Exploring the Relationship between Test-Anxiety, Emotional Intelligence and Academic Performance among University Students

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Abstract
This study was conducted to find the relationship of test-anxiety, emotional intelligence and academic performance of public private sector university students. A sample of 388 students, 194 male and 194 females was drawn through convenient sampling from the Public and Private universities of Karachi in Pakistan, using a cross sectional design. Test anxiety was assessed through Westside Test Anxiety Scale and emotional intelligence was assessed using The Schutte Emotional Intelligence Scale. Performance of the last two semesters attended by the students was used to assess academic performance and demographic information was gathered through the demographic form. The “Pearson Product Correlation” was calculated to find the relation between test anxiety and emotional intelligence and academic performance. t-test for independent sample was used to obtain the differences in test-anxiety and emotional intelligence and gender in Public and Private sector university students’ academic performance on the respective variables. The results revealed an inverse relationship between test-anxiety and emotional intelligence, academic performance. However, the results showed a positive relation between emotional intelligence and academic performance. Gender differences were found in test anxiety but not in emotional intelligence. The students of both the sectors differed in test anxiety, whereas both the groups did not differ on the scores of emotional intelligence. It is incumbent on educational institutes to provide psychological services to students who find it hard to handle exam situations in the same way as financial assistance is provided to those who need it.
Key words: emotional intelligence, academic performance, test anxiety, university students.

Introduction

Experiencing anxiety is a normal phenomenon and has been studied extensively in psychology. Normality itself is not anxiety free, rather a small level of anxiety is required for normal functioning. However, it is the intensity of anxiety that makes it problematic and challenging. Like other spheres of life, anxiety has been found across different situations in life, and the academic setting is no exception. If it is not treated at earlier stages, it may give way to the feelings of worthlessness, which eventually will never hinder the person from achieving anything, including academic success (Huberty, 2009).

Besides treatment for anxiety, there are also some personality attributes that help cope with this much dreaded condition. Emotional intelligence plays an important role in assessing stressful tasks and task-performance because there is a positive relation between task performance and emotional intelligence (Austin, 2004; Petrides & Furnham, 2003). Parker et al, (2006) found that emotional intelligence is associated with adaptive behavior, better academic performance and retention. Moreover, the work of Jahangirpour (2012) proved an inverse relationship between emotional intelligence and stress.

In the case of academia, students are provided training and coaching and then put on the edge for evaluation. This process of evaluation has a built-in element of pressure which could on the one hand facilitate the performance of few but on the other hand, prove detrimental for others. Such a situation has been labelled by Spielberger & Vagg (1995) as “test anxiety.” The attribute which facilitates the performance of few has been identified as “emotional intelligence” which is the ability to comprehend one's own emotional state and utilize this capacity for everyday functioning. Lam (2002) stated that there was a positive correlation between emotional intelligence and individual performance. Zafer and Akhter (2023) studied the role of emotional intelligence in classroom management styles in Raheem Yar Khan district of Punjab. Findings revealed that anxiety was heightened in Lassie Farrie and authoritarian management styles. These two styles were found to be low on empathy and students found themselves unguided. Such a situation renders them vulnerable to the adversities of the exam situation. Furthermore,
findings showed that teachers’ emotional intelligence plays an important role in alleviating students’ anxiety. However, the component of emotional intelligence is not common to everybody which renders many people to become vulnerable to stress and anxiety. Hence it is imperative to explore this aspect of personality, address related issues and inculcate the trait so that people can capitalize on their effort and skills.

**Rationale of the Study**

As emotional intelligence seems to be implicated in all kinds of stressful situations, including test in academia, the present study attempts to take an exploratory approach at the interplay of emotional intelligence in academic task performance, particularly at the higher education level. Though the area has already been explored in research in the Pakistani context, it has been done so only within the school population. The present study incorporates the issues of adult population at the higher education level so that the students are prepared for challenges faced in practical life. The understanding about the interplay of these variables at higher educational level will broaden our view of these concepts.

**Literature Review**

Test Anxiety has been identified as an emotional feeling which any individual experiences as a result of own doubt in his/her own potential, particularly in a test taking situation. This negative feeling incapacitates individuals from facing challenges of testing situations and enhances anxiety because their ego is threatened due to being evaluated (Lazarus, 1999). Instead of positive or proactive coping, test anxiety engulfs the person in maladaptive cognitive responses, such as, worry, fear and anxiety related to academic stressors (Sarason, 1984).

Liebert & Morris (1967) defined emotionality as the capacity of students to recognize and understand their feelings, especially those related to task performance and psychological and physiological responses. Ahmed and Aziz (2019) measured the emotional intelligence and test anxiety of four colleges of Lahore city. According to them, girls possessed higher levels of emotional intelligence than boys.

Eruvenkai and Simon (2021) measured emotional intelligence and test anxiety among adolescent students in Mumbai, but due to the smaller sample size
of 100 students they failed to find any relation between emotional intelligence and test anxiety. Moreover, no gender differences were reported in the said variables.

Zeidner (1998) highlighted that it is during middle school that gender differences in test anxiety begin to appear, and that female students express higher test anxiety as compared to male students. Chapell et al. (2005) reported similar findings regarding female undergraduate and graduate students who experience more test anxiety than their male counterparts despite having higher GPAs than male students. Based on the result of a survey, Heydari (2012) also emphasized that female students have a higher level of test anxiety than male students.

Blessing and Florence (2019) in their study, examined the impact of anxiety on the academic performance of secondary school students, including the variations among socioeconomic groups. They found a significant difference (mean difference of 9.1) between the lower and upper socioeconomic groups and also found that exam anxiety varied by gender in high school students.

Additionally, Richard et al. (2022) used an experimental research design to examine how test anxiety affected Education College students. To investigate the impact of test anxiety, they used pretest and posttest conditions with and without treatment. Their findings showed a substantial variation in test anxiety's impact on performance between socioeconomic groups. They also learned the distinction between anxiety conditions with and without treatment for pretest and posttest. In addition, while studying gender differences, they found that female students performed better after treatment in both numerical and non-numeric courses.

The literature that has been cited thus far raises the question: how might anxiety's effects be mitigated? Subsequent studies continued examining those elements, and Goleman (1995) proposed the idea of emotional intelligence, which holds that a person's social, behavioral, and emotional tendencies—along with his knowledge and intelligence—are contributing factors to his/her performance in school. This includes emotional inclination, degree of accountability (studying), and the capacity to restrain emotions in a range of emotionally taxing circumstances. Furthermore, in 2005, Savenkov identified the concept of social perception and social memory in the social intelligence and expanded the concept of emotional intelligence as the potential human capabilities.
Izmaylova et al. (2021) examined the relationship between general and emotional intelligence in preschool children older than five years. He examined the emotional states of children with schematic and real images, the cognitive intelligence was measured through preschool version of WISC. He found that those with high general intelligence only 50% showed high emotional intelligence and the rest 50 % had low emotional intelligence. The same was found for children with average intelligence but those with above average intelligence only 20% showed high emotional intelligence. In the group with low intelligence 75% showed high emotional intelligence. He concluded that these two intelligences were not correlated at all with r= 0.012.

Stevens et al. (2019) explored the relation of academic stress and emotional intelligence in college students. They found moderate negative correlation between the said variables. Moreover, they found no significant differences gender wise in academic stress, t’ value was insignificant but both the genders crossed the cutoff point, however female students were higher on academic stress and male students were higher on trait emotional intelligence.

Malakar (2019) examined students' emotional intelligence and academic achievement and found that, based on how they scored on a test of test anxiety, students in the high anxious group fared differently from students in the low anxious group. Additionally, these groups also differed on the variable of emotional intelligence. Chang and Tsai (2022) on the other hand, showed that emotional intelligence has more impact on students’ learning motivation and self-efficacy than it has on academic achievement. Stankovska et al. (2018) studied emotional intelligence, test anxiety and academic stress among university students and found a positive correlation among test anxiety, emotional intelligence, and academic stress in high academic performance and negative correlation between emotional intelligence, academic stress and test anxiety in low academic performance. They also found significant gender differences on the variable of emotional intelligence. A study conducted by Malik et al. (2013) examined the relation of emotional intelligence and test anxiety of secondary school students of Punjab. Their results showed negative correlation between test anxiety and emotional intelligence. It was proposed that to enhance emotional intelligence, test anxiety must be seriously addressed.
ALmegewly et al. (2022) studied the relation of emotional intelligence and academic performance among undergraduate nursing students. They discovered only a small degree of positive correlation between emotional intelligence and academic achievement.

Aparicio- Flores et al. (2021) identified several pathways which affect the relationship between emotional intelligence and academic performance. Findings showed that emotional control allows students to produce positive emotions which in turn facilitate academic performance. In addition, ability to regulate emotions allows them to control negative emotions which facilitates them to assess the demands of learning situations accurately. According to Costa & Faria (2020) different components of emotional intelligence impacts the achievement differently. In a study conducted by Romano et al. (2020), understanding and managing emotions were found to be associated with academic achievement whereas perception of emotions and use of emotions to facilitate thought were weakly related to academic achievement. Additionally, managing and understanding emotions had a strong correlation with academic achievement.

Zheng et al. (2023) studied 1315 students, ages ranging from 17 to 25 years, from several Chinese universities. They discovered that while there was a negative correlation between test anxiety and regulatory emotional self-efficacy, they found a positive correlation between regulatory emotional self-efficacy and parental expectations. However, the same was negatively correlated with test anxiety. Among freshmen, they discovered a strong positive association between test anxiety and academic achievement.

**Hypotheses**

i. There would be an inverse relationship between the scores of emotional intelligence and test-anxiety of university students.

ii. There would be positive relationship between the scores of academic performance and emotional intelligence of university students.

iii. There would be inverse relationship between the scores of academic performance and test-anxiety of university students.

iv. There would be a difference in the scores of test-anxiety and emotional intelligence between students of public and private sector universities.
v. There would be gender differences in the scores of emotional intelligence and test-anxiety between male and female university students.

Methodology

Design of the study

The present study follows the quantitative, cross-sectional design with correlational approach.

Sample Selection

Sample calculated through G*-Power (Version3.1.9.4) with an effect size of 0.40, α error 0.05 with power of 0.95 (Abbas et al., 2021). G power calculator generated a sample size of 388 participants, with 194 in each group, http://www.gpower.hhu.de/en.html. The participants were approached randomly and there were 194 students from private sector universities. Among those 97 were males and 97 females. The other 194 were sampled from public universities, out of which, 97 were males and 97 were females. Their age range was taken between 18 to 25 years.

Inclusion and Exclusion Criteria

Students below the age of 18 and above the age of 25 were excluded. Persons with disabilities were also excluded. Students who were not studying in any university were excluded. Student between the age of 18 and above the age of 25 were included. Physically abled persons were included. Only university students were included. Those who agreed to participate were included.

Measures

Demographic Form: The demographic form provides information about the enrollment in a university, and other personal information such as age, education, family income, family type and grade points.

Schutte Emotional Intelligence Scale (SEIS): Schutte Emotional Intelligence Scale (SEIS) is a 33 item self-report inventory focusing on emotional intelligence (Schutte et al., 2009). It consists of four subscales 1) perception of emotions 2)
managing own emotions 3) managing others’ emotions 4) utilization of emotions. Items can be rated on five-point Likert type scale ranging from strongly disagree=1 to strongly agree=5. Scores can range from 33 to 165, with higher scores indicating more characteristic emotional intelligence. It has d internal consistency with Cronbach’s alpha for total scale .90 and test-retest reliability .78. It has a reverse scoring system for some items, (5, 28 and 33).

The most widely used subscales derived from the 33-item Assessing Emotions Scale are those based on factors identified by Petrides and Furnham (2003), Ciarrochi et al. (2001). The mean alpha across samples is .87 (Schutte et al.,1998).

**Westside Test Anxiety Scale (WTAS)**

The Westside Test Anxiety Scale is a 10 item self-report inventory (Driscoll, 2007). Items can be rated on five points Likert scale ranging from not at all never true=1 to extremely always true=5. Items focus strongly on performance impairments, with 6 of 10 items specifically about performance problems (Items 1, 4, 5, 6, 8, and 10), and 4 items, (2, 3, 7, and 9) measure Worry (catastrophizing). Items are all scored positive, and scores can range from 10 to 50 with higher scores indicating extremely high anxiety. Internal consistency ranges from .78 to .89 across samples (Onyeizugbo, 2008; Saravanan et al., 2014).

**Procedure**

The duration of the running semester was chosen deliberately by the researcher to apply and both the scales. The questionnaires needed approximately 20 minutes to complete and participants’ queries were entertained. Instructions according to the test’s manuals were followed and responses of participants were recorded for data analysis.

**Ethical Considerations**

Administrators of the universities were sent a letter, describing the objectives of the study, in order to obtain consent for the research. After permission was granted, students were approached at their institution through their faculty. Students who showed willingness to participate in the study were informed about purpose of study and were assured of the confidentiality of their identity and data.
findings. Also, they were asked to give their verbal and written consent, and were informed that they could withdraw at any point if they felt uncomfortable.

Data Analysis

The Statistical Package for Social Sciences (SPSS 22.0) was used to analyze the data. To illustrate sample characteristics such as age, gender and academic grades, descriptive statistics including mean, and standard deviation were calculated. Independent t-test was calculated to investigate the group and gender differences on the variables of test-anxiety and emotional intelligence among the students from public and private sector universities. Pearson product moment correlation was applied to calculate the relationship between test-anxiety, emotional intelligence and academic performance of university students.

Results

Table 1

<table>
<thead>
<tr>
<th></th>
<th>SES 1</th>
<th>SES 2</th>
<th>SES 3</th>
<th>Nuclear</th>
<th>Joint</th>
</tr>
</thead>
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<tr>
<td>Institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gov.</td>
<td>97</td>
<td>97</td>
<td>73</td>
<td>87</td>
<td>34</td>
</tr>
<tr>
<td>Pvt.</td>
<td>97</td>
<td>97</td>
<td>69</td>
<td>64</td>
<td>61</td>
</tr>
<tr>
<td>Female(n=194)</td>
<td>97</td>
<td>97</td>
<td>69</td>
<td>64</td>
<td>61</td>
</tr>
<tr>
<td>Male(n=194)</td>
<td>97</td>
<td>97</td>
<td>73</td>
<td>87</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
<td>194</td>
<td>142</td>
<td>151</td>
<td>95</td>
</tr>
</tbody>
</table>

The table 1 shows the distribution of sample in terms of SES (Socioeconomic Status, SES 1, SES 2, SES 3). Types of institutions (govt and private), family type (nuclear and joint) and gender (male & female).
Table 2

Correlations between CGPA, WTAS, and SCHUTTE Scales (n=388)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- CGPA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2- WTAS Worry</td>
<td>-.635**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3- WTAS Incapacity</td>
<td>-.751**</td>
<td>.536**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4- WTAS Total</td>
<td>-.796**</td>
<td>.845**</td>
<td>.904**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5- S - Perception</td>
<td>.467**</td>
<td>-.438**</td>
<td>-.506**</td>
<td>-.542**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6- S - Managing Own</td>
<td>.363**</td>
<td>-.351**</td>
<td>-.380**</td>
<td>-.418**</td>
<td>.563**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7- S - Managing Others</td>
<td>.407**</td>
<td>-.351**</td>
<td>-.394**</td>
<td>-.427**</td>
<td>.570**</td>
<td>.596**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8- S - Utilization</td>
<td>.463**</td>
<td>-.407**</td>
<td>-.522**</td>
<td>-.536**</td>
<td>.550**</td>
<td>.514**</td>
<td>.522**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9- S – Total</td>
<td>.524**</td>
<td>-.476**</td>
<td>-.557**</td>
<td>-.593**</td>
<td>.825**</td>
<td>.814**</td>
<td>.816**</td>
<td>.805**</td>
<td>1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (1-tailed).

The table 2 shows the correlation between CGPA, and all the subscales of test Anxiety and emotional intelligence which are significant at .01 level.

Table 3

Correlations between CGPA, and SCHUTTE Scales (n=388)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- CGPA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2- Schitte - Perception</td>
<td>.467**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3- Schitte - Managing Own</td>
<td>.363**</td>
<td>.563**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4- Schitte - Managing Others</td>
<td>.407**</td>
<td>.570**</td>
<td>.596**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5- Schitte - Utilization</td>
<td>.463**</td>
<td>.550**</td>
<td>.514**</td>
<td>.522**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6- Schitte – Total</td>
<td>.524**</td>
<td>.825**</td>
<td>.814**</td>
<td>.816**</td>
<td>.805**</td>
<td>1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (1-tailed).

The table 3 shows correlation between CGPA and the subscales of emotional intelligence namely perception, managing own, utilization and total EI
Table 4

Correlations between CGPA, and WTAS Scale (n=388)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- CGPA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2- WTAS Worry</td>
<td>-.635**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3- WTAS Incapacity</td>
<td>-.751**</td>
<td>.536**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4- WTAS Total</td>
<td>-.796**</td>
<td>.845**</td>
<td>.904**</td>
<td>1</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (1-tailed).

Table 4 showing correlation between CGPA and the subscales of Test anxiety namely worry, Incapacity and total test anxiety.

Table 5

Gender Differences in Anxiety (n=388)

<table>
<thead>
<tr>
<th>Gender (n=388)</th>
<th>Male(n=194)</th>
<th>Female(n=200)</th>
<th>T</th>
<th>df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTAS Worry</td>
<td>M 11.69</td>
<td>M 12.71</td>
<td>1.95</td>
<td>398</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>SD 3.29</td>
<td>SD 3.74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incapacity</td>
<td>M 17.74</td>
<td>M 18.26</td>
<td>1.73</td>
<td>398</td>
<td>.243</td>
</tr>
<tr>
<td></td>
<td>SD 4.32</td>
<td>SD 4.57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>M 29.42</td>
<td>M 30.96</td>
<td>2.00</td>
<td>398</td>
<td>.028</td>
</tr>
<tr>
<td></td>
<td>SD 6.58</td>
<td>SD 7.35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 showing mean differences, standard deviation, t value, degree of freedom and significant level between the scores of both genders on the variable of test anxiety.

Table 6

Gender Differences in Emotional Intelligence (n=388)

<table>
<thead>
<tr>
<th>Gender (n=388)</th>
<th>Male(n=194)</th>
<th>Female(n=194)</th>
<th>t</th>
<th>df</th>
<th>Sig</th>
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</thead>
<tbody>
<tr>
<td>SCHUTTE Percep</td>
<td>M 30.21</td>
<td>M 29.41</td>
<td>1.96</td>
<td>398</td>
<td>.233</td>
</tr>
<tr>
<td></td>
<td>SD 6.49</td>
<td>SD 6.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 M Own</td>
<td>M 30.46</td>
<td>M 30.87</td>
<td>-.64</td>
<td>398</td>
<td>.521</td>
</tr>
<tr>
<td></td>
<td>SD 6.24</td>
<td>SD 6.53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 M Other</td>
<td>M 27.53</td>
<td>M 27.44</td>
<td>.153</td>
<td>398</td>
<td>.879</td>
</tr>
<tr>
<td></td>
<td>SD 6.05</td>
<td>SD 6.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Utilization</td>
<td>M 23.93</td>
<td>M 23.24</td>
<td>.979</td>
<td>398</td>
<td>.328</td>
</tr>
<tr>
<td></td>
<td>SD 7.74</td>
<td>SD 6.39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Total</td>
<td>M 112.12</td>
<td>M 110.94</td>
<td>.548</td>
<td>398</td>
<td>.584</td>
</tr>
<tr>
<td></td>
<td>SD 21.10</td>
<td>SD 21.93</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Table 6 showing mean differences, standard deviation, t value, degree of freedom, significant level between both the genders on the variable of emotional intelligence.

**Table 7**

_Differences between Institutions in Anxiety (n=388)_

<table>
<thead>
<tr>
<th>Institution (n=388)</th>
<th>WTAS</th>
<th></th>
<th></th>
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<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public (n=194)</td>
<td>Private (n=194)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>t</td>
<td>Df</td>
<td>Sig</td>
</tr>
<tr>
<td>1 Worry</td>
<td>11.75</td>
<td>3.486</td>
<td>12.65</td>
<td>3.57</td>
<td>-2.548</td>
<td>386</td>
<td>.011</td>
</tr>
<tr>
<td>2 Incapacity</td>
<td>17.84</td>
<td>4.374</td>
<td>18.15</td>
<td>4.53</td>
<td>-.696</td>
<td>386</td>
<td>.487</td>
</tr>
<tr>
<td>3 Total</td>
<td>29.59</td>
<td>6.962</td>
<td>30.80</td>
<td>7.068</td>
<td>-1.725</td>
<td>386</td>
<td>.085</td>
</tr>
</tbody>
</table>

Table showing mean differences, standard deviation, t value, degree of freedom and significance level between public and private universities on the variable of test anxiety.

**Table 8**

_Differences between Institutions in Emotional Intelligence (n=388)_

<table>
<thead>
<tr>
<th>Institution (n=388)</th>
<th>SCHUTTE</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public (n=194)</td>
<td>Private (n=194)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>t</td>
<td>Df</td>
<td>Sig</td>
</tr>
<tr>
<td>1 Percep</td>
<td>29.89</td>
<td>6.26</td>
<td>29.73</td>
<td>7.11</td>
<td>.239</td>
<td>386</td>
<td>.811</td>
</tr>
<tr>
<td>2 M Own</td>
<td>30.97</td>
<td>6.30</td>
<td>30.36</td>
<td>6.46</td>
<td>.955</td>
<td>386</td>
<td>.340</td>
</tr>
<tr>
<td>3 M Other</td>
<td>27.89</td>
<td>6.13</td>
<td>27.08</td>
<td>6.27</td>
<td>1.313</td>
<td>386</td>
<td>.190</td>
</tr>
<tr>
<td>4 Utilization</td>
<td>23.60</td>
<td>6.84</td>
<td>23.57</td>
<td>7.36</td>
<td>.049</td>
<td>386</td>
<td>.961</td>
</tr>
<tr>
<td>5 Total</td>
<td>112.34</td>
<td>20.76</td>
<td>110.72</td>
<td>22.24</td>
<td>.753</td>
<td>386</td>
<td>.452</td>
</tr>
</tbody>
</table>

Table 8 showing mean differences, standard deviation, t value, degree of freedom and significance level between public and private universities on the variable of emotional intelligence.

**Discussion**

According to first hypothesis, ‘students with lower levels of test-anxiety would have higher emotional intelligence and better academic performance,’ results
revealed that there is significant correlation between level of test anxiety with emotional intelligence \((r = -.59, \text{It is also clear that low scores on test-anxiety scale are significantly related to higher performance on test}} \((r = -.79, p < .01), \text{as shown in table no. 4 & 2}} \((p < .01).

Since learning is a pre-requisite for academic excellence, it is important to deal with test-anxiety effectively at this stage. If this is not taken care of, feelings of excessive worry, worthlessness, and inability may overtake learners. This condition may also adversely affect the academic performance of students. The results of current study have been supported by Malik et al. (2013) who studied the same variables among the students of Punjab. They found inverse relation of emotional intelligence and test anxiety of secondary school students. It was recommended that in order to enhance emotional intelligence, test anxiety must be seriously addressed. In fact, exams are simply a means to assess the potential of students which could be capitalized in their practical lives. As such, all test anxiety should be taken care of prior to exams which should only be used as a yardstick through which their performance is measured (Rothman, 2004).

Importance of emotional intelligence is widely accepted as an important element that impacts the academic performance of the students. Naidoo, (2000) stated that mostly, students drop out from school due to the sense of detachment from the group. According to Sinclair et al. (1998) those who leave high school without graduating have difficulty with interpersonal skills. Moreover, it has been found that in the case of drop out students, most do so due to emotional disturbances (Wagner et al., 1991).

Zheng et al. (2023) found significant positive correlation with test anxiety and academic performance among freshmen. Thus, low emotional intelligence scores are correlated with increasing student concern. In a study on middle school students, McLin (2003) used the Juvenile Emotional Management Scale (JEMS), and found that high emotional intelligence ratings from instructors were correlated with high self-report emotional intelligence scores.

According to another study, there was a substantial difference between students who scored highly on emotional intelligence assessments from teachers and those who scored poorly, with a favorable association between self-reported
and teacher-reported scores (McLin, 2003). On the other hand, Malakar (2019) looked at students' emotional intelligence and academic achievement and found that, based on how they scored on a test of test anxiety, students in the high anxious group fared differently from students in the low anxious group. Additionally, these groups also differed on the variable of emotional intelligence.

Furthermore, Maharaj and Ramsaroop (2022) examined the role emotional intelligence played in the success of educators. They described emotional intelligence as a flexible skill which could help individuals in facing adversity. Emotionally intelligent educators are capable of utilizing their emotions in distressing situation by coping through adaptive methods which act as a shield against failure. Coping through adaptive methods has also been emphasized upon and advocated by Kant and Shanker (2021).

The second hypothesis, ‘there would be a positive relationship between emotional intelligence and academic performance,’ is supported by showing significant, moderate positive relationship ($r = .52$, $p < .01$). Table no. 3 shows that emotional intelligence has a highly significant positive association with the academic performance of students.

In today’s world, emotional intelligence unquestionably relates with academic functioning because of the concomitant relation between the two variables. The research also indicates that students who scored high on emotional intelligence also sustained high academic scores, whereas those who scored low on emotional intelligence had poor academic scores. Results have been supported by Stankoyska et al. (2018) who found positive correlation between emotional intelligence and test anxiety among high performing individuals.

Petrides & Furnham (2003) and Austin (2004) reported positive correlation between emotional intelligence (EI) and emotional task performance. Emotional intelligence has an element of adaptability which leads towards healthy behaviors. When students exert energies in an adaptive manner, their occupational (academic performance) increases, (Parker et al, 2006), and they find themselves better able to face academic problems (Gohm et al., 2005; Matthews et al., 2006). Students with high emotional intelligence have better stress management abilities as compared to those who have low emotional intelligence.
According to the third hypothesis of the study ‘there would be an inverse relationship between test-anxiety and academic performance,’ is supported by the data. Table 4 shows a strong inverse relationship between academic performance and test-anxiety and ($r = -.79$, $p < .01$).

The world, including Pakistan, saw increasing changes in education in the last two decades. Two common reasons for this include strict rules for clearing exams in any university graduate program, and less opportunities in the market, giving rise to a sense of competition among students. Such a situation causes panic and eventually disturbs students’ academic performance which has implication for their future. Exams, no doubt have their worth, because students’ academic progress is determined which may lead to their induction to graduate schools (Zeidner, 1998). Among other factors, pressure is also exerted by parents to perform well due to which students often experience heightened stress and anxiety during tests.

Park and Rhee (2020) identified empathy as a prominent factor for educators, in order to make their interpersonal interactions impactful. Drigas and Pipoutsi (2020) described behavior during crisis such as pandemic, as one of cooperation, which led to the development of resilience which is described by McDonald (2021) as adaptive regulation of stressful emotions. When test or exams produces anxiety, the components ‘worry’ and ‘incapacity’ affect the cognition component, which, in return, causes test-irrelevant thinking and academic stressors. Due to these factors, students perceive exams as a high-pressure situation that ultimately deteriorates their academic performance.

The fourth hypothesis which states that ‘there are gender differences in the scores of test-anxiety and emotional intelligence,’ is supported by the results because there is a significant difference in the scores of test-anxieties between male and female students ($t = -2.20$, $df = 386$, $p < .02$). According to the table 5, females experience more anxiety than males do, although significant difference was found in subscale of ‘worry’ ($t = -2.89$, $df = 398$, $p < .01$). Although, Richard et al. (2022) reported that gender differences in anxiety showed that males tend to report more anxiety than females.

Regarding differences in scores on emotional intelligence, table 6, results displayed in table 6 show that there is no gender difference ($t = .54$, $df = 386$, $p < .01$).
.5) in emotional intelligence. Emotional intelligence covers almost all facets of human behaviors and tendencies. It is an ability of individuals to help assess their behavioral trends and execute them accordingly in daily life. Generally, all facets of emotional intelligence create opportunities for individuals to gain control and exhibit it through a variety of situations (Naidoo, 2000).

The fifth hypothesis states that ‘there can be a difference between the test-anxiety and emotional intelligence between the public and private sector university students. The hypothesis is partially supported, as shown in the table 7, indicating that a significant difference has been observed ($t = -2.54, df = 386, p < .01$) in test-anxiety, worry scale. Students of private institutions, experienced higher test-anxiety than students of public sector institutions. There is no difference between the students of both the sectors in terms of emotional intelligence ($t = .75, df = 386, p < .45$) as shown in table 8.

Aspirants of higher education, particularly engineering and medical students of public and private institutions often find themselves on the verge of stress and anxiety. The nature of study and the competitive examination system serve as core elements to make the situation worse. Although students of both public and private universities/institutions experience ‘test-pressure or test-anxiety,’ yet private campuses contribute more in producing anxiety for their respective students. Results support the hypothesis that ratio of anxiety levels differs between students studying in public and private institutes. Literature also supports hypotheses of the study. It has been reported that engineering students of Cornell College rated themselves ‘highly anxious’ and fearful about their academic scores or grades.

Situations such as tests preparation, examination, and presentations make undergraduate students in Private and Public institutions anxious before taking up challenging tasks. As the literacy ratio is on increase in developing countries, the Government of Pakistan has taken steps to entertain the needs of higher education students. To pursue better employment opportunities, Pakistani young students aim to pursue higher studies in the ever-rising competition in the academic field. During the last few years there has been an increase in depression and anxiety among youngsters, and, to address this issue, various private institutions have been established across the country.
It is imperative for academicians and teachers to explore the negative and positive aspects of students’ academic performance in order to sharpen their academic skills, so that they could effectively handle academic demands. In addition, teaching faculty at institutions should come forward to address students’ academic concerns.

**Conclusion and Recommendations**

The topic has pedagogical implications for both teachers and students. The current research has encompassed important findings on academic perspective of students which also have educational and clinical implications. The study helped in providing valuable knowledge about academic constraints students face in their educational years. Additionally, the results of the study support the assumptions that emotional and cognitive abilities are helpful in test situation, which is thought to be particularly responsible for a student’s academic life, performance and goals. The results support the conjecture that test anxiety and emotional intelligence are associated with academic performance. This serves as an implication for academicians and educators who can discern low academic performers and high academic performers. This can also be advantageous for them to focus on the management of anxiety and emotional skills by installing certain programs in the syllabus.

Students are referred to undergo psychological assessment and counseling for commonly reported issues such as low academic scores, academic failures, low self-esteem, concentration problem and task-anxiety. The researcher has had interactions with students who asked for solution to their academic problems and emotional health. Understanding of developmental changes can be beneficial, and teaching pro-active strategies can be shared with parents. By understanding the strengths and weaknesses of students, teachers and parents can enhance their skills and turn into competencies that can make a real difference.

This study has implications for public and private organizations that induct fresh graduates for their respective jobs. Organizations can have an edge by hiring individuals who can work better under pressure conditions. It can help them in allocating difficult assignments to the most capable employees. For example, a situation requiring customer services may be a challenge for person having low interpersonal skills. Thus, awareness about one’s emotional intelligence and
anxiety level can play a pivotal role in shaping the personalities of young scholars on whom not only organizations but nations can also capitalize. Better equipped personalities not only allow them to be good and effective students, it also makes them holistically functional individuals.

The results of the current study provide opportunities for teachers, academicians and students to comprehend the role test anxiety and emotional intelligence play in the academic life of students. The observations made through this research have given insight about variables that affect students’ academic performance, which undoubtedly, are the prime concern for students in their academic career. Kreber (2006) placed importance on the role of transformative learning through which teachers can get advantage in teaching and learning, understanding what, why and how to teach. Reflections on one’s teaching method will help teachers develop their knowledge and understand students’ learning process better. Understanding how test anxiety and emotional intelligence impact students’ learning can help both students and teachers by focusing on the facilitative or deteriorating role it can play. Additionally, highlighting the relevance of emotional intelligence, Wolfe (2019) stated that Emotional intelligence courses should be included in curriculum. Suleman et al. (2019) explored the relation of emotional intelligence with academic performance of undergraduate students in KPK and recommended that emotional intelligence should be incorporated in curricula. Teachers can pave the way for students in a way that they can get an edge on emotional-handling skills, and that also assist them during their academic difficulties.

Furthermore, to address the issue of anxiety, the role of counselors should be highlighted as this can play a major role in ameliorating the effect of anxiety, with one on one attention in special cases. Also, teachers should recommend sites for stress management through which students can get a better picture of physical, emotional and behavioral symptoms of anxiety. Moreover, the present research has a limited sample size due to which it has generalizability issues. If data from all over Pakistan are collected, rather than from a single city, findings could be more rigorous and applicable. Since the study has been conducted in Pakistan, a country which is culturally diversified, it is also imperative to study sub ethnic samples.

Other than Psychology courses, students should also be equipped with
basic techniques like mindfulness, deep breathing, meditation, and positive self-talk. Effective handling of test material such as leaving difficult questions for later and focusing on completing the easier ones first, will definitely minimize the fear. Finally, training in time management will do a lot to minimize anxiety.

Though the implications of this research are relevant, directions for future research include further work in this area so that a more comprehensive understanding could be developed about factors that are crucial for students’ academic performance. Demographic variables like parental education, locality, semester level which were not analyzed in the current study, should be a part of future research.

References


Chang, Y., & Tsai, Y. (2022). The effect of university students’ emotional intelligence, learning motivation and self-efficacy on their academic achievement—online


