The Relationship of Emotional Intelligence with the Academic Achievement of Students

Iram Afridi

PhD Scholar, Institute of Education and Research, University of Peshawar, KP, Pakistan. Email: iramafridi30@yahoo.com

Arshad Ali

Professor, Institute of Education and Research, University of Peshawar, KP, Pakistan.

Abstract   The objective of this study was finding the relationship between emotional intelligence and academic achievement. 384 students from secondary and high secondary school participated in this study. A significant relationship was found between academic achievement and Emotional Intelligence with the p-value = 0.01. The mean difference in emotional intelligence score of the students who secured high academic scores were found high. i.e. 58.57 as compared to the mean of emotional intelligence score of the students who secured low academic scores i.e. 56.93. A significant correlation was also found between Emotional Intelligence and academic scores(r=0.130). The results of the study suggest that higher emotional intelligence leads to better educational outcomes. An individual with a high level of Emotional Intelligence could have a strong, stable, and positive state of emotional well-being. Students who have a positive state of emotional wellbeing are more open to new experiences, which research has shown to lead to more learning.

Key Words
Emotional Intelligence, Emotional Quotient, Academic Achievement. Adolescents, Emotional Quotient Inventory, Emotional Management

Introduction

Investigations proved that Intelligence Quotient is not the only measure of success. These investigations challenged old concepts that grades can't be used to predict personal and professional success, rather Emotional Intelligence (EI), Social Intelligence and luck plays an important role. As a result of the educational system, many factors affect high and low student performance. Goleman, (1996) claims that IQ can only be attributed to 20 percent of a person's success. This claim prompts many researchers to explore and identify other factors contributing an additional 80% to the success of a person. These factors can come from within the students themselves, as well as from external factors, such as teaching skills, the curriculum, and the culture. (Sewang, April 2019)

Those who are supporting the theory of Emotional Intelligence (EI) are debating that intelligence, particularly IQ, is only related to cognitive abilities cannot assure the overall success of a student. For leading a balanced life physically, socially and emotionally, the exploration, control, and monitoring of emotions is very necessary

IQ is the measurement of the information an individual encompasses i.e. memory word bank, arithmetic, comprehension, etc which does not necessarily ensure success in life (Stein & Book, 2011). Researchers have found out that successful people have the following traits:

1. Empathy
2. Self-awareness of one's own emotions
3. Managing their anger, anxiety and stress Self-motivation
4. Having good interpersonal relationship (Goleman,1998).

All these traits lead to variables of EI.

A comprehensive explanation of emotional intelligence (EI) was given by Daniel Goleman is that a person should have qualities like self-management, impulse control, self-awareness, good social skills and self-esteem (Pellitteri et al, 2006).

Study of EI is important because students nowadays are facing problems like stress, anxiety, drugs, alcoholism, sexual assault, etc. which are adversely affecting their academics. These problems were not as serious as they were in the past. Teachers and the respective schools should teach their students good emotional skills, create self-awareness amongst them, tell them how to manage their emotions while handling various situations and how to control undesirable emotions

like anger, stress, and anxiety (Chasen,2009). This study is going to focus on the emotional management of students which would help them in their academics and hence, by controlling and managing their emotions, they could lead a productive and successful life.

The researcher's study was to find out EI among adolescents and its relation to academic achievement. The researcher took adolescents as a sample because this age is a turning point in their lives. Adolescents are passing through an emotional trauma which needs to be monitored or controlled. Physical changes are also taking place in their body. EQ, unlike IQ, can be taught to them in the classroom because, at this critical stage, they have to make important decisions for their career as well as for their lives. Balanced and stable EQ can help them in making sensible decisions.

At this stage, success means a lot to them whether it is on academic or personal level. Also, it needs to be investigated that, what is meant by academic achievement? (Nada,2000). Do only grades define success or are there some other factors that can contribute to leading a productive and more successful life? Can traits like empathy, socialization, adaptability, emotional control, etc. have any positive impact on a student's academic career and life?

The objective of the Study

The researcher intends to explore the following objective to:
Determine the relationship between Emotional Intelligence and academic achievement.

Research Questions

Does Emotional Intelligence help students in their academics?

Hypothesis of the Study

There is no relationship between Emotional Intelligence and Academic Achievement.

Literature Review

Emotional Intelligence is the topic of interest in the area of education. People having an average level of intelligence lead successful lives, whereas individuals with high level of intelligence struggle with the demands of life (Goldernburg, Matheson &Mantler, 2006). Emotional Intelligence deals with self-regulatory emotional and motivational processes that help people to make adjustments to accomplish individual, collective, and institutional goals. Emotional Intelligence is correlated with personal progress, achievement in an institutional environment and with an individual achievement Magnano, Craparo, & Paolillo. (2016).

 Educators always suspected that emotions had a cardinal role in imparting knowledge and learning. Students who interpret and control their emotions adequately become more engaged and focused on academic tasks. They can demonstrate a higher amount of energy and willingness to put an effort into learning and to continue to face a higher degree of challenges that may occur throughout the development of academic tasks. In short, emotional skills encourage students' positive attitudes towards study. (Serrano & Andreu, 2016). Greenberg and Snell, (1997) stated "In teaching-learning process, emotions play a very important role. It drives attention, which drives learning and memory" (p.103). Mayer & Slaovey (1997) found that Emotional Intelligence can improve a student's success, emotional achievement and social competence in schools which can be achieved through social competence programs and improved curriculums. Acknowledging the importance of Emotional Intelligence, different resources and staff development programs should be developed for teachers to improve emotional achievement and social competence of students, which would lead to academic success.

For many years' researchers tried to find out whether or not to incorporate teaching good Emotional Intelligence Skills into school curriculum and to measure academic achievement through improved Emotional Intelligence. Researchers have shown varied results for the relationship between Emotional Intelligence and academic achievement. There are different ways in which academic achievement can be measured. Grade point average (GPA) is the primary index used by academic institutions worldwide to measure how well an individual is performing in school. Research has provided mixed support for the predictive relationship between EI and academic success in schools and colleges. Swart (1996) found significant differences in groups of academically successful and unsuccessful students in their scores on a self-report measure of emotional intelligence. Students were selected into the groups based on their GPA. Those students considered successful consistently scored higher on emotional intelligence scale. General intelligence, or academic ability, may not be sufficient by itself to result in academic success. It is likely that factors other than academic ability influence academic success. Students must be able to manage stress and some level of social interaction to successfully complete their education.

Previous studies suggested that EI may be another contributing factor to academic achievement. The studies

predicted that EI showed a stronger relationship to academic achievement over a longer time frame, especially in relation to graduation rates. Schutte, Malouff, Simunek, Mckenley, & Hollander (2002) suggested that high Emotional Intelligence could affect all areas of life such as work, education, and relationships. An individual with a high level of EI could have a strong, stable, and positive state of emotional well-being. Individuals who have a positive state of emotional wellbeing are more open to new experiences, which according to many types of research lead to more learning (Salovey & Grewal, 2005). Tapia and Marsh (2002) demonstrated that general IQ accounts for only about 20 percent of the factors that determine success in life. Individuals may excel in an academic setting but lack appropriate social skills to function in a real-world setting. These individuals surpass expectations in the structured environment that college offers, but, when faced with the dynamics of the real world, they fail. The ability to achieve success in college with academics and social-emotional competencies can be significantly influenced by emotional intelligence. Many colleges in U.S. have designed freshman courses to include curricula focused on building and improving emotional intelligence skills and competencies with the purpose of stimulating student achievement, thus enhancing institutional and student efficiency (Long,2018).

The study was conducted on high school students in Iran; 9,386 students were taken as a sample and 35 subjects were selected using Cochran's sample size determination formula and multistage random sampling method. The results showed that EI and social competence have a significant positive relationship with academic achievement Akbaribooreng, Hosseini, Zangouei, & Ramroodi (2015) and it also predicts that students with high Emotional Intelligence and Social competence are socially adjustable and they perform better in schools. A study was conducted on the students of International Islamic University Islamabad (IIUI) by Nasir, Maliha, (2010). That was a correlational study to examine the relationship of Emotional Intelligence with the age, gender and academic achievement of the students. Study showed significant correlation between Emotional Intelligence and academic achievement. According to many researchers EI is more important than IQ in attaining success in their lives and career. Many argue that happiness and success in life depend upon healthy and stronger relationships, ability to diffuse conflict, empathy, overcome challenges and better social skills. These all can be achieved if we have better emotional intelligence

Methodology

Nature of Research

The study aimed at finding the relationship of Emotional Intelligence with academic achievement. For this purpose, the researcher used Quantitative Research involved quantitative data. According to (King, Koehane & Verba, 1994.pp 3-4) Quantitative Research uses numbers and statistical methods. It is based on numerical measurement of specific aspects of phenomenon. The purpose of this type of research was to abstract from particular instances, seek generalizable results or to test causal hypothesis (Glesne & Peshkin, 1992, p.6)

The population of the Study

The population of the study was all male and female students, both from secondary and higher secondary schools of Peshawar, Khyber Pakhtunkhwa, Pakistan. Ages of the sample ranged from 13 to18 years. According to Bureau of Statistics KP,Pakistan, there were 201598 students enrolled in secondary and higher schools in Peshawar in 2014.

Sample of the Study

The sample was selected according to Krejcie, R.V. & Morgan, D.W. table (1970). The researcher did stratified random samplings. The sample consists of male and female students, private and public schools. 12 schools were selected for collection of data out of which 6 private and 6 public schools were selected. Out of 384 students, 124 male students and 153 female students were selected. 231 public school students and 153 private school students were selected by the researcher.

Rational of sampling

The Researcher took secondary and higher secondary school students for this study. The age group of the sample was from 13- 18 yrs. The researcher selected adolescent age because they are passing through crucial stage not only physically and emotionally, but academically as well. Academic success at this stage means a lot because, upon this, their whole life depends. It can only be achieved if they know how to manage and regulate their emotions in this transitional phase of life.

Tools for Data Collection

Data from the students was collected through Bar-On-inventory Youth Version. EQ inventory-YV was designed by Bar-On and Parker in 2000. The EQ-inventory is a 60-item self-report inventory for students whose ages range from 7-18 years. It is a 5-point Likert scale ranging from (1=very seldom true of me, 2=seldom true of me 3=often true of me 4= very often true of me).

For the collection of the data formal permission was sought from principles and heads of the schools and colleges. The researcher personally contacted each class and subject teachers for the results of the students. Result of the final year exam was taken from the respective class teacher. For putting the students into a high and low score group, detailed discussion was done and consent was taken from the class teachers, and head of the institutions. In order to make the students at ease researcher tried to build a rapport with students. Informal discussion related to the purpose of the research was done with them. The researcher herself explained the difficult terms to the students. Afterward, the researcher explained the questionnaire and the whole process in detail. The purpose of the study and the term emotional intelligence was thoroughly explained to the teachers.

Methods of Data Analysis

Independent sample t-test and Pearson Product correlation coefficient were used to analyze all variables. T-test was used by the researcher to test Hypothesis and to assesses whether the mean of two groups was significantly different from one another. All variables in this study were tested at the P=0.05 level of significance. Mean and standard deviation of the variable were also sought out.

Pearson Product correlation coefficient was used to measure the strength and direction of the linear correlation between two variables: EI and Academic Achievement. The Quantitative data from questionnaires were put into the SPSS software and analyzed with the help of version 17 of the package. The data was presented in tables and interpreted through the use of percentage, mean, standard deviation, t-tests, and correlations.

The procedure of the Study

Emotional Intelligence of the students was calculated on Bar-On Inventory Youth Version by using the formula given in the inventory. Calculated emotional intelligence score of the students was divided into two groups on the basis of their academic achievement. A student with high marks above 65% was given high (Group) and students with low marks below 65% were given low (Group). T-test was applied to emotional intelligence score of both groups. Correlation between EI and academic achievement of students was also found.

Data Analysis

Table 1. Comparison of Emotional intelligence with Academic Achievement.

	Groups	N	Mean	Std. Deviation	T	Df	Sig. (2-tailed)
Emotional Intelligence	Low	289	56.9365	5.41778			
	High	95	58.5719	5.41235	2.553	382	.01

The table shows that there is a significant relationship between academic achievement and emotional intelligence. The p-value is 0.01 which is less than 0.05. The result indicates that there is a significant difference between students with high academic scores and low academic scores in relationship to emotional intelligence. The mean difference of high academic score group is greater (58.57) than the mean of lower academic scores group (56.93) with regard to emotional intelligence. Null Hypothesis is rejected.

Table 2. Correlation of Emotional Intelligence with Academic Achievement

		Academic Scores	Emotional Intelligence
Emotional Intelligence	Pearson Correlation	.130*	1
	Sig. (2-tailed)	.011	
	N	384	384

**=Correlation is significant at the 0.01 level (2- tailed).
*=Correlation is significant at the 0.05 level (2- tailed).

The table shows significant co-relation between Emotional Intelligence and academic achievement(r=.130) with a P-value of 0.01.

Discussion

This study shows a significant relationship between Emotional Intelligence and Academic Achievement with respect to low and high academic score groups. This study revealed that students with high academic scores have higher Emotional Intelligence and students with low academic scores have lower Emotional Intelligence. The mean difference of higher academic score group was greater than the mean of the lower academic score group. It has been proved by many pieces of research that performance of an individual in all walks of life is directly related to his / her emotions. A recent study conducted by Yulika, Rahman & Sewang, (2019) on 149 students of State Junior High School 1 Sengkang regarding effect of EI on student learning achievement. The study found positive and significant impact of EI on students' learning achievement.

The higher the Emotional Intelligence of an individual the better their performance is and Poor performance is because of lower emotional intelligence. In order to cope with the academic pressure students' needs to be emotionally stable and emotionally intelligent. Highly emotionally intelligent students know how to regulate and manage emotions in highly academic pressures in the classroom. This study is also supported by Ranasinghe., Wathurapatha, Mathangasinghe, & Ponnamperuma, (2017). The aim of this study was to investigate the relationship between EI and academic performance among medical undergraduates. Study revealed that higher EI was linked to increased academic success among medical students of the final year.

Costa. & Faria (2015) explored the predictive validity of Emotional Intelligence (EI) in Portuguese secondary school over the academic achievement of students. At the end of each academic level; PA, Portuguese and Mathematics scores of students were collected. The results indicated that EI can predict the academic achievement of students and that they have a greater impact on the prediction of the achievement of 10th-year students.

Nelson and low (1999) conducted a study over the 25 years and they found out that emotions play an important role in all walks of life. Sottlmyer (2002) concluded in her dissertation that Emotional Intelligence skills were predictive of academic achievement in three schools of Texas. Schutte et al. (1998) found a significant correlation (r = .32) between scores on a self-report measure of EI and first-year college GPA. Chapman and Hayslip (2005) and O'Connor and Little (2003) also found a significant correlation between EI and college GPA, r = .32 and r = .23, respectively. EQ-inventory YV has shown a relationship to GPA in past researches (O'Connor & Little, 2003; Swart, 1996).

Conclusion

The study examined relationships between EI and academic achievement of secondary and high secondary school students. The findings support and indicate the importance of EI in the academic achievement of adolescents.

The hypothesis was "There is no relationship between Emotional Intelligence and Academic Achievement." To examine this hypothesis, the following research question was formulated "Does Emotional Intelligence helps students in their academic success"? Result of the present study concludes that there is a significant relationship between Emotional intelligence and academic achievement of the students. It is concluded that the Null hypothesis is rejected.

Acknowledgments

References

Akbaribooreng, M., Hosseini, S. M., Zangouei, A. A., & Ramroodi, M. (2015). Relating emotional intelligence and social competence to academic performance in high school students. *International Journal of Educational and Psychological Researches*, *1*(2), 75.

Campbell, D., & Fiske, D. (1959). *Convergent and discriminant validation by the multitrait-multimethod matrix.* Psychological Bulletin, 56, 81-105.

Caruso, D., &Salovey, P. (2004). *The emotionally intelligent manager how to develop and use the four key emotional skills of leadership.* San Francisco: Jossey-Bass.

Chapman, B. P., & Hayslip, B., Jr. (2006*). Emotional intelligence in young and middle adulthood: Cross-sectional analysis of latent structure and means. Psychology and Aging, 21*(2), 411-418.

Chasen, L. (2009). Surpassing standards in the elementary classroom: Emotional Intelligence and academic achievement through educational drama. New York: Peter Lang.

Coetzee, M., & Jansen, C. A. (2007). Emotional intelligence in the classroom: The secret of happy teachers. Cape Town: Juta.

Costa, A., & Faria, L. (2015). The impact of emotional intelligence on academic achievement: A longitudinal study in Portuguese secondary school. *Learning and Individual Differences*, *37*, 38-47.

Elizabeth J. Rozell, Charles E. Pettijohn, R. Stephen Parker, (2002) "*An empirical evaluation of emotional intelligence: The impact on management development",* Journal of Management Development, Vol. 21 Issue: 4, pp.272-289.

Esmond-Kiger, C., Tucker, A.l., & Yost, .C.A.(2006). *Emotional intelligence: From the classroom to the workplace.* Management Accounting Quarterly, 7,35-42.

Fein, Steven & Kavanaugh, Robert D & Zimmerberg, Betty & G. Stanley Hall Symposium (3rd: 1993: Williams College) (1996). *Emotion: interdisciplinary perspectives*. L. Erlbaum Associates, Mahwah, N.J.

Gardner, H. (1983). *Frames of mind: The Theory of Multiple Intelligence.* New York: Basic Books.

Glesne, C., & Peshkin. (1992). *Becoming qualitative researchers: An introduction.* White Plains, NY: Longman.

Goldenberg, I., Matheson, K., & Mantler, J. (2006). The assessment of emotional intelligence: A comparison of performance-based and self-report methodologies. *Journal of Personality Assessment, 86*(1), 33-45.

Goleman, D. (1996). *Emotional intelligence: Why it can matter more than IQ.* London: Bloomsbury.

Greenberg, M. T., & Snell, J. L. (1997). Brain development and emotional development: The role of teaching in organizing the frontal lobe. In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 93-126). New York, NY, US: Basic Books.

Hedlund, J., & Sternberg, R. J. (2000). Too many intelligences? Integrating social, emotional, and practical intelligence. In R. Bar-On & J. D. A. Parker (Eds.), *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace* (pp. 136-167). San Francisco, CA, US: Jossey-Bass.

King, G., Keohane, R., & Verba, S. (1994). *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton, New Jersey: Princeton University Press.

Long, L. A. (2018). *An Analysis of the Impact of Potential Problem Areas Assessed by the Emotional Skills Assessment Profile on Community College Student Success and Retention (Doctoral dissertation, Tarleton State University).*

Magnano, Paola, Craparo, Giuseppe, & Paolillo, Anna. (2016). Resilience and Emotional Intelligence: which role in achievement motivation. *International Journal of Psychological Research, 9*(1), 9-20.

Mayer, J. D., &Salovey, P. (1997). *What is emotional intelligence? In P. Salovey& D. Sluyter (Eds.), Emotional development and emotional intelligence: Implications for educators* (pp. 3-31). New York: Basic Books.

Mayer, J. D., Caruso, D., &Salovey, P. (2000). *Emotional Intelligence meets traditional standards for an intelligence.* Intelligence, 27(4), 267-298.

Nada Salem Abisamra., (2000). *The Relationship between Emotional Intelligence and Academic Achievement in Eleventh Graders*,

Nasir, M., & Masrur, R. (2010). An exploration of emotional intelligence of the students of IIUI in relation to gender, age and academic achievement. *Bulletin of education and research*, *32*(1).

Nelson, D. and Low, G. (1999). *Exploring and developing emotional intelligence skills.* Kingsville, TX: EI Learning Systems.

O'Connor, K.M. &Little, I.S. (2003). Revisiting the predictive validity of emotional intelligence: self-report versus ability based measures. Personality and individual differences,35, 1893-1902.

Parker, J., Saklofske, D., &Stough, C. (2009). *Assessing Emotional Intelligence Theory, Research, and Applications.* Boston, MA: Springer-Verlag US.

Pellitteri, J., Stern, R., Shelton, C., & Muller-Ackerman, B. (Eds.). (2006). *Emotionally intelligent school counseling*. Routledge.

Ranasinghe, P., Wathurapatha, W. S., Mathangasinghe, Y., & Ponnamperuma, G. (2017). Emotional intelligence, perceived stress and academic performance of Sri Lankan medical undergraduates. *BMC medical education*, *17*(1), 41.

Salovey, P., Bedell, B., Detweiler, J., & Mayer, J. (1999). Coping intelligently: Emotional intelligence and the coping process. *Coping: The psychology of what works,* 141-164.

Salovey, P., & Grewal, D. (2005). *The Science of Emotional Intelligence*. Current Directions in Psychological Science, 14, 281-285.

Sewang, R. Y. (April 2019). The Effect of Emotional Intelligence and Learning Motivation on Student Achievement. *Advances in Social Science, Education and Humanities Research (ASSEHR), volume 227*, 368-389.

Serrano, C., & Andreu, Y. (2016). Perceived Emotional Intelligence, Subjective Well-Being, Perceived Stress, Engagement and Academic Achievement of Adolescents. *Revista de Psicodidáctica,* 21 (2), 357-374.

Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., et al. (1998). *Development and validation of a measure of emotional intelligence. Personality & Individual Differences,* 25, 167-177

S. Schutte, Nicola & M. Malouff, John & Simunek, Maureen & McKenley, Jamie & Hollander, Sharon. (2002). *Characteristic Emotional Intelligence and Emotional Well-Being. Cognition & Emotion* - COGNITION EMOTION. 16. 769-785.

Stein, S., & Book, H.E. (2011). The EQ edge: Emotional Intelligence and Your Success. Mississauga, Ont.: Jossey-Bass.

Stottlemyer, B. G. (2002). *A conceptual framework for emotional intelligence in education: Factors affecting student achievement (Doctoral dissertation).* Texas A&M University-Kingsville.

Swart, A. *The Relationship between Wellbeing and Academic performance*. Unpublished Master's Thesis. University of Pretoria, South Africa. 1996.

Tapia, M.L., (1999). *A Study of the Relationship of the Emotional Intelligence Inventory (Intelligence Tests).* Dissert – Abst Int.

Van Der Zee, K., Thijs, M. & Schakel, L. (2002). *The relationship of emotional intelligence and the big five*.European Journal of Personality.16, 103-125.