale)



Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences National
University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire adapted by the scholar towards his thesis has been assessed by me and I find it to have been designed adequately to assess the Teachers' Self-Efficacy at University Level. The questionnaire has 3 dimensions of Teacher Self-Efficacy (Instructional Strategies, Student engagement, Classroom management). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, adapted for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name

Dr. M. A. Jinnah

Designation

Institute

Signature

Dr. Muhammad Ajmal Chaudhary
CHAIRMAN
Department of Distance,
& Non-Formal Education
Allama Iqbal Open University, Islamabad

CERTIFICATE OF VALIDITY
(The Pyramid of Emotional Intelligence Scale)



**Relationship of Emotional Intelligence and Teachers' Self-Efficacy at
University Level**

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences

National University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar towards his thesis has been assessed by me and I find it to have been designed adequately to assess the Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level. The questionnaire has 9 levels of Emotional Intelligence (Emotional Stimuli, Emotional Recognition, Self-Awareness, Self-Management, Social Awareness, Social Skill, Universality of Emotion: Self-Actualization, Transcendence, Emotional Unity). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, developed for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name

Dr. Azhar Mahmood

Designation

Associate Professor

Institute

IUI

Signature

[Handwritten Signature]

DR. AZHAR M. CHAUDHARY
Associate Professor
Department of Education
International Islamic University
Islamabad

CERTIFICATE OF VALIDITY
(Teachers' Sense of Efficacy Scale)



**Relationship of Emotional Intelligence and Teachers' Self-Efficacy at
University Level**

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences
National University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire adapted by the scholar towards his thesis has been assessed by me and I find it to have been designed adequately to assess the Teachers' Self-Efficacy at University Level. The questionnaire has 3 dimensions of Teacher Self-Efficacy (Instructional Strategies, Student engagement, Classroom management). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, adapted for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name

Dr. Azhar Mahmood

Designation

Associate Professor

Institute

iiui

Signature

[Handwritten Signature]

DR. AZHAR M. CHAUDHARY
Associate Professor
Department of Education
International Islamic University
Islamabad

CERTIFICATE OF VALIDITY
(The Pyramid of Emotional Intelligence Scale)



**Relationship of Emotional Intelligence and Teachers' Self-Efficacy at
University Level**

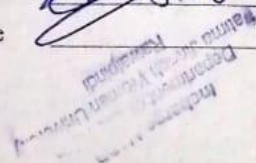
By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences National
University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar towards his thesis has been assessed by me and I find it to have been designed adequately to assess the Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level. The questionnaire has 9 levels of Emotional Intelligence (Emotional Stimuli, Emotional Recognition, Self-Awareness, Self-Management, Social Awareness, Social Skill, Universality of Emotion: Self-Actualization, Transcendence, Emotional Unity). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, developed for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Malik Gul Bahar
Designation Asst. Prof.
Institute FJU
Signature [Signature]



CERTIFICATE OF VALIDITY

(Teachers' Sense of Efficacy Scale)



Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences National
University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire adapted by the scholar towards his thesis has been assessed by me and I find it to have been designed adequately to assess the Teachers' Self-Efficacy at University Level. The questionnaire has 3 dimensions of Teacher Self-Efficacy (Instructional Strategies, Student engagement, Classroom management). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, adapted for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name

Dr. Malik Ghulam Bekhal

Designation

Asst. Prof.

Institute

EUWU

Signature

[Signature]

CERTIFICATE OF VALIDITY
(The Pyramid of Emotional Intelligence Scale)



**Relationship of Emotional Intelligence and Teachers' Self-Efficacy at
University Level**

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences

National University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar towards his thesis has been assessed by me and I find it to have been designed adequately to assess the Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level. The questionnaire has 9 levels of Emotional Intelligence (Emotional Stimuli, Emotional Recognition, Self-Awareness, Self-Management, Social Awareness, Social Skill, Universality of Emotion: Self-Actualization, Transcendence, Emotional Unity). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, developed for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name Dr Imran Younis
Designation Chairman DOE
Institute ARID
Signature [Signature] 29/12/2019

CHAIRMAN
Department of Education
PMAS-Arid Agriculture University
Rawalpindi

CERTIFICATE OF VALIDITY
(Teachers' Sense of Efficacy Scale)



**Relationship of Emotional Intelligence and Teachers' Self-Efficacy at
University Level**

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences
National University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire adapted by the scholar towards his thesis has been assessed by me and I find it to have been designed adequately to assess the Teachers' Self-Efficacy at University Level. The questionnaire has 3 dimensions of Teacher Self-Efficacy (Instructional Strategies, Student engagement, Classroom management). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, adapted for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name Dr Imran Yousuf
Designation Chairman DOE
Institute ARID
Signature [Signature] 29/12/2019

CHAIRMAN
Department of Education
PMAS-Arid Agriculture University
Rawalpindi

CERTIFICATE OF VALIDITY
(The Pyramid of Emotional Intelligence Scale)



**Relationship of Emotional Intelligence and Teachers' Self-Efficacy at
University Level**

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences
National University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar in the light of the model presented by Drigas and Papoutsi (2018). His questionnaire has been assessed by me and I find it to have been designed adequately to assess the Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level. The questionnaire has 9 levels of Emotional Intelligence (Emotional Stimuli, Emotional Recognition, Self-Awareness, Self-Management, Social Awareness, Social Skill, Universality of Emotion: Self-Actualization, Transcendence, Emotional Unity). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, developed for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Khushbakht Hina.
Designation Assistant Professor
Institute NUML, Islamabad.
Signature Khushbakht Hina.

Dr. Khushbakht Hina
Assistant Professor
National University of Modern
Languages & Sciences
Islamabad Pakistan

CERTIFICATE OF VALIDITY
(Teachers' Sense of Efficacy Scale)



**Relationship of Emotional Intelligence and Teachers' Self-Efficacy at
University Level**

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences
National University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire adapted from Tschannen-Moran & Hoy (2001) by the scholar. His questionnaire has been assessed by me and I find it to have been designed adequately to assess the Teachers' Self-Efficacy at University Level. The questionnaire has 3 dimensions of Teacher Self-Efficacy (Instructional Strategies, Student engagement, Classroom management). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, adapted for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Khushbakht Hina
Designation Assistant Professor
Institute NUML, Islamabad
Signature [Handwritten Signature]

Dr. Khushbakht Hina
Assistant Professor
National University of Modern
Language & Sciences
Islamabad Pakistan

CERTIFICATE OF VALIDITY
(The Pyramid of Emotional Intelligence Scale)



**Relationship of Emotional Intelligence and Teachers' Self-Efficacy at
University Level**

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences
National University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar towards his thesis has been assessed by me and I find it to have been designed adequately to assess the Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level. The questionnaire has 9 levels of Emotional Intelligence (Emotional Stimuli, Emotional Recognition, Self-Awareness, Self-Management, Social Awareness, Social Skill, Universality of Emotion: Self-Actualization, Transcendence, Emotional Unity). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, developed for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name	<u>Dr. Saira Nudrat</u>
Designation	<u>Assistant Professor</u>
Institute	<u>Dept. of Edu (NUML)</u>
Signature	<u>[Handwritten Signature]</u>

CERTIFICATE OF VALIDITY

(Teachers' Sense of Efficacy Scale)



Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences

National University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire adapted by the scholar towards his thesis has been assessed by me and I find it to have been designed adequately to assess the Teachers' Self-Efficacy at University Level. The questionnaire has 3 dimensions of Teacher Self-Efficacy (Instructional Strategies, Student engagement, Classroom management). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, adapted for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Samia Nudrat
 Designation AP
 Institute NUML, 18b
 Signature [Signature]

CERTIFICATE OF VALIDITY
(The Pyramid of Emotional Intelligence Scale)



**Relationship of Emotional Intelligence and Teachers' Self-Efficacy at
University Level**

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences National
University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar towards his thesis has been assessed by me and I find it to have been designed adequately to assess the Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level. The questionnaire has 9 levels of Emotional Intelligence (Emotional Stimuli, Emotional Recognition, Self-Awareness, Self-Management, Social Awareness, Social Skill, Universality of Emotion: Self-Actualization, Transcendence, Emotional Unity). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, developed for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name	<u>Dr. Sabra Nazer Khan</u>
Designation	<u>Assistant Professor</u>
Institute	<u>FJWU</u>
Signature	<u>Sabra</u>

CERTIFICATE OF VALIDITY

(Teachers' Sense of Efficacy Scale)

**Relationship of Emotional Intelligence and Teachers' Self-Efficacy at
University Level**

By Mr. Muhammad Kazim,

M.Phil Scholar, Department of Education, Faculty of Social Sciences National
University of Modern Languages, H-9, Islamabad, Pakistan

This is to certify that the questionnaire adapted by the scholar towards his thesis has been assessed by me and I find it to have been designed adequately to assess the Teachers' Self-Efficacy at University Level. The questionnaire has 3 dimensions of Teacher Self-Efficacy (Instructional Strategies, Student engagement, Classroom management). Responses thus collected will aid treatment of the subject in a scientific matter.

It is considered that the research instrument, adapted for the research above titled is according to the objectives and hypothesis of the research, assures adequate construct and content validity according to the purpose of research, and can be used for data collection by the researcher with fair amount of confidence.

Name	<u>Dr. Salma Nazam Khom</u>
Designation	<u>Assistant Professor</u>
Institute	<u>FJUW</u>
Signature	<u>Salma</u>

APPENDIX H

TOPIC APPROVAL LETTER



NATIONAL UNIVERSITY OF MODERN LANGUAGES
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF EDUCATION

ML.1-4/2020/Edu

Dated: 20-01-2020

To: **Muhammad Kazim,**
1500-MPhil/Edu/S18

Subject: **APPROVAL OF MPhil THESIS TOPIC AND SUPERVISOR**

1. Reference to Minute Sheet No. ML.1-2/2020-Edu dated 02-1 -2020, the Higher Authority has approved your topic and supervisor/s on the recommendation of Faculty Board of Studies vide its meeting held on 15th Oct 2019.

a. **Supervisor's Name & Designation**

Dr. Quratul Ain Hina
Assistant Professor, Department of Education
NUML, Islamabad.

b. **Topic of Thesis**


Relationship of Emotional Intelligence and Teachers' Self-Efficacy at University Level

2. You may carry out research on the given topic under the guidance of your Supervisor/s and submit the thesis for further evaluation within the stipulated time. It is to inform you that your thesis should be submitted within the prescribed period by **31st Jan 2021** positively for further necessary action please.

3. As per policy of NUML, all MPhil/PhD theses are to be run through Turnitin by QEC of NUML before being sent for evaluation. The university shall not take any responsibility for high similarity resulting due to thesis prior run by any other individual.

4. Thesis is to be prepared strictly on NUML's format that can be taken from the MPhil & PhD Coordinator, Department of Education.

Telephone No: 051-9265100-110 Ext: 2090
E-mail: mdin@numl.edu.pk


Dr. Hukam Dad Malik
Head,
Department of Education

Cc to: **Dr. Quratul Ain Hina**

APPENDIX I

DATA COLLECTION PERMISSION LETTER



ML.1-5/2020-Edu

DEPARTMENT OF EDUCATION
FACULTY OF SOCIAL SCIENCES
National University of Modern Languages
Sector H-9, Islamabad
Tel. No: 051-9265100 Ext: 2090

Dated: 10-02-2020

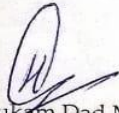
WHOM SO EVER IT MAY CONCERN

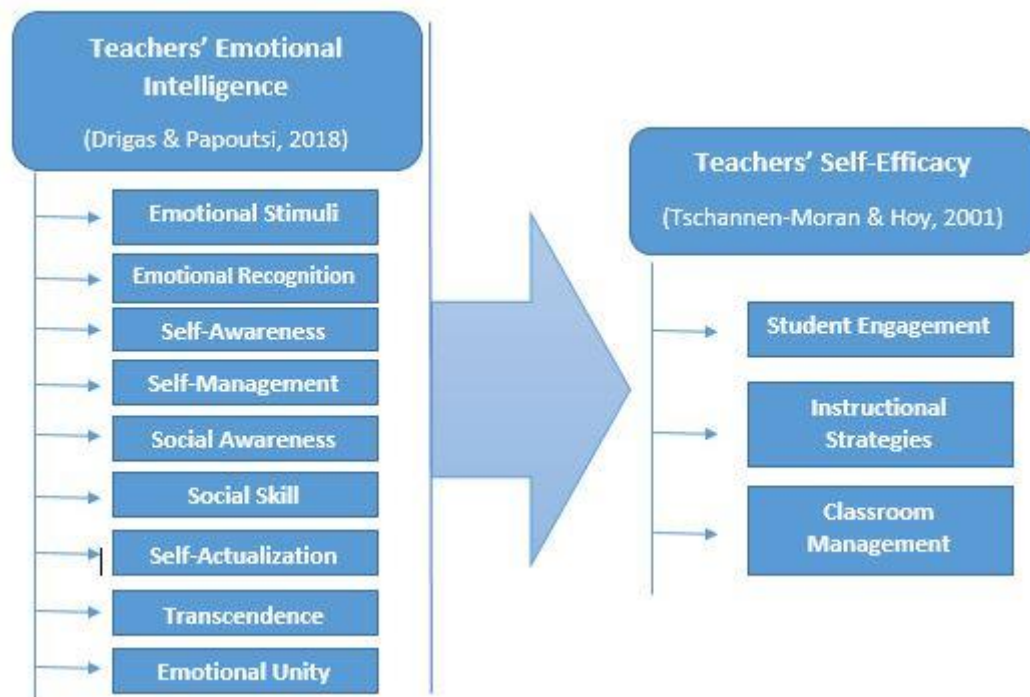
Mr. Muhammad Kazim, student of MPhil, Department of Education, National University of Modern Languages is engaged in the Research Work.

He may please be allowed to visit you to obtain the required information for his Research Work.

This information shall not be divulged to any unauthorized person or agency. It shall be kept confidential.





Dr. Hukam Dad Malik
Head,
Department of Education.

APPENDIX J**CONCEPTUAL FRAMEWORK**

Conceptual Framework of the Study

APPENDIX K

Author's Guideline on Researcher Self-Developed Emotional Intelligence Tool

Kazim Yazdani <kazim.c9v@gmail.com>

Questionnaire
1 message

Xara Papoutsi <papoutsi.xara@yahoo.com> Wed, Dec 18, 2019 at 3:33 PM
To: kazim.c9v@gmail.com

Dear Kazim Yazdani,

Thank you for reading and using our article about Emotional Intelligence on your research. We are in a process of making a tool based on our pyramid of Emotional Intelligence but we understand the fact that you are in a hurry for a tool for your research purpose.

We checked your questionnaire which is well developed but in the layer of Emotional Stimuli maybe you must be more specific because some of the statements have to do with self awareness (for example ES3). And it is not only about efforts, it is more general.

As for the validity, the author of the article checks the validity of the tool after a small sample has filled it out. Then you send it to a larger sample to make your conclusions. Moreover, the validity it is done by the author because the weighting of a questionnaire is influenced by the longitude and latitude of each region and by the population.

Thank you again for seeing and using our article.


Best regards

Chara Papoutsi
Athanasios Drigas

APPENDIX L

Permission Letter

Teacher Self-Efficacy Scale


Kazim Yazdani <kazim.c9v@gmail.com>

Request for permission (Using the scale of Teacher Self-Efficacy)
3 messages

Kazim Yazdani <kazim.c9v@gmail.com>
To: Anita Woolfolk Hoy <anitahoy@icloud.com>
Cc: QuratulAin Hina <academicresearch@gmail.com>

Mon, Feb 22, 2021 at 6:48 PM

Respected Anita Woolfolk Hoy

I am MPhil scholar from Pakistan and wants to adapt Teachers' Self-Efficacy Scale* which you developed. I want to use it for university teachers.

I request you please allow me to use this scale for my research study.

I shall be very grateful to you for this act of kindness.

Regards,
Muhammad-Kazim
M.Phil Scholar
National University of Modern Languages Islamabad, Pakistan

Anita Woolfolk Hoy <anitahoy@icloud.com>
To: Kazim Yazdani <kazim.c9v@gmail.com>

Mon, Feb 22, 2021 at 7:10 PM

You are welcome to use the TSES in your research as you describe below. This website might be helpful to you:

<http://u.osu.edu/hoy.17/research/instruments/>

Best wishes in your work.

Anita Woolfolk Hoy, PhD
Professor Emerita
The Ohio State University
7655 Pebble Creek Circle, Unit 301
Naples, FL 34108
anitahoy@mac.com
415-640-2017

Ohio State Website: <http://u.osu.edu/hoy.17/>

Personal Website
<https://anitawoolfolkoy.com>
[Quoted text hidden]

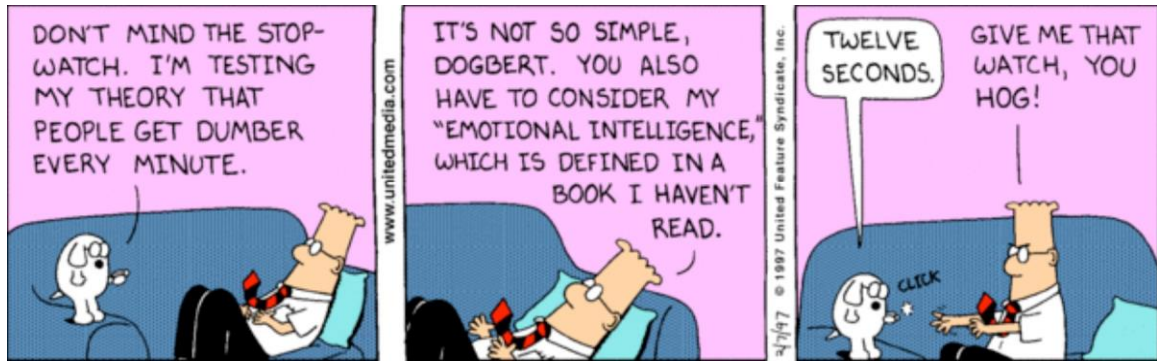
Kazim Yazdani <kazim.c9v@gmail.com>
To: Anita Woolfolk Hoy <anitahoy@icloud.com>

Mon, Feb 22, 2021 at 10:20 PM

Thank you so much.
[Quoted text hidden]

APPENDIX M

EMOTIONAL INTELLIGENCE TRAINING MANUAL



EMOTIONAL INTELLIGENCE IN THE WORKPLACE

TRAINING MANUAL

Why Should I Care about Emotional Intelligence at Work?

- It may not seem necessary to think about our emotional intelligence when things are going well, but what about on a bad day?
- Sometimes it's when we do not want to think about our own improvement that we need it most!

- Improving emotional intelligence will help us like our jobs more, like our peers more, be more liked by our peers, and be more effective at our jobs.



Some times to turn inward and think about our emotional intelligence (E.I.):

1. Someone at work is being just impossible **Think:** What is the problem?
What could solve the problem?
2. For some reason, we are unable to get our point across **Adjust.** If one thing isn't working, try another.
Rework. Gear message to better suit the listener's style.
Ask. Find out if you are making sense, or if not, why?
3. We feel sad, irritable, frustrated, stressed, unappreciated, etc.
Time Out. Take a few minutes away from the situation to figure out why you are feeling these ways
Work. Focus on feeling better before tackling interactions (focus on breathing, focus on feelings, step into the other person's shoes.)

4. Negotiation is necessary

Wish list. We often can't get exactly what we want, but knowing what we want is a good starting point.

Sacrifice: What can we possibly give up for the sake of a positive outcome for both parties?

First Things First



- Before we can think about others, we sometimes need to first think about our own behaviors.

- Is there anything we can do to easily improve an interaction with someone?
 1. Do I have time to give this person the proper attention?

 2. Am I giving this person my full attention?

 3. Am I letting my own issues affect this interaction?

 4. Do I understand the message this person is trying to convey?

Know Thyself

- What is your greatest strength? This is what you should emphasize!

- Think of several ways in which you can emphasize your strength.
 1. For example, my strength is empathy.
 - a) I can emphasize that by listening more effectively.

Know Thyself

- What is your biggest weakness? This is what you should work to improve!

- Think of a few ways that you can improve upon your weaknesses.
 1. For example, my biggest weakness is I interrupt, and I am too sensitive.
 - a) I can work to improve that by focusing on what the speaker is saying, not having to always respond, and having confidence that I am a good person even if someone finds fault.
 - b) Work to improve rather than feel defeated.

Listen Up!

Adults are usually distracted by other things while they listen, and therefore, hear at about 25% efficiency.

- Rather than always try to listen when someone is speaking, sometimes it is necessary, and even helpful, to ask the speaker to come back at a later time when we can be more receptive.
- It has been found that multi-tasking does not really work, so if someone is talking to you, put your phone down, turn away from your computer monitor, and just listen.
- Listening is about more than being able to repeat what someone just said. It involves hearing the words, interpreting the entire message of the speaker, and giving helpful comments or feedback in return.
- Sometimes the words do not convey the whole message. Good listeners are often analyzing what the speaker is trying to get across, why the speaker is sharing the information with us, and what type of feedback may be desired in return.

Listening:

Conflict Resolution and Negotiation

- When tempers flare, and frustration levels are high, active listening can have a calming effect.
- If someone is angry or frustrated and not calming down, it could be partially because he or she does not feel like anyone is paying attention.
- The FBI's Critical Incident Response Group (CIRG) has developed a negotiation technique for situations such as hostage negotiations. The main steps that are recommended are minimal encouragements, paraphrasing, emotion labeling, open-ended questions, and 'I' statements. Just as important, however, is a well-placed break in conversation.

Active Listening Techniques

1. Let the speaker know that you are listening with well-timed and short replies, e.g. I see, or yes, or tell me more, or even by nodding.

2. Paraphrase speaker's messages to make sure you are understanding, and also to show an effort to understand.
3. Identify the emotion the speaker is feeling. For example, if the speaker is very angry and ranting, the listener can say, 'it sounds like you are really hurt', or 'that makes you really angry, huh?' This serves to validate the speaker's feelings.
4. Instead of asking 'Why?' which may put the person on the defensive, ask open-ended questions. ('tell me about that'...or 'could you help me understand better?')
5. Use 'I' statements rather than 'You' statements ('I feel frustrated when you yell at me', for example.) These statements sound less accusatory.
6. Effective pauses. Sometimes not saying anything at all is more effective than even the perfect response. By leaving gaps in the conversation, it allows the speaker to share more. Also, sometimes the speaker is trying to elicit a response, and not giving one, takes some wind out of his or her sails.

Talking Points



Are you getting your point across?

Are you Making Yourself Clear?

- You might be pretty sure that you're being perfectly clear, but you might not be!
- Give yourself time to organize your thoughts and make sure that your main points are clear.
- Give examples.
- **Pay attention to your listeners:**
 - Do they seem to understand?
 - Are they engaged and seeming interested in what what you are saying?
 - Perhaps sum up your thoughts in brief statements periodically and ask listeners to say how they are interpreting what you are saying.
- **Pay attention to yourself:**

- Make sure you listened to others' preceding comments.
- Wait for correct entrance to express what you have to say.

Yes, but what do you REALLY mean?

- We all know that nonverbal communication is at least as important as verbal communication, but how can this knowledge help us in everyday interactions?

/r/e/a/d/i/n/g/

Nonverbal Communication

- Whether you are a speaker or a listener, sender or receiver, paying attention to body language can guide you to a more positive outcome.

1. Does the listener seem receptive with open body language, or defensive (if minds are open, bodies tend to be more open)?

- not holding barriers between you and them, palms up, calm and relaxed face

2. If you are the speaker, do you seem relaxed, knowledgeable, and open to discussion, or do you seem domineering, accusatory, and a know-it-all?

- Palms up or arms at your sides rather than pointing or pounding a desk, looking people in the eyes, opening your own body language,

- check the tone of your voice: is it friendly, or does it sound like you are barking? Are you speaking at a reasonable speed and volume?

Nonverbal Communication

Important: Nonverbal communication is very contextual and individual. Never assume someone's feelings based on one or two common behaviors.

1. Rather, use your suspicions as an opportunity to ask your audience about their reactions or to experiment with your own body language.

2. Maybe a slight change would make a big difference in effectiveness!

Why must you be so difficult?!

Difficult people come in many forms:

- **The provocateur:** purposely says inflammatory, unnecessary, or off topic comments in order to get a reaction from you.
- **The withholder:** does not volunteer any information, answers with very short responses that are not helpful.
- **The sarcastic one:** does not take things seriously; puts a negative and somewhat mocking spin on your message.
- **The critic:** Nothing is good enough; nothing is enlightening; the process is stupid; anywhere else would be more enjoyable.
- **The shy one:** In contrast to the withholder, the shy one may want to cooperate, but is difficult to draw out, does not give helpful responses, and is not easy to read; may seem uninterested in your subject matter due to self-conscious behavior.

Difficult people

- Whether someone is trying to be difficult, or just has a gift, we need to have some strategies to deal with these people while keeping our cool.

1. Confront their attitude with a question (e.g. “Maybe you disagree with that statement; could you tell me your view about that?”)

2. Draw difficult people into a friendly dialogue to hopefully lighten up the mood and feel more positive for everyone.

3. If all else fails, ignore the problem person, and think about all of the positive people instead. This way you will not be weighted down by one person's negativism.

I'm sorry; I can change if you'd like.

- Sometimes the problem is not difficult people, but it is people trying too hard to please everyone.
- If you are one of these people, you know that this is a losing battle in which no one is happy.
- This most likely comes from a lack of confidence and self-esteem, but it could also come from not knowing how to deal with difficult people.

'I know trying to please everyone is futile, but what do I do instead?'

When Trying Is Not Working...

1. **MOVE ON.** Part of being emotionally intelligent is being able to read people and situations while knowing how we are feeling and coming across. If a person or situation is a lost cause, it's okay to let it go. Do not waste your valuable time and energy any

more than is necessary (assuming that you have made reasonable attempts.)

2. WORK ON YOU. Stay focused on what you can do better rather than change someone else's behaviors. In the end, each person is responsible for his or her own behavior: not others' behavior.

3. DO NOT TRY TOO HARD. Stop trying to please everyone. The person who is always trying to help everyone is the first one to get knocked down. In other words, people do not appreciate someone trying to help them, and they often will take out their frustration on the very person who is TRYING.

I am So Stressed!

Stress Reduction Kit



Directions:

1. Place kit on FIRM surface.
2. Follow directions in circle of kit.
3. Repeat step 2 as necessary, or until unconscious.
4. If unconscious, cease stress reduction activity.

Image source:

<http://scientopia.org/blogs/scicurious/2010/06/21/stress-and-anxiety-akacrf-and-5-ht2/>

Take a Chill Pill!

- Extra responsibility, less sleep, lower expendable income, and never-ending bills can make us more stressed than we even realize.
- Stress exacerbates many other conditions, such as: depression, insomnia, irritable bowel syndrome, and colds, as well as others.

Good news!

- There are many simple ways to reduce our stress levels that are very effective.
- By managing our stress levels on a regular basis, we are likelier to remain more relaxed, and decrease stress quicker and easier in the future.
- How can I manage my stress?

Managing Stress

- Step away from the situation if possible

- Focus on the in-and-out of your breath for a few minutes, and concentrate only on that.
 - If thoughts or feelings come up during this exercise, that's fine, but quickly refocus on your breathing.

 - This helps you calm down and gain perspective.

- If you need to vent, find a friend, family member, or trusted colleague who you can trust to listen and maybe offer helpful suggestions.

- Once you are calm, think about the stressful situation in a different way.
 - How can you change it?

 - How can you better cope with it?

 - Have you tried some alternative ways of dealing with the situation or person?

May I have your Attention, Please?

- Hopefully, before you began speaking, you assessed the situation to make sure that your timing was good. Even if you did, things may have changed.

- If your audience is clearly not interested or just does not have the time or attention to listen to what you are saying, here are a few options:
 - Drop a large object on the floor to wake them up

(probably not the best option) – Ask a question in

which the audience elaborates on what you have said.

 - Speed things up a bit.

 - Ask if there would be a better time to speak because they seem distracted.

Boundaries

- An important part of emotional intelligence that is often ignored is people's boundaries.
- What might be perfectly appropriate to you may be inappropriate or uncomfortable for someone else.
- When someone's boundaries are crossed, it can have negative results, such as:
 - Anger
 - Closed off to your message
 - Sadness
 - Distrust
 - Lack of focus; distractibility
- If you sense that you have crossed the line with someone, apologize, and proceed with caution.
- Switch to a lighter subject, or put the ball in someone else's court (i.e. stop talking; let someone else speak for a while.)

Rules of Thumb

- A good rule of thumb is to ask and share a little less rather than a little more. If the other person is open to sharing more, then he or she will.
- Do not push people too hard or too quickly.
- We can never know for sure what is okay and what is taboo for any particular person.
- Just because an experience is one way for you, does not mean that the experience is the same way for others.
- You don't have to understand why someone feels a particular way necessarily, but you do need to respect that it is his or her feeling to have.

How do I keep people motivated even on a boring project?

- If you are having trouble keeping people awake with your subject matter when speaking publicly, try asking an open-ended question that requires audience participation.
- Ask for volunteers to share relevant experiences. If there is silence, share something yourself, and ask if anyone can relate to your experience.
- Go back to the basics: are you speaking in a dynamic and engaging tone? Are you using eye contact? How is your body language? Can you make your material any more interesting while you are speaking?

How should I handle “attack criticism” in front of a group?

- Draw the critic into a conversation where he or she is free to voice any concerns or doubts.
- If the critic is not letting up, try to lighten up the mood with a short, positive comment, and move on.
- Rather than confront the critic--which could cause embarrassment and more criticism--address possible concerns in your next few sentences and check for change in mood.

How can I help the “withholder” to open up and help avoid passive stalemates that waste time and aggravate?

- Ask specific and open-ended questions directed toward that person (be subtle and somewhat gentle so as to not seem threatening)
- Open up a little yourself; give a little more.
- Do not waste too much time on someone unwilling to participate in a dialogue; try a couple of times, but then move on to others.
- Empathize. What is causing this person to withhold? Is he or she shy? Having a hard time? Not understanding? Try to think of this person’s perspective and change your behavior accordingly.
- Directly mention that he or she seems to be withholding, and find out if this is because he or she needs time to open up, or are you being offensive, or unclear, and so on?
-

How should I handle the “always right person”?

- It can be tricky when you are talking to someone who knows everything already, but we can get out gracefully with some patience, positive attitude, an open mind, and a willingness to listen and learn.
- It may sound like a joke, but maybe we could learn something from the ‘know-it-all.’
How?

- Ask questions

- Challenge Mr. or Ms. Know-It-All with a bit of healthy debate or asking for sources of the knowledge.
- If this stops feeling productive and starts feeling petty or fake, do not take the bait that this person is putting out for you. Stop responding and move on to others who are more receptive.

How can I give concise directions that can be understood by all learning styles?

- Another big part of emotional intelligence is reading your audience and being flexible enough to work with a variety of personalities.
 - We may be assuming that everyone is at the same level of understanding or experience, but this might not be true.
- Given that there are many different learning styles, make sure to say things in more than one way.
 - Double-check understanding as you go by looking, listening, and asking.
 - Make your speaking style concise; there is no need for flowery language or excessive information.
 - KISS: Keep It Simple, Stupid!