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Research Article

An Investigation of Emotional Intelligence and its Association with Self-Efficacy at Higher Education Level in Pakistan

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Abstract

The present study examined the effects emotional intelligence on self-Efficacy of tertiary education students. Two scales Schutte Self-Report Emotional Intelligence Scale [44] and Schwarzer & Jerusalem Self Efficacy Scale [47] were used. The pilot study was conducted to assess the reliability of the instrument and main study was conducted to assess the results on sample of the study. A sample of 50 students (25 males, 25 females) were taken from universities of Islamabad and Rawalpindi. Both questionnaire were administered to the sample. The psychometric properties of pilot study were found satisfactory. In second phase main study was conducted which considered of sample of 200 university students (100 males and 100 females). The psychometric properties of main study were also satisfactory. Scores were analysed using SPSS software. Results of demographic variables such as age, birth order, mother education, father education and number of siblings are positively correlated with both scales and sub scales. The results were significant at ($p<0.05$) of mean differences with gender, education and family system. This survey consists of three hypotheses, which were accepted.

Keywords:
Emotional Intelligence; Self-Efficacy; Intelligent Quotient

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INTRODUCTION

Several research studies have examined the emotional intelligence and its considerable association and relationship with self-efficacy in relation to adults as sample of these investigations. On the other hand studies also focused on individual variations of emotional intelligence in association with psychological aspects of the personality and self-efficacy and relationship of all these attributes to the attitudes of the adult students. However, the prediction of individual attitudes through addressing emotional intelligence and self-efficacy is rarely addressed in research studies [1].

Emotional consistency through individual awareness of appropriate behavior after processing the information of the situation varies individual to individual this concept is addressed by trait emotional intelligence (Trait EI). This concept also covers the gathering of information through emotional capabilities, it also relates to the individual tempers related to personality aspects of immature individual depicting lower personality attributes [2].

Assessment of individuals those present positive emotions to individuals and the welfare to the society mostly possess high trait EI assessment scores [3]. Individuals with Trait EI attributes possess greater level of emotional intelligence and endorse greater happiness for them and other individuals around them [4].

Individual success and personal happiness is produced and directed through various means such as individuals with higher level of self-efficacy embrace complex tasks as contest or experiment while individuals with lower level of self-efficacy prefer to avoid complex tasks and remain in pressure or fear of accomplishing complex challenges [5]. While facing the challenging situations attitudes of individuals with higher level of self-efficacy would be controlling and authoritative. This sort of attitude produces individual success and decreases depression and anxiety [6], [7], [8].

Individual who are uncertain regarding personal competence and feel hesitation usually avoid performing complex tasks or feel pressure in performing challenging tasks. These individuals mostly possess low ambitions to the objectives and aims of the life goals they want to achieve. While performing complex task related to any objective to achieve these individuals with low self-efficacy start concentrating on their personal weaknesses and difficulties of task they want to peruse rather than concentrating on gathering and processing information on task achievement. They often lose concentration and determination of performing task and facing problems and fall into depression and anxiety and more often they choose to quit the task. Efficacy deals and reduces the individual stress level while performing task that seems to be challenging according to individual capacity to perform that task [9], [10].

On the basis of above background, we intend to measure the emotional intelligence and self-efficacy among university students, to find out the relationship of emotional intelligence and self-efficacy, to

explore the differences of emotional intelligence and self-efficacy on selected demographic variables and to explore the gender difference on Emotional Intelligence and self-efficacy. And meanwhile our hypotheses of the Study were the greater the Emotional Intelligence, the more will be the Self Efficacy, males are emotionally more intelligent than Females and female students rate high on Self Efficacy than male students.

REVIEW OF LITERATURE

In the light of background above, there is considerable that Self-efficacy presents individual differences in terms of individual sensation, individual performance. Individual sensation is strictly associated with self-efficacy such as low level of self-efficacy cause stress and despair. Students with higher level of self-efficacy possess greater creativity and determination in their studies to accomplish academic goals. These individuals produce productive thoughts and gain information regarding effective academic sources to achieve academic success.

Emotional Intelligence

Emotional intelligence deals with the individual consciousness regarding personal emotions, incorporate these emotions into knowledge as well as comprehension of these emotions. Moreover, emotional intelligence states the personal capacity to observe, regulate and assess the individual emotions. In most cases this concept is considered as subcategory of social intellect that comprises the personal capacity to observe personal emotions and taking care of feelings of people who are in circle of this particular individual to differentiate them and use existing knowledge of mind to guide personal actions towards others [11].

Emotional Intelligence - Two Aspects

The prior aspect of emotional intelligence requires individual consciousness, self-regulation and organization of personal emotions, and attitude with other people based on emotional information. These aspects are considered as essential attributes of emotional intelligence and make EI as subset of intelligence.

Emotional Intelligence - The Five Domains

Fundamental domains those are associated with emotional intelligence are as under [12]:

Knowledge of personal or individual emotions.

Handling personal or individual emotions.

Personal encouragement and inspiration.

Knowing and identifying others' emotions.

Organization of personal interactions with other.

This significant concept of emotional intelligence is derived and supported by several branches of behavioral psychology, emotional psychology and communicational philosophies, for instance the Neuro Linguistic Programming also supports unique concept of emotional intelligence. Including the concept of transactional analysis and compassion also supports this concept. These branches provide information regarding developing emotional intelligence and support for the domains of emotional intelligence which provide dynamic approaches for individual achievement and support to others to achieve their goals. The developmental procedure and desired consequences of emotional intelligence progression comprises several components to decrease anxiety and depression regarding emotional establishment of personality. This particular process also help in refining personal interactions, promote constancy, endurance and coordination [12].

Concept of Emotional Intelligence

Emotional Intelligence relates to the individual capacity to observe, regulate and assess personal emotions. Several researchers mentioned that emotional intelligence is personal characteristic that can be imparted, while others believe that it relates to inheritance of person. Research related to emotional intelligence indicate that there exists two significant researchers Peter Salovey and John D. Mayer with

substantial role regarding EI research. These researcher defined emotional intelligence as the category of social intellect that implicates the ability to observe personal emotions and emotional state of other people, to differentiate among emotions and to use this knowledge regarding emotions to direct personal thoughts and acts [11].

The Four Branches of Emotional Intelligence

Four significant areas of emotional intelligence related to researchers' proposed model first area relates to awareness of emotions, second relates to cognitive capacity for emotions, third relates to personal capacity to recognize emotions and fourth relates to capacity to direct or control emotions to perform a particular act [13].

Observing emotions

The first and foremost phase to lead emotions is to correctly observe personal and others' emotions. This involves several aspects related to nonverbal communication and others' attitude of expressing themselves towards any individual or a group [13], [14].

Cognition of emotions

The second phase involves role of cognitive ability to deal with personal emotions. Mind keeps information to arrange emotions regarding particular situation and person reacts through using that information which control personal actions for particular situation [14].

Recognize emotions

Individual emotions varied in perception and presentation of situation. If anger temperament relates to any individual, the observer quickly gather mental information behind reason of anger and to recognize their emotions. For instance, if your leader is expressing anger towards subordinates, it might mean disappointment to subordinates' performance; or it could be the argument that leaders had with his wife earlier in the morning; or he got a fine ticket while driving to work this morning [14].

Control of emotions

The capacity to direct or control emotions is crucial phase of emotional intelligence. Directing personal emotions, reacting according to situation and reacting to the emotions of others all features are important in the phase of controlling emotions [15].

Emotional Intelligence in Applied Settings

Gender Differences in Emotional Intelligence

Research studies significantly indicates that there exists gender differences in emotional intelligence aspects. A study explored that female participants' assessment score regarding emotional intelligence are greater than male participants of the study, both in personal and organizational settings. Whereas slight differences to these results may occur due to change of instrument [16]. Another study [17] examined that male respondents of the study achieve lower scores than female respondents while assessment based on EI Test [18]. Study reported no significant difference between male respondents and female respondents while collecting the study data through Bar-On Emotion Quotient Inventory (EQ-i) [18]. Likewise a study [19] also mentioned no gender differences related to emotional intelligence while taking respondent data through Self-Report EI Test (SREIT). While some studies suggested that gender contributes as a demographic factor in emotional intelligence only when there exists probable cause of cognitive difference rather than considering overall demographic and capability factors. Gender differences is also notable fact in demographic factors of the respondent and holds considerable debate in research analysis. But there is also possibility of biasedness regarding assessment of results, such as considering only male respondent capable of responding to research inventory. There is still gap in the area of research regarding emotional intelligence while considering gender as demographic factor of respondent [17].

Applicability to Everyday Living

Different research studies has identified that emotional intelligence mostly have notable effects on routine matters of an individual. A study explained that greater level of individual emotional intelligence assures personal contentment in life [20]. Another research revealed that individuals with greater level of emotional intelligence were capable of effectively use adaptive life strategies and demonstrate improved psychological condition [21]. Measurement inventories of emotional intelligence have exemplified that individuals with higher emotional intelligence level are appeared to be spending healthier life style, positive attitudes towards individuals or groups to whom they are associated and keeping items those remind them about their loved ones [17].

Emotional intelligence in the workplace

Higher level of emotional intelligence also contributes towards individual progression at place of work. Therefore, the applied psychology also suggests being emotionally constant at workplace to achieve desired work achievements. Research disclosed major causes regarding individual assessment and improvement of emotional intelligence through using profession as its means, which includes: To achieve desired goals at professional place emotional intelligence capabilities are essential [22]. Many individuals enter the profession without having specific capabilities needed to perform professional tasks. Most of the organizations support and encourage several ways to enhance emotional intelligence while performing professional tasks [23].

Individuals with High Emotional Intelligence

Research had shown that higher emotional intelligence has stronger effects on personality of individual as compare to higher Intelligent Quotient. Researcher further argued that emotional intelligence is more influential as compare to Intelligent Quotient [24].The argument supported the previous research which disclosed that the forecasting attribute of Intelligent Quotient on organizational or educational settings is not much obvious, while performing educational tasks there exists considerable variance in I.Q level of individual which ranges from 10% to 25% [25].Further survey studies also found emotional intelligence as significant factor of personality dimension of individual [26]. Another study with 450 respondents informed that I.Q level has lesser effects on their academic achievement as compare to emotional intelligence, E.I is also essential for predicting achievement level of students which also contributes to individual dealing with depression and anxiety [27].

Self-Efficacy

Self-efficacy refers to individual's certainty to manage the mental information and deploy the sequence of actions in response to particular situation or to handle forthcoming situation. On the other hand, self-efficacy is individual's confidence regarding his/her capacity to be successful in specific circumstances. Research described this sort of personal confidence or certainty as factors of individual thinking, conduct and sensation. Individuals' approaches, capabilities and reasoning abilities in terms of research known as self-system. This kind of system acts as significant part regarding how an individual observe and react to diverse situations face by that individual. Moreover, self-efficacy acts as vital element of self-system of an individual [28].

Defining Self-Efficacy

There are several concepts those are interrelated with the concept of self-efficacy, to understand the concept of self-efficacy it is essential to differentiate it from its interrelated concepts.

Self-efficacy cannot be considered as a skill to observe a situation; it is individual's trust on personal competencies in relation to certain situation. It is not related to individual's certainty regarding personal capacity to deploy common psychomotor actions, but it is related to individual's confidence regarding personal capacity to manage and compose talents and capabilities in a diverse and puzzle situation. Self-efficacy competency is not just the expected performance or actions of an individual. Self-efficacy is also not a common response to a challenging situation. Common response is related to justification of situation containing individual reaction and circumstances after the reaction. Self-efficacy principles are related to personal belief about competencies. Self-efficacy cannot be related to aim and objects

to achieve certain goals. Objectives are the possible actions to achieve goal; and research studies had proven that objectives can be effected by several elements containing self-efficacy of an individual [29].

Self-efficacy cannot be interrelated with self-esteem. Self-esteem is related to individuals' awareness and beliefs about themselves and feelings related to that awareness and beliefs. Efficacy attributes in certain field of psychology will support individual's self-esteem only if individual is focused to improve these efficacy attributes [30].

Self-efficacy is not an intention, determination or need for direction. Individual may certainly in need of direction in certain situation but there is possibility that an individual is still having weak efficacy regarding certain situation [29], [30].

Self-Efficacy Comes From

Self-efficacy is not considered as heredity characteristic of any individual but rather it advances as time passes and being familiar with challenging situations. This process of advancement regarding these emotions begins in childhood and progress during whole life. Knowledge regarding developmental process of self-efficacy requires its interpretation of theoretical and conceptual knowledge. Social cognitive theory provides better interpretation of self-efficacy; which is related to the knowledge of human reasoning, reaction, feelings and encouragement that inspires an individual as an active member of society rather than a passive observer [31].

Social cognitive theory is based on four fundamental principles, which are as follows:

Every individuals possess influential reasoning abilities that allow them to establish mental information regarding routine life, the progression of impressive attitudes, testing of assumptions related to adopted attitudes while making expectations regarding consequences and the sharing of personal knowledge related to actions and their consequences. This process also involves personal scrutiny which relates to assess and evaluate personal attitudes, thinking and feelings. These actions are related to personal assessment and directing and controlling personal behavior [32].

Assumptions of Self-Efficacy

Performance Experiences

Personal engagements to real situations are stronger means to enhance individuals' self-efficacy in real sense. Effective attempt to manage personal behavior increases self-efficacy and expertise regarding that specific situation. Unsuccessful attempts on controlled behavior reduces self-efficacy for that domain and behavior [33].

Vicarious Experiences

These assumptions are related to observation of the individual regarding attitudes and activities of other people leads to self-efficacy of individual. Individual observes the conduct of person he/she is observing then assumes performing same activities and facing consequences at personal level. These type of assumptions have less influence on individual self-efficacy as compare to actual involvement in situation [34].

Imaginable Experiences

Self-efficacy can be through effective use of imagination power, such as an individual engaging into challenging situation through imagination. Such situations can be created in mind with the use of mental information related to real experiences and hypothesized experiences of individual, or these imagination can brought into the attention of individual through creating a complex and challenging situation with verbal conversation which is also a way used by psychiatrists, it is often referred as covert modeling. The actual experiences may bring more intensive and complex situation than hypothetical situation but imaginable experiences are somehow effective while supporting self-efficacy of an individual [35].

Verbal Persuasion

Self-efficacy is additionally effected by what other people expected us to perform and what they be certain of us to perform. Furthermore, verbal encouragement is also effected by several elements in regards to increase or decrease in self-efficacy such as persuasion competency, persuasion reliability and persuasion desirability by the persuader. There exists association between persuasion and behavioral changes. Despite that fact, personal engagement and field experiences are considered more authentic sources of long lasting effects on self-efficacy as compare to verbal persuasion [35].

Physiological and Emotional States

Self-efficacy is also effected by physical aspects and feelings of individual, it is gradual experience of individual to relate less amount of effort to failure as well as reasonable amount of effort to achieve particular goal and getting happiness. Therefore, through this process an individual is being conscious regarding undesirable physiological stimulation, it is also possible that individual can have self-doubt after not achieving success while having desirable physiological arousal and effort. Similarly, relaxed physiological atmosphere can lead to self-assurance in individual's personal capabilities for particular situation. Physiological efforts provide anticipation for increase in the level of self-efficacy, and integrate individual effort to group effort for a particular task. For instance, the task that is more psychomotor and requires power and energy to perform, in that case the observed self-efficacy of individual is effected by exhaustion and tiredness [36,33].

The Role of Self-Efficacy

Almost every individual is ascertain regarding desired goals they want to achieve, revolution they want to bring and tasks they want to undertake for achievement purpose. Though, there is also need to take certain actions to accomplish desired tasks in effective manner. Research had shown that self-efficacy act as fundamental attribute to achieve desired goals, accomplish particular tasks and to face challenging situations in life.

Individual with higher level of self-efficacy:

Reasonable level of self-efficacy for tasks to accomplish.

Mastery of desired tasks for particular challenging situations.

Preferred level of aptitude to perform the required tasks.

Affirm commitment with tasks and aptitude level.

Rapid improvement in case of facing hindrance or failure.

Individual with lower level of self-efficacy:

Find ways to escape while performing complex tasks.

Underestimate their skills to perform challenging tasks.

Avoid mastering desired tasks to accomplish goal.

Pay attention to failure rather than reasons of failure.

Fall in disappointment regarding their own capabilities [37].

Sources of Self-Efficacy

Self-efficacy could be increased through several sources other than fundamental sources.

Mastery Experiences.

Self-efficacy can be progressed through mastering the skills and abilities to effectively perform a particular task. Carrying out desired task in effective manner increases the level of self-efficacy of an individual. Similarly, while performing undesirable effort which could lead to unsuccessful attempt to a task can decrease the level of self-efficacy [38].

Social Modeling

Social modeling is related to taking notice of the productive performance of people who already achieved success in a particular task. This process enables an individual to observe the skills those are required to successfully achieve the desired goal. Through this mechanism they can master the equivalent processes to accomplish success [39], [40].

Social Persuasion

Research also emphasized that an individual could be convinced that they have the talent to gain achievement for particular goal. Positive and boosting remarks from people who are associated with individual can motive individual to achieve a particular goal. Verbal reinforcement can reduce stress and anxiety which helps any individual to gain focus on a particular task and to gain achievement as well [41].

Psychological Responses

Self-efficacy also deals with personal reactions to particular situation, these reactions also contribute towards self-efficacy. Attitudes, feelings, physical response and anxiety level can affect individuals' feeling regarding personal capabilities in specific circumstances. An individual that feels hesitation while talking in front of people may be having low level of self-efficacy in that particular situation. Research studies revealed that self-efficacy deals with perception and analysis of a particular situation rather than specifically dealing with personal sensation and physical response. Individual can improve self-efficacy through experiencing challenging situations while decreasing the anxiety level and by controlling attitude and emotions [42], [43].

METHODS

Participants

The present study was conducted to find out the relationship between Emotional Intelligent and Self Efficacy. For this purpose sample of 200 university students (100 males, 100 females) was collected from two major universities of Islamabad and Rawalpindi i.e. Quaid-e-Azam university and Arid Agricultural university. The age range of participants was between twenty and thirty, whereas there educational qualification varied from Bachelor to M.Phil.

INSTRUMENT

Two instruments were used to collect the data from the selected participants for this study.

The Schutte Self-report Emotional Intelligence Test (SSEIT) is method of measuring general Emotional Intelligence (EI), using four sub scales. This scale was developed by Schutte, et. al., in 1999 [44]. Emotional perception, Utilizing emotions, managing self-relevant emotions, managing others' emotions. The SSEIT is structured off the EI model by Mayer & Salovey [45]. The SSEIT model is closely associated with the EQ-I model of emotional intelligence.

The AES is a thirty-three-item self-report inventory which focuses on typical emotional intelligence and attempts to assess characteristic or trait emotional intelligence. The subjects rate themselves on the items using a five-point Likert-type scale. Total scale scores are calculated by reverse coding items 5, 28, and 33 and then summing all items. Scores can range from 33 to 165, with higher scores indicating characteristic emotional intelligence at a greater level. Its reliability is 0.87.

The Generalized self-efficacy scale (GSE) is a 10 item scale was developed by Schwarzer and Jerusalem in 1993 [47].The scale is intended to measure enthusiastic self-confidence used to handle major challenges of life. The focus of scale is to measure self-efficacy of an individual which is certainty of individual activities which result in achievement of desired goals. Four point Likert scale is used for the scale statements 1(not at all true) to 4(exactly true). Its reliability is alpha ranges from 0.75 to 0.94.

PROCEDURE

In this purpose first participant were knowledgeable all about the objectives of study and purpose as well. This student was conducted into two phases. In the first phase the pilot study was conducted to

assess the reliability of the instrument and main study was conducted to assess the results on sample of the study. The objectives of pilot study were to determine the psychometric properties of instruments used in the study and to find out the trends of data on small sample size. A sample of 50 students (25 males, 25 females) was taken from universities of Islamabad and Rawalpindi. Both questionnaires were administered to the sample. The psychometric properties of pilot study were found satisfactory. In second phase main study was conducted which considered of sample of 200 university students (100 males and 100 females). The psychometric properties of main study were also satisfactory. In this research Randomized Group Design was used because structured Questionnaires and Randomized sampling was used.

DATA ANALYSIS

First, measure the emotional intelligence and self-efficacy among university students and the relationship of emotional intelligence and self-efficacy the mean and standard deviation of emotional intelligence and self efficacy with its sub scales was calculated, to explore the differences of emotional intelligence and self-efficacy on selected demographic variables correlation coefficient range was calculated and to explore the gender difference on Emotional Intelligence and self-efficacy t test was applied to find out the mean difference between males and females on emotional intelligence, its subscales and self efficacy.

RESULT

The study was conducted in two phases that is Pilot study and Main study.

Pilot Study:

It is conducted to check the psychometric properties of the scales. For the research purpose we used sample of 50 university students (25 males, 25 females). They were selected from two major universities of Islamabad and Rawalpindi. The age range of participants were between twenty and thirty. Whereas there educational qualification varied from Bachelor to M.Phil.

The research was conducted of two major scales Schutte Self Report Emotional Intelligence Scale [44] and second is Schwarzer & Jerusalem Self Efficacy Scale [47]. These scales used on sample of 50 university students.

Pilot Study Results

The objectives of pilot study were to determine the psychometric properties of instruments used in the study and to find out the trends of data on small sample size.

Note. PE = Perception of Emotions; ME = Managing own Emotions; MOE = Managing other Emotions; UE = Utilizing of Emotions; EI = Emotional Intelligence; SE= Self Efficacy; SD = Standard Deviation; M = mean; n = Number of Items

Table 1 shows the value of Cronbach alpha of Emotional Intelligence scale and Balance Task Leadership and their sub-scales. The reliabilities of all scales and subscales are highly satisfactory of Emotional Intelligence and Self Efficacy except Managing Other Emotions subscale of Emotional Intelligence

Table 2 shows mean and standard deviations of Emotional Intelligence, its subscales and Self Efficacy scale.

Phase II:

Main Study: It is concerned with the attitude of students. For this purpose sample of 200 university students (100 males, 100 females) was collected from two major universities of Islamabad and Rawalpindi. The age range of participants was between twenty and thirty, whereas there educational qualification varied from Bachelor to M.Phil.

Main Study Results

Table 3 shows the value of Cronbach alpha of Emotional Intelligence scale and Balance Task Leadership and their sub-scales. The reliabilities of all scales and subscales are highly satisfactory of Emotional

Table 1 Psychometric properties of major study variable (N = 50)

Variables	*n*	*M*	*SD*	α	Range		skewness
					Potential	Actual	
PE	10	37.62	4.62	.640	26-50	10-50	.284
ME	9	34.06	3.47	.336	26-44	9-45	.106
MOE	8	30.26	3.63	.509	20-38	8-40	-.653
UE	6	23.98	3.60	.694	13-30	6-30	-1.18
EI	33	125.29	12.90	.843	89-152	33-165	-.625
SE	10	29.76	6.23	.819	12-39	10-40	-.986

Table 2 Summary of Inter correlations, Means and S.D for scores of variables (N = 50)

Measures	1	2	3	4	5	6
1. PE	-	.749**	.526**	.654**	.890**	.405**
2. ME	-	-	.510**	.641**	.860**	.371**
3. MOE	-	-	-	.550**	.761**	.246
4. UE	-	-	-	-	.841 **	.169
5. EI	-	-	-	-	-	.362**
6.SE	-	-	-	-	-	-
Mean	37.62	34.06	30.26	23.98	125.29	29.76
S.D	4.62	3.47	3.63	3.60	12.90	6.23

* P< 0.05, **p< 0.01

Intelligence and Self Efficacy except Managing Other Emotions subscale of Emotional Intelligence. It also indicates the mean and Standard Deviation of Emotional Intelligence scale and Self Efficacy scale and also its subscales. The actual and potential ranges of Emotional Intelligence scale its sub-scales and Self Efficacy scale shows in table which indicates that actual ranges are highly satisfactory. All the scales and most of the subscales are negatively skewed.

Table 4 shows mean and standard deviations of Emotional Intelligence and its subscales.

Table 5 shows inter-scale correlation of Emotional intelligence and Self Efficacy. The correlation coefficients range from .013 to .806**. There are significantly correlated in positive direction.

Table 6 shows inter-scale correlation of Emotional intelligence and Self Efficacy with Age. The correlation coefficients range from .070 to .162*. There are significantly correlated in positive direction. Table also shows inter-scale correlation of Emotional intelligence and Self Efficacy with Mother Education. The correlation coefficients range from .002 to .98. There are significantly correlated in positive direction. Table 6 in addition shows inter-scale correlation of Emotional intelligence and Self Efficacy with Father Education. The correlation coefficients range from -.008 to .111. There are significantly correlated in positive direction. Table 6 also shows inter-scale correlation of Emotional intelligence and Self Efficacy with birth order. The correlation coefficients range from .003 to .062*. There are significantly correlated in positive direction. Table 6 further shows inter-scale correlation of Emotional

Table 3 Psychometric properties of major study variable (N= 200)

Variables	*n*	*M*	*SD*	α	Range		skewness
					Potential	Actual	
PE	10	36.16	4.47	.616	10-50	21-49	.114
ME	9	35.20	4.23	.597	9-45	23-45	-.258
MOE	8	30.02	3.82	.480	8-40	20-39	-.029
UE	6	23.54	3.50	.658	6-30	13-30	-.557
EI	33	125.24	12.60	.834	33-165	87-160	.172
SE	10	29.11	6.16	.801	10-40	12-40	-.051

Table 4 Summary of Inter correlations, Means and S.D for scores of variables (N= 200)

Measures	1	2	3	4	5	6
1.PE	-	.441**	.416**	.467**	.773**	.170*
2.ME	-	-	.417**	.709**	.806**	.267**
3.MOE	-	-	-	.378**	.725**	.013
4.UE	-	-	-	-	.776**	.132
5.EI	-	-	-	-	-	.158**
6.SE	-	-	-	-	-	-
Mean	36.16	35.20	30.02	23.54	125.24	29.11
S.D	4.47	4.23	3.82	3.50	12.60	6.16

* P< 0.05, ** P< 0.01

Table 5 Correlation of Emotional Intelligence with Self Efficacy (N= 200)

Variables	1	2	3	4	5	6
1.PE	-	.441**	.416**	.467**	.773**	.170*
2.ME	-	-	.417**	.709**	.806**	.267**
3.MOE	-	-	-	.378**	.725**	.013
4.UE	-	-	-	-	.776**	.0132
5. EI	-	-	-	-	-	.158*
6.SE	-	-	-	-	-	-

* p<0.05, **p<0.01

Table 6 Relationship between certain Demographic Variables with Emotional Intelligence, its subscales and Self Efficacy of adults (N = 200)

Variables	Perception of Emotions	Managing own Emotions	Managing other Emotions	Utilizing of Emotions	Emotional Intelligence	Self Efficacy
Age	.078	.132	.162*	.070	.135	.059
Mothers' Education	.098	-.044	.002	.027	.034	.020
Fathers' Education	.102	-.008	.020	.051	.051	.111
Birth Order	-.110	.003	.062*	-.051	-.049	-.064
No. of Siblings	-.081	.096	.061	-.051	.000	-.028

* $p<0.05$

Table 7 Mean difference of Males and Females on Emotional intelligence, its subscales and Self Efficacy (N = 200)

Variables	Male (n =100)		Female (n = 100)		*t* (198)	*p*	95% CI		Cohen's *d*
	M	*S.D*	*M*	*S.D*			LL	UL	
PE	36.03	4.54	36.30	4.41	-.426	.671	-1.520	.980	0.06
ME	35.35	3.89	35.05	4.56	.500	.617	-.882	1.482	0.07
MOE	30.18	3.79	29.85	3.87	.609	.544	-.739	1.399	0.09
UE	23.48	3.27	23.60	3.73	-.242	.809	-1.098	.858	0.03
EI	125.50	12.86	124.99	12.39	.285	.776	-3.013	4.033	0.04
SE	28.10	6.92	30.12	5.13	-2.343	.020	-3.720	-.320	0.33

intelligence and Self Efficacy with number of siblings. The correlation coefficients range from -.028 to .096. There are significantly correlated in positive direction.

Table 7 indicates Mean difference of Males and Females on Emotional intelligence, its subscales and Self Efficacy that there is non-significant relationship between ($p>0.05$) of emotional Intelligence with gender and also it subscales but there is a significant relationship ($p<0.05$) of Self Efficacy Scale with gender.

DISCUSSION

Present study was aimed to find out the effect of Emotional Intelligence with Self Efficacy. The study was conducted in two phases that is pilot study and main study. Pilot study was conducted to assess the psychometric properties of instruments and analyze main hypothesis of the study to trend the data on a small sample. Results were satisfactory to start the second phase which was the main study.

The results of analysis related to psychometric properties showed that the value of Cronbach alpha of Emotional Intelligence scale, its sub-scales and Self Efficacy Scale. The reliabilities of all subscales are highly satisfactory except managing other emotions, subscale of Emotional Intelligence. It also indicated the mean of Emotional Intelligence scale and Self Efficacy scale. The actual and potential ranges of Emotional Intelligence scale and Self Efficacy and their sub-scales shows in table which indicates that potential ranges were highly satisfactory (See table 3).

Item total correlations were calculated in order to assess whether the items were consistent with the rest of the scale. The results of item total correlations were significant for all the items of Emotional Intelligence and its sub scales except its perception of emotions scale. The correlation coefficient suggests that most of the items are significantly positively related ($p< 0.01$) to the scale except item no 33 which is no significant and also negative correlated.

Another result of item total correlations was significant for all the items of Self Efficacy are positively related ($p< 0.01$) to the scale.

To estimate the trends of data, descriptive analysis was conducted on Emotional Intelligence scale and Self Efficacy Scale. Mean and standard deviation (see table 4) indicating the clustering of scores around the mean. The values of mean and standard deviations showed deviations from the mean on scales and its sub scales were normal.

Inter scale correlation coefficient of two instruments in order to assess the link of scale and subscales with one another. The results indicate that there is significant correlation between Emotional intelligence and Self Efficacy and positive directed and ranges from .013 to .806** (see table 4).

This moderate positive correlation related to the findings of "Hutchison" 2010, who's also has moderate positive correlation and suggested that due to the low score of factors related to emotional intelligence there is necessity for principals to focus on professional training of teacher to inculcate emotional intelligence into learners, this process must support the assessment programs through which emotional intelligence and self-efficacy of learners should be measured.

The results of Relationship between certain Demographic Variables with Emotional Intelligence, its subscales and Self Efficacy of adults. It shows inter-scale correlation of Emotional intelligence and Self Efficacy with Age. The correlation coefficients range from .070 to .162*. There are significantly correlated in positive direction. Table inter-scale correlation of Emotional intelligence and Self Efficacy with Mother Education shows the correlation coefficients range from .002 to .98. There are significantly correlated in positive direction. It also shows inter-scale correlation of Emotional intelligence and Self Efficacy with Father Education. The correlation coefficients range from -.008 to .111 (see table 5).There are significantly correlated in positive direction. Which shows that parents education develop a great effect on their children in most of the areas. Inter-scale correlation of Emotional intelligence and Self Efficacy with birth order shows the correlation coefficients range from .003 to .062*. There are significantly correlated in positive direction. It shows that individual Emotional Intelligence and Self Efficacy do not enhance or decrease by Birth order. Inter-scale correlation of Emotional intelligence and Self Efficacy with number of siblings shows the correlation coefficients range from -.028 to .096. There are significantly correlated in positive direction (see table 5).

By the study of gender differences there is no significant interaction ($p>0.05$) between Emotional intelligence and Self Efficacy (See table 6). Our findings is according to the [48] which also showed non-significant interaction ($p>0.05$) between Emotional intelligence and Self Efficacy among adolescence.

Moreover findings of this study showed that females have higher rate on Self Efficacy than males. However males found more Emotional intelligent than females. So we can't say that females or males beat each other. So there is no big difference of both genders between Emotional Intelligence and Self Efficacy.

The findings of this survey proved the 2 and 3 hypothesis, and this hypothesis is also proved according to the past research [49]. Which shows that boys were more confident in self-realization and maintaining wellness and girls were more confident in self-efficacy.

Moreover the role of family system also effects on Emotional intelligence and Self Efficacy that is whether the joint family system or nuclear family system affects. But the results of our study indicates that there is no significant relationship ($p>0.05$) of Emotional intelligence and Self Efficacy with family system (see table 7).

The findings Emotional Intelligence and Self Efficacy on Education are aligned to the study [50], which shows that the through integrating aptitude related to emotional intelligence in curriculum contents and instructional strategies would support to enhance the self-efficacy of the students in effective manner.

CONCLUSION

In last we concluded that research shows that greater the Emotional Intelligence, the more will be the Self Efficacy. The inter scale and inter items correlation of Emotional Intelligence and Self Efficacy were significant and positively correlated. There is not significant interaction ($p>0.05$) between Emotional intelligence and Self Efficacy with the Mean difference of Males and Females.

Competing Interests

The authors have declared that no competing interests exist.

ETHICAL STATEMENT

The participants were informed of the objectives of the research and guaranteed secrecy of their answers and fulfillment with the ethical values of privacy in data processing.

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References

1. Salami, S. O. (2010). Emotional intelligence, self-efficacy, psychological well-being and students attitudes: Implications for quality education. *European Journal of Educational Studies*, 2(3), 247-257.
2. Petrides, K. V., & Furnham, A. (2000). On the dimensional structure of emotional intelligence. *Personality and individual differences*, 29(2), 313-320. DOI: https://doi.org/10.1016/s0191-8869(99)00195-6
3. Bar-On, R. (1997). Bar-On Emotional Quotient Inventory (EQ-I): Technical Manual. Toronto, Canada: Multi-Health Systems.
4. Petrides, K. V., Furnham, A., & Mavroveli, S. (2007). Trait emotional intelligence: Moving forward in the field of EI. *Emotional intelligence: Knowns and unknowns*, 4, 151-166.
5. Multon, K. D., Brown, S. D., & Lent, R. W. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of counseling psychology*, 38(1), 30. DOI: https://doi.org/10.1037/0022-0167.38.1.30
6. Pajares, F. (2002). Overview of social cognitive theory and of self-efficacy. Prieiga per internetą: http://www.emory.edu/education/mfp/eff.html.
7. Pajares, F. (1997). Current directions in self-efficacy research. *Advances in motivation and achievement*, 10(149), 1-49.
8. Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191. DOI: https://doi.org/10.1037/0033-295x.84.2.191
9. Palmer, B., Donaldson, C., & Stough, C. (2002). Emotional intelligence and life satisfaction. *Personality and individual differences*, 33(7), 1091-1100. DOI: https://doi.org/10.1016/s0191-8869(01)00215-x
10. Bandura, A. (1997). *Self-Efficacy. The Exercise of Control*, New York: W H. Freeman & Co. Student Success, 333, 48461.
11. Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, cognition and personality*, 9(3), 185-211.
12. Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam Books.
13. Mayer, J. D., Salovey, P., Caruso, D. R., & Sternberg, R. J. (2000). Models of emotional intelligence. JD Mayer. In J. R. Sternburg (Ed.), *Handbook of Intelligence* (pp. 396-420). Cambridge, UK: Cambridge University Press. DOI: https://doi.org/10.1017/cbo9780511807947.019
14. Mayer, J.D., Salovey, P., & Caruso, D. (1998). Competing models of emotional intelligence. In R.J. Sternburg (Ed.), *Handbook of Human Intelligence* (2nd ed.). New York: Cambridge University Press.
15. Mayer, J. D., Caruso, D. R., & Salovey, P. (2000). Selecting a measure of emotional intelligence: The case for ability scales. In R. Bar-On & J. Parker (Ed's.), *The Handbook of Emotional Intelligence*. San Francisco: Jossey-Bass.

16. Mandell, B., & Pherwani, S. (2003). Relationship between emotional intelligence and transformational leadership style: A gender comparison. *Journal of business and psychology*, 17(3), 387-404. DOI: https://doi.org/10.1023/a:1022816409059
17. Brackett, M. A., Mayer, J. D., & Warner, R. M. (2004). Emotional intelligence and its relation to everyday behaviour. *Personality and Individual differences*, 36(6), 1387-1402. DOI: https://doi.org/10.1016/s0191-8869(03)00236-8
18. Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27(4), 267-298. DOI: https://doi.org/10.1016/s0160-2896(99)00016-1
19. Mayer, J. D., & Geher, G. (1996). Emotional intelligence and the identification of emotion. *Intelligence*, 22(2), 89-113. DOI: https://doi.org/10.1016/s0160-2896(96)90011-2
20. Palmer, B., Donaldson, C., & Stough, C. (2002). Emotional intelligence and life satisfaction. *Personality and individual differences*, 33(7), 1091-1100. DOI: https://doi.org/10.1016/s0191-8869(01)00215-x
21. Pellitteri, J. (2002). The relationship between emotional intelligence and ego defense mechanisms. *The Journal of psychology*, 136(2), 182-194. DOI: https://doi.org/10.1080/00223980209604149
22. Cherniss, C. (2000). Social and emotional competence in the workplace. In R. Bar-On &J. Parker (Ed's.), *The Handbook of Emotional Intelligence*. San Francisco: Jossey-Bass.
23. Cherniss, C., & Adler, M. (2000). *Promoting emotional intelligence in organizations: Make training in emotional intelligence effective*. American Society for Training and Development.
24. Goleman, D. (1995). *Emotional Intelligence*. New York: Bantam Books.
25. Hunter, J. E., & Hunter, R. F. (1984). Validity and utility of alternative predictors of job performance. *Psychological bulletin*, 96(1), 72. DOI: https://doi.org/10.1037/0033-2909.96.1.72
26. Hedlund, J., & Sternberg, R. J. (2000). Too many intelligences? Integrating social, emotional, and practical intelligence. In R. Bar-On & J.D. Parker (Ed's.), *The Handbook of Emotional Intelligence*. San Francisco: Jossey-Bass.
27. Snarey, J. R., & Vaillant, G. E. (1985). How lower-and working-class youth become middle-class adults: The association between ego defense mechanisms and upward social mobility. *Child development*, 899-910. DOI: https://doi.org/10.2307/1130102
28. Bandura, A. (1994). Self-efficacy In VS Ramachaudran (Ed.) *Encyclopedia of Human Behavior*, 4, 71-81. New York: Academic Press. (Reprinted in H. Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998).
29. Maddux, J. E., & Gosselin, J. T. (2012). *Self-efficacy*. The Guilford Press.
30. Bandura, A., Pastorelli, C., Barbaranelli, C., & Caprara, G. V. (1999). Self-efficacy pathways to childhood depression. *Journal of Personality and social Psychology*, 76(2), 258. DOI: https://doi.org/10.1037/0022-3514.76.2.258
31. Bandura, A. (2006). Guide for constructing self-efficacy scales. *Self-efficacy beliefs of adolescents*, 5(1), 307-337.
32. Tipton, R. M., & Worthington, E. L. (1984). The measurement of generalized self-efficacy: a study of construct validity. *Journal of personality Assessment*.
33. Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W.H.
34. Bandura, A., & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology*, 88(1), 87-99. DOI: https://doi.org/10.1037/0021-9010.88.1.87
35. Williams, S. L. (1995). Self-efficacy, anxiety, and phobic disorders. *Self-efficacy, adaptation, and adjustment*, 69-107. DOI: https://doi.org/10.1007/978-1-4419-6868-5_3
36. Bandura, A. (1986). *Social foundations of thought and action*. Upper Saddle River, NJ: Prentice Hall.
37. Bandura, A. (2004). Cultivate self-efficacy for personal and organizational effectiveness. In E. A. Locke (Ed.), *Handbook of principles of organizational behavior* (pp. 120-136). Malden, MA: Blackwell.
38. Bandura, A. (1978a). Reflections on self-efficacy. *Advances in behaviour research and therapy*, 1(4), 237-269. DOI: https://doi.org/10.1016/0146-6402(78)90012-7
39. Bandura, A. (1978b). The self-system in reciprocal determinism. *American psychologist*, 33(4), 344. DOI: https://doi.org/10.1037/0003-066x.33.4.344

40. Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191. DOI: https://doi.org/10.1037/0033-295x.84.2.191
41. Bandura, A. (1982). Self-efficacy mechanism in human agency. *American psychologist*, 37(2), 122. DOI: https://doi.org/10.1037/0003-066x.37.2.122
42. Bandura A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychol.*, 28, 117 - 148. DOI: https://doi.org/10.1207/s15326985ep2802_3
43. Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child development*, 67(3), 1206-1222. DOI: https://doi.org/10.2307/1131888
44. Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25, 167–177. DOI: https://doi.org/10.1016/s0191-8869(98)00001-4
45. Mayer, J. D., & Salovey, P. (2007). *Mayer-Salovery-Caruso emotional intelligence test*. Toronto: Multi-Health Systems Incorporated.
46. Jerusalem, M., & Schwarzer, R. (1993). Self-efficacy as a resource factor in stress appraisal processes. *Self-efficacy: Thought control of action*, 195213.
47. Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In: J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37).
48. Ream, K. S. (2010). The relationship of emotional intelligence and self-efficacy of first and second year principals in Missouri. University of Missouri-Columbia.
49. Yuen, M. (2002). Exploring Hong Kong Chinese guidance teachers' positive beliefs: A focus group study. *International Journal for the advancement of Counselling*, 24(3), 169-182. DOI: https://doi.org/10.1023/a:1022987421355
50. Hashemi, M. (2011). Language stress and anxiety among the English language learners. *Procedia-Social and Behavioral Sciences*, 30, 1811-1816. DOI: https://doi.org/10.1016/j.sbspro.2011.10.349

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