

## **Emotional Intelligence and Test Anxiety: A Case Study of Unique School System**

Misbah Malik\*, Mumtaz Akhter\*\*, Ghulam Fatima\*, Mahwish Safder\*

---

### **Abstract**

The substantive purpose of this study was to identify the relationship between emotional intelligence and test anxiety among students studying at higher secondary level in Unique School System. A sample of 150 students was selected randomly. A questionnaire comprised of two scales “Free Java Scripts”, provided by The JavaScript Source, to measure emotional intelligence, and “Westside test anxiety scale” to measure level of test anxiety, was used for data collection. Both scales were adapted and translated. Questionnaire was used after pilot testing (with high reliability index, Cronbach alpha= 0.97). Results showed negative correlation (correlation coefficient -0.603) between Emotional Intelligence and Test Anxiety among students. In the light of major findings, it was recommended to use strategies to reduce test anxiety and to improve Emotional Intelligence.

**Key words:** Emotional Intelligence, Test Anxiety, Unique School System, Java scripts, Westside test anxiety scale

---

\*Ph.D Scholar, Institute of Education and Research, University of the Punjab, Lahore

\*\*Mumtaz Akhter, Professor of Education, Institute of Education and Research, University of the Punjab, Lahore

## Introduction

Tests and exams are important segments of education. Individuals are rewarded according to their performance in tests and exams. Results of the exams determine one's fate. Zollar and Bed-Chain (1990) argued that this is an age of test consciousness. Lives of many individuals are not only affected, but also determined by their performance in tests and examination. All kind of tests and exams may cause different levels of stress and anxiety. Generally speaking, test anxiety is a great hurdle in the way of many individuals to reach their real academic destination. In empirical literature, it is evident that high level of test anxiety is associated with lower academic performance (Nasir & Rizwa, 2010). To be successful in tests, it takes more than traditional cognitive intelligence. Students who exist at the top of their class ranking are not just good in their academics, but they are generally more flexible, tolerant and optimistic (Sunil and Rooprai, 2009). Golman (1995), in mixed model approach of emotional intelligence, identify five domains of emotional intelligence. "Managing emotions" and "Motivating oneself" are two of the domains, so students who are more flexible, tolerant and optimistic are perceived as Emotionally Intelligent. Emotional Intelligence (EI) includes the ability to monitor one's own and others' feelings i.e. stress, anxiety, anger, doubtfulness, to discriminate among these feelings and on its base guide ones' own thoughts and actions (Salovey and Mayer, 1990).

Emotional intelligence created interest among researchers in Social and Applied Sciences after the first scientific publication of emotional intelligence in 1990. Mayer and Salovey (1997) presented first model of emotional intelligence. This model presented two-part approach; general processing of emotions and at the same time of skills involved in such processing. "An ability to recognize the meaning of emotions and their relationships and to reason and problem-solve on the basis of them [...] the capacity to perceive emotions, assimilate emotion related feelings, and understand the information of those emotions and manage them."

Afterwards, Mayer, Salovey and Caruso (2001) added to definition of this two-part ability-based emotional intelligence. According to revised ability model, emotional intelligence can be defined as "the ability to perceive emotion, integrate emotion to facilitate thought, understand emotions, and to regulate emotions to promote personal growth" (Mayer & Salovey, 1997). Bar-On (1997) defines emotional intelligence to be related to understanding oneself and others, concerning with people, and adapting to and coping with the immediate environment to be more

successful in dealing with requirements of surroundings. Bar-on and Parker (2000) described emotional intelligence as having four branches. The first branch includes focus of attention to receive and make sense of emotional messages. The second branch relates to the ability to use or create emotions, to focus attention, express feelings, or connect to other cognitive processes such as reasoning, problem solving and decision making. Third branch involves ability to understand emotional information and reasons of emotional change and progress. The fourth and last branch deals with management and control of ours' and others' emotions.

Goleman (1995) and Cooper (1997) presented the mixed model of emotional intelligence by integrating the ability to comprehend and process emotions with various aspects of personality and competencies.

Test anxiety is a type of worry which can appear in test situations having symptoms as common anxiety. These symptoms may include dizziness, hand shivering, sleep loss, uncertainty, agitation, increased heart beat and sweating. Wine (1971) presented an intentional model of test anxiety. According to this model, individuals with test anxiety mostly focus on activities which are irrelevant to given assignments. Mostly their mental obsessions go along with nervousness and they suffer from physical depression and self criticism. Inference model of test anxiety states that recalling of previous information is disturbed by test anxiety and ultimately individual performance suffers.

According to Meichenbawm & Butler (1983), the two models of test anxiety, deficit and dual deficit models, relate performance on test with shortfall of attention and irregular pattern of behaviours. To be successful in tests, it takes more than traditional cognitive intelligence. Students who exist at the top of their class ranking are not just good in their academics, but they are generally more emotionally intelligent. Khaledian, Amjadian and Pardegi (2013), argued that there is a meaningful positive correlation between emotional intelligence and academic achievement. The purpose of the study was to identify the relationship between emotional intelligence and test anxiety.

### **Objectives of the study**

The study was conducted to achieve the following objectives:

- a. To identify the level of emotional intelligence and test anxiety among the students of higher secondary school.

- b. Find out the relationship between emotional intelligence and test anxiety.

## Methodology

The study was descriptive in nature. The population of study consisted of all students of Unique College, Lahore enrolled in higher secondary classes. One hundred and forty eight (148) students (males= 75, females=75) were selected through random sampling technique. Two questionnaires (females) were excluded due to missing information. An adapted standardized scale “Free Java Scripts” provided by “The Java Script Source” to measure emotional intelligence and “Westside Test Anxiety Scale”, to measure the level of test anxiety, were used to elicit responses of the students. Researcher found this online questionnaire encompassing all the aspects (cognitive ability and personality aspects) of emotional intelligence according to mixed intelligence model of Goleman. Total number of items in the emotional intelligence scale was 33 and total number of items in test anxiety scale was 10. Both of the scales were translated from English to Urdu. A pilot study was conducted to ensure the reliability of the scale. The results of pilot study showed a high reliability coefficient (Cronbach alpha = 0 .97).

## Results

Different statistical tests were applied for data analysis. In order to measure level of emotional intelligence among students, three groups (low, moderate and high) were formulated by dividing them into equal percentile (33.33) score on emotional intelligence scale. Same procedure was applied to same groups of students according to their level of test anxiety. According to the objectives of study, the results of different tests are being presented in tables.

Table 1  
Levels of emotional intelligence

| Level of emotional intelligence | Male | Female | Frequency | Percentage |
|---------------------------------|------|--------|-----------|------------|
| High                            | 30   | 24     | 54        | 36.5       |
| Moderate                        | 18   | 26     | 44        | 29.7       |
| Low                             | 27   | 23     | 50        | 33.8       |
| Total                           | 75   | 73     | 148       | 100        |

Table 1 shows that 54 (males=30, females=24) out of 148 students possessed high level of emotional intelligence which consisted of 36.5% of total number of students. Whereas, 50 (males=27, females=23) out of 148 students (33.8%) possessed

low level of emotional intelligence, and rest of the students, (males=18, females=26), that were 44 in number (29.7%) had moderate level of emotional intelligence.

Table 2  
Levels of test anxiety

| Level of test anxiety | Male | Female | Frequency | Percentage |
|-----------------------|------|--------|-----------|------------|
| High                  | 16   | 34     | 50        | 33.8       |
| Moderate              | 25   | 26     | 51        | 34.5       |
| Low                   | 33   | 14     | 47        | 31.8       |
| Total                 | 74   | 73     | 148       | 100        |

Table 2 shows that 50 (males=16, females=34) out of 148 students possessed high level of test anxiety which constituted 33.8% of total number of students. Whereas, 47 (males=33, females=14) out of 148 students (31.8%) possessed low level of test anxiety. The rest of the students, who were 51(males=25, females=26), (34.5%) had moderate level of test anxiety.

Table 3  
Correlation between emotional intelligence and test anxiety

| Variables              | N   | r value | Sig.   |
|------------------------|-----|---------|--------|
| Emotional Intelligence | 148 | -.603   | .000** |
| Test Anxiety           |     |         |        |

\*\*Correlation is significant at .01 level (2-tailed)

\*Correlation is significant at .05 level (2-tailed)

Table 01 revealed that there was high negative correlation between test anxiety and emotional intelligence ( $p < .05$ ). So, it is concluded that test anxiety is negatively correlated with emotional intelligence. It means, as emotional intelligence increases, test anxiety decreases. In this way null hypothesis that there is no correlation between emotional intelligence and test anxiety, is rejected.

## Discussion

The purpose of study was to identify the level of emotional intelligence and test anxiety among secondary school students of unique school system. In the light of statistical results, it is concluded that the level of emotional intelligence was comparatively high, but still there was no significant difference in the levels of emotional intelligence: high, low and moderate. Other objective of the study was to identify the relationship between emotional intelligence and test anxiety. There was a high negative correlation between emotional intelligence and test anxiety. Results of

the study are consistent with the results of previously conducted studies. Dutta and Dasgupta (2013) also found that emotional intelligence of higher secondary school students was negatively correlated with emotional intelligence. Emotional intelligence is negative predictor of worry (Dutta & Dasgupta, 2013). There were significant negative correlations between accounting students' emotional intelligence and their test anxiety, and also between their test anxiety and academic achievements (Khaledian, Amjadian and Pardegi, 2013).

Farahati, Mahdavianand Agahi (2011) conducted a study on high school students in Tahrán and results revealed the same pattern of correlation among test anxiety and emotional intelligence. The result of this study suggested that test anxiety has a negative effect on emotional intelligence and therefore all emotional intelligence parameters have reverse correlation with amount of test anxiety. Berrocal, Alcaide, and Extremera (2006) identified that emotional intelligence was negatively related to levels of depression and anxiety among adolescents. There is a meaningful positive correlation between their emotional intelligence and academic achievement (Khaledian, Amjadian and Pardegi, 2013).

## Recommendations

- a. 65 % of the students possessed moderate and low level of emotional intelligence. Teachers should adopt such strategies that help the students to enhance their emotional intelligence so that they may have more control on their emotions (Stein & Book, 2000).
- b. The level of test anxiety in female students is high. As high level of test anxiety impairs the performance at test, so it is recommended that teachers should adopt the strategies to decrease the level of test anxiety. Research has revealed that by teaching different study skills test anxiety can be reduced, such as test preparation, utilizing class time, taking organized notes, and integrating subject matter (Zeidner, 1998; Plant, Ericsson, Hill, & Asberg, 2005; Jansen & Suhre, 2010).
- c. It is further recommended to identify the factors that cause such anxiety amongst the high school students in Lahore.

## References

Bar-on, R (1997). *Bar- on emotional quotient inventory*. Toronto: Multi Health System Inc.

- Bar-On, R., & Parker, D. A. (2000). Emotional intelligence theory, development assessment, and application at home. *School and in the Workplace*. San Francisco.
- Berrocal, P. F., Alcaide, R., & Extremera, N. (2006). The role of emotional intelligence in anxiety and depression among adolescents. *Individual Differences Research*, 4(1)
- Cooper, R. (1997). Applying emotional intelligence in the workplace. *Training and Development*, 51(12), 31-8.
- Dutta, S. & Dasgupta, S. (2013). Examining the relationship between emotional intelligence and the dimension of test anxiety. *Research Journal of Social Science & Management*, 2(11)
- Farahati, M., Mahdavian, A., & Agahi, S. (2011). P01-282 - Investigation the relationship between test anxiety and emotional intelligence (EQ) in boys and girls of high schools of Tehran city. *European Psychiatry*, 26 (1), 283
- Goleman, R. D. (1995). *Emotional intelligence, what it can matter than IQ?* New York: Bantam books.
- Jansen, E. P. W. A. & Suhre, C. J. M. (2010). The effect of secondary school study skills preparation on first-year university achievement. *Educational Studies*, 36, 569-580.
- Khaledian, M., Amjadian, S., & Pardegi, K. (2013). The relationship between accounting students' emotional intelligence (EQ) and test anxiety and also their academic achievements. *European Journal of Experimental Biology*, 3(2):585-591
- Mayer, J.D. & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D.J. Sluyter (Eds.), *Emotional Development and Emotional Intelligence: Educational Implications*. New York: Basic Books.
- Mayer, J. D., Salovey, P., & Caruso, R. D. (2000). Emotional Intelligence meets traditional standards for an intelligence. *Intelligence*, 27, 267-298.
- Meichenbawm, D., & Butler, L. (1983). Cognitive ethology: assessing the stream of cognition and emotion. In K. Blankstein, P. Pliner, and J. Polivy (Eds.),

*Advances in the study of communication and effect: Assessment and modification of emotional behavior.* New York: Plenum Press.

- Plant, E. A., Ericsson, K. A., Hill, L. & Asberg, K. (2005). Why study time does not predict grade point average across college students: Implications of deliberate practice for academic success. *Contemporary Educational Psychology*, 30, 96-116.
- Rana, R. A ., & Mehmood, N. (2010).The Relationship between Test Anxiety and Academic Achievement. *Bulletin of Education and Research*, 32(2), 63- 74
- Sarason, S.B. & Mandler. G. (1952). Some correlates of test Anxiety. *Journal of Abnormal and Social Psychology*, 47, 810-817.
- Stein S. J., & Book, H. E. (2000). *The EQ Edge: Emotional Intelligence and Your Success.* Toronto: Stoddart Publishing Co.
- Wine, J. D (1971). Test anxiety and directions of attention. *Psychological Bulletin*, 76, 92-106.
- Zoller, U., & Ben-Chain, D. (1990). Gender differences in examination type, test anxiety, and academic achievement in college science: a case study. *Science Education*, 74(6), 597-608
- Zeidner, M. (1998). *Test anxiety: The state of the art.* Hingham, MA: Kluwer Academic Publishers.