Relationship among Emotional Intelligence, Self-efficacy, and Achievement Score of Students at Elementary Level
Muhammad Shabbir Ali*, Naveed Azmat† and Sabahat Parveen‡

Abstract
The current study is an intention to explore the relationship among emotional intelligence, self-efficacy, and achievement scores of students at elementary level. Four hundred students of 5th class from twelve schools in district Faisalabad participated in the study. Self-developed instruments, Emotional Intelligence Survey (EIS) and Self-Efficacy Survey (SES) with reliability value of .83 and .79 respectively were used. The achievement score of the students were taken in the annual exam of 5th class. Data were analyzed using mean and Pearson product-moment correlation coefficient. The results revealed that there exists a strong positive and significant correlation between emotional intelligence and self-efficacy. The factors of these variables were also had strong positive and significant correlation with each other. Females have better achievement score as compared with males. The students belonging to high socio economic status achieved better performance. Urban areas and public sector schools have shown higher achievement score. However, Achievement score did not had any significant relationship with emotional intelligence and self-efficacy.

Keywords: Emotional intelligence, self-efficacy, academic achievement

Introduction
Academic performance, intellect and capability were found to be associated with various factors like socio-economic (Lillydahl, 1990), colleagues’ interactions (Bjarnason, 2000), and inspiration (Bergin, 1998; Bong, 2001). Emotional intelligence is another element that is assumed to have an influence on the academic achievement. Primarily, the emotional intelligence is considered a sub-factor of social intelligence. Emotional intelligence is well-defined by Salovey and Mayer (1990) as the procedure of emotional information of self-assessment and others’ feelings exactly with the regulation of feeling for better life. Cooper and Sawaf (1997) also defend as the ability of using efficiently the emotions as source of human drive, info, influence and connection.

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In the view point of Espstein (1998), a mental a skill that deals with emotions as well as means of understanding. Persons with greater emotional intelligence are born up in emotionally sensitive families, open to criticism, and show their feelings effectively, aesthetics nature, high morals, ethic oriented, leadership role, and innovative knowledge to solve problems (Mayer, Salovey, & Caruso, 2004).

The most prevalent factor in recent researches that is supposed to affect academic performance is emotional intelligence (Yazici, Seyis&Altun, 2011). In educational setting, both cognitive and emotional intelligence are important in developing academic achievement and quality of life among students. Academic self-efficacy is the sense of feeling in completing the academic tasks effectively. Learners’ goals, level of motivation, and academic attainments affect their capability beliefs in knowledge and receiving better academic achievements (Schunk, 2009).

Self-efficacy has many types. They are general self-efficacy, social self-efficacy (colleagues), family self-efficacy (parents) and educational self-efficacy (intuitional). There is a significant rise in emotional intelligence and self-efficacy. The findings of the study show that there exists a significant positive relationship in self-efficacy and emotional intelligence. On the other hand, no significant variation is perceived in academic performance (Goreyshi, kargar, Noohi, &Ajilchi, 2013).

According to Motlagh, Amrai, Yazdani, Abderahim, and Souri (2011), self-efficacy is an extensive aspect in academic attainment. In one of his study, Pajares (2002) revealed that individuals with low level of self-efficacy find it difficult to solve the problems and it leads to poor results, despair and pessimism toward the solution of problems. The studies of Bandra and Locke (2003) supported the self-efficacy belief to improve of person’s action. A positive and strong correlation was found between performance and self-efficacy. The results of the experimental studies conducted by Staikovic and Luthans (1988) investigated a strong and positive relationship between the performance and self-efficacy. Same findings were revealed by Multon, Brown, and Leni (1991) the academic performance and self-efficacy of students. Many studies have presented the positive correlation between self-regulated learning, self-efficacy and academic attainments (Wigfield, Eccles, Schiefele, Roiser& Kean, 2006; Zimmerman, Banudra, & Martinez, Pons, 1992; Denissen, Zarrete, &Eccles, 2007).

In the view point of Bandura (2006) self-efficacy is the ability by birth that must be controlled in behaviour, collective and scholastic sub-skills with the self-beliefs, self-assurance, problem-solving, and positive thoughts. Positive thoughts make it easy to overcome the sense of losing.
Learners with greater self-efficacy beliefs participate in learning activities as compared with students with low self-efficacy. They take the activities more seriously and develop more operational strategies in contradiction of the difficulties they face (Eggen&Kauchak, 1997). Self-efficacy facilitate the learners to attain new knowledge and to grow their skills for leading a better and purposeful (Bandura, 1995). Therefore, strengthening learners' specific resources like self-efficacy would lead to attain educational objectives.

**Objectives of the study**
Following objectives were designed.
1. To explore the mean scores of emotional intelligence, self-efficacy, and achievement score with respect to different variables among 5th grade students.
2. To investigate the relationship between emotional intelligence and self-efficacy of students with respect to demographic variables.
3. To find out the relationship among emotional intelligence, self-efficacy and achievement score at elementary level.

**Hypotheses**
Following hypotheses were tested to achieve the required objectives:

- **H₀₁**: There is no significant difference in the mean achievement score of variables.
- **H₀₂**: There is no significant relationship between emotional intelligence and self-efficacy of students with respect to demographic variables at elementary level.
- **H₀₃**: There is no significant relationship among emotional intelligence, self-efficacy and achievement score of students at elementary level.
- **H₀₄**: There is no significant relationship among emotional intelligence and self-efficacy factors of 5th grade students.

**Method**
**Participants**
Twelve elementary schools were selected randomly including six schools from public and six from private sectors located in district Faisalabad. From each category three schools were taken from urban areas and three from rural areas further subdivided into two males’ schools and one female school. Class five students were selected for the study. A total of four hundred students (188 males with mean score= 63 and 212 females with mean score=64) of class five were selected randomly from these schools. Socioeconomic status of students was categorized as (parents income above 40000=High, Mean achievement score=65, 20000-40000= moderate, Mean achievement score =63, and below 20000=low, Mean achievement score =62). On the basis of father qualification Mean achievement score Illiterate=60, Mean achievement score of MA,
MSc=63, Professionals Mean=66, Intermediate M=61, BA M=64, above masters M=71. Institute wise achievement score Public sector M=65, Private M=64. With respect to school location Urban M=65, rural M=62.

Instruments

**Emotional Intelligence Survey (EIS)**

Emotional intelligence survey was developed by the researchers on five point Likert scale by selecting the items frequently used in literature. Twenty eight items were selected after pilot testing and calculating reliability. EIS has four factors (7 items each factor). They were, Feeling and managing the emotions, Self-motivation, Empathy and relationship oriented. The reliability of the instrument was calculated using Cronbach Alpha which was .83.

**Self-Efficacy Survey (SES)**

The self-efficacy survey was a self-developed instrument on five point Likert scale to get the information from the respondents. The SES has twenty items with four sub factors (5 items each factor). They were Start behaviour, Resume behaviour, Behaviour completion and Disturbance handler. After the validation by three experts in the field, its reliability was computed. The Cronbach Alpha value was .79.

Data Collection method

Data were collected through survey method. Two instruments were used for this purpose. The demographic variables like gender, institution, father qualification, parents’ socio-economic status, and school location were mentioned in the instruments. The achievement score of the students was taken from the result of the annual exam.

Data Analysis

As the study was correlational, data were analyzed using SPSS version 22. Mean, standard deviation, and Pearson “r” was applied. The process of hypothesis testing is as under:

H₀: There is no significant difference in the mean achievement score of variables.

Table 1

**Gender Wise Comparison of Mean Values of Variables**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Gender</th>
<th>Emotional Int.</th>
<th>Self-Efficacy</th>
<th>Achievement Sc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>3.69</td>
<td>3.77</td>
<td>63</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>3.73</td>
<td>3.74</td>
<td>64</td>
</tr>
<tr>
<td>3</td>
<td>Public</td>
<td>3.81</td>
<td>3.78</td>
<td>65</td>
</tr>
<tr>
<td>4</td>
<td>Private</td>
<td>3.67</td>
<td>3.70</td>
<td>64</td>
</tr>
<tr>
<td>5</td>
<td>Urban</td>
<td>3.73</td>
<td>3.76</td>
<td>65</td>
</tr>
<tr>
<td>6</td>
<td>Rural</td>
<td>3.69</td>
<td>3.75</td>
<td>62</td>
</tr>
<tr>
<td>7</td>
<td>Socio Ec. Status</td>
<td>3.73</td>
<td>3.74</td>
<td>65</td>
</tr>
</tbody>
</table>
A total of four hundred students (188 males with mean score= 63 and 212 females with mean score=64) of class five were analyzed. Socioeconomic status of students was categorized as (parents income above 40000=High, Mean achievement score=65, 20000-40000=moderate, Mean achievement score =63, and below 20000=low, Mean achievement score =62). On the basis of father qualification Mean achievement score Illiterate=60, Mean achievement score of MA, MSc=63, Professionals Mean=66, Intermediate M=61, BA M=64, above masters M=71. Institute wise achievement score Public sector M=65, Private M=64. With respect to school location Urban M=65, rural M=62.

H₂: There is no significant relationship between emotional intelligence and self-efficacy of students with respect to demographic variables at elementary level.

Table 2

<table>
<thead>
<tr>
<th>Factor</th>
<th>Self-efficacy</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional intelligence Overall</td>
<td>.711**</td>
<td></td>
</tr>
<tr>
<td>Emotional intelligence Males</td>
<td>.753**</td>
<td></td>
</tr>
<tr>
<td>Emotional intelligence Females</td>
<td>.671**</td>
<td>.000</td>
</tr>
<tr>
<td>Emotional intelligence Public</td>
<td>.678**</td>
<td></td>
</tr>
<tr>
<td>Emotional intelligence Private</td>
<td>.685**</td>
<td></td>
</tr>
<tr>
<td>Emotional intelligence Urban</td>
<td>.703**</td>
<td></td>
</tr>
<tr>
<td>Emotional intelligence Rural</td>
<td>.716**</td>
<td></td>
</tr>
</tbody>
</table>

The correlation between emotional intelligence and self-efficacy was examined using Pearson product-moment correlation coefficient. Initial analyses were executed to check for assumptions. It was found that there was a positive and strong significant correlation between all the variables, $r = .711, .753, .671, .678, .685, .703, .716, n = 400, p < .01$ and .05. So the null hypothesis that, there is no significant relationship between emotional intelligence and self-efficacy of students with respect to demographic variables at elementary level was rejected. It was obvious that there exists a strong and positive relationship between self-
efficacy and emotional intelligence with respect to gender, institute, and location. When emotional intelligence increases, self-efficacy level of students also increases.

H₀₃: There is no significant relationship among emotional intelligence, self-efficacy and achievement score of students at elementary level.

Table 3
*Relationship among Emotional Intelligence, Self-Efficacy and Achievement Score*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Achievement Score</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional intelligence</td>
<td>-.045</td>
<td>.366</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>-.041</td>
<td>.410</td>
</tr>
</tbody>
</table>

N=400

The correlation among emotional intelligence, self-efficacy and achievement score was examined using Pearson product-moment correlation coefficient. Initial analyses were executed to confirm no abuse of the suppositions of linearity, normality, and homoscedasticity. It was found that there was no correlation of achievement score with emotional intelligence and self-efficacy variables, \( r = -.045 \), \( n = 400 \), \( p > .05 \). So the null hypothesis that, there is no significant relationship among emotional intelligence, self-efficacy and achievement score of students at elementary level was accepted. It was evident that no relationship of achievement score found with emotional intelligence and self-efficacy of 5th grade students.

H₀₄: there is no significant relationship among emotional intelligence and self-efficacy factors of 5th grade students.

Table 4
*Correlation among Emotional Intelligence and Self-Efficacy Factors*

<table>
<thead>
<tr>
<th>S. no</th>
<th>Factors</th>
<th>Start Behavior</th>
<th>Resume Behavior</th>
<th>Behavior Completion</th>
<th>Disturbance handler</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Feel and manage emotions</td>
<td>.553**</td>
<td>.467**</td>
<td>.539**</td>
<td>.188**</td>
</tr>
<tr>
<td>2</td>
<td>Self-Motivation</td>
<td>.367**</td>
<td>.363**</td>
<td>.372**</td>
<td>.182**</td>
</tr>
<tr>
<td>3</td>
<td>Empathy</td>
<td>.548**</td>
<td>.450**</td>
<td>.453**</td>
<td>.174**</td>
</tr>
<tr>
<td>4</td>
<td>Relationship oriented</td>
<td>.537**</td>
<td>.485**</td>
<td>.540**</td>
<td>.195**</td>
</tr>
</tbody>
</table>

N=400

The correlation among emotional intelligence and self-efficacy factors was studied using Pearson product-moment correlation coefficient. Initial analyses were performed to check for assumptions. It was found that there was a positive and strong significant correlation between all the
factors, $p < .01$ and .05. So the null hypothesis that, there is no significant relationship among emotional intelligence and self-efficacy factors of 5th grade students was rejected. It was clear that there exists a strong and positive relationship among self-efficacy and emotional intelligence factors. When mean achievement score of emotional intelligence factors increase, self-efficacy factors of students also increase.

**Discussion**
Female students secured better achievement score as compared with male students. The reason behind is that female students manage their academic career well as compared with male students. This study is similar to other studies that females’ academic inspiration was better than the males’ (Pajares & Voliante, 2002). Many studies revealed that both genders deliver brilliance results to each other in various academic fields (Kitchenham, 2002; Warrington & Younger, 2000).

On the basis of socio economic status, the students of the parents with high socio economic status performed the better than moderate and low economic status. Financial assistance to students is a better source of contentment because they fulfill their academic needs well when they have sufficient balance and support from parents. On the other hand the mean achievement score of low socio economic status received low achievement score. It is obvious that they cannot fulfill their academic requirements and live from hand to mouth. The current study is consistent with Muijs (1997) and Yang’s (2003) findings that the students with higher level of socio-economic status performed better academically.

The achievement score of students on the basis of father qualification was investigated higher as qualification increases (Illiterate=60, Masters= 63, and above masters 71). The students find it easy to consult their parents regarding their studies. High qualified parents support their kids towards the careers better as they have experience the jobs well. They accommodate and facilitate their kids and have positive understanding towards the future. The results favor the study of Pajares and Johnson (1996) that qualification is the expectation of academic success. The students of public sector schools secured higher achievement score as compared with private sector schools. Our public sector institutions are still working well as compared with street schools. Higher qualified staff, better infrastructure and refresher courses for the staff made the students satisfied as compared with private schools. With respect to school location, the students in
urban areas schools received higher percentage when compared with rural areas schools. Urban areas schools have proper infrastructure and staff to support the students as compared with rural areas schools. It was obvious that there exists a strong and positive relationship between self-efficacy and emotional intelligence with respect to gender, institute, and location. When emotional intelligence increases, self-efficacy level of students also increases. It was found that there was no correlation of achievement score with emotional intelligence and self-efficacy variables, \( r = -.045, n = 400, p > .05 \). So the null hypothesis that, there is no significant relationship among emotional intelligence, self-efficacy and achievement score of students at elementary level was accepted. It was evident that no relationship of achievement score found with emotional intelligence and self-efficacy of 5th grade students. The results contradict the study of Schunk and Swartz (1993) who found positive correlation between the two variables. This finding is not consistent with the findings of the study of Parker, et al. (2004) that show the emotional intelligence is a predictor of academic success. On the other hand, the studies suggest that the emotional intelligence is not a strong predictor of academic achievement (O'Connor, Jr., & Little, 2002).

The correlation among emotional intelligence and self-efficacy factors was studied using Pearson product-moment correlation coefficient. Initial analyses were performed to check for assumptions. It was found that there was a positive and strong significant correlation between all the factors, \( p < .01 \) and \( .05 \). So the null hypothesis that, there is no significant relationship among emotional intelligence and self-efficacy factors of 5th grade students was rejected. It was clear that there exists a strong and positive relationship among self-efficacy and emotional intelligence factors. When mean achievement score of emotional intelligence factors increase, self-efficacy factors of students also increase. Students’ academic inspiration and academic achievements have negative effects (Phillips & Lindsay, 2006) or positive effects (Wentzel, 1991) with respect to friendly relationships and qualification.

References


