Emotional Intelligence and Academic Achievement: Implications for Children's Performance in Schools

Farah Malik   and   **Sultan Shujja**

GC University, Lahore Pakistan   University of Sargodha

The study assessed relationship of emotional intelligence with academic achievement in children of 4 to 8th grades with age 9 through 13 years ($M = 11.48$, $SD = 1.43$). Sample comprised 204 children; 107 high and 97 low achievers drawn from eight public and private schools in two cities of Pakistan. Children's percentage of marks obtained in the final promotion examination of pervious grades was used as indicator of academic achievement. Measures used were Urdu version of BarOn EQ-i: YV and a demographic information form. Data were collected in small groups of 10-15 consented children with the help of class teachers. The results indicated a significant positive correlation between academic achievement and emotional intelligence. High and low achievers showed significant differences on overall emotional intelligence; no gender differences were found in both groups for total EQ score but on interpersonal and stress management scales; gender differences within groups were significant. Children from public schools were high on EQ than private schools but low on academic achievement. The findings might be of great interest to academicians, educational psychologists, school counselors and parents to understand association between emotional intelligence and academic achievement; also Pakistan related cultural specific issues.

Keywords: Emotional Intelligence, Academic Achievement, High and low achievers, Pakistan, BarOn EQ-I YV

Emotional intelligence and academic achievement have become a prime interest for the teachers, educationists, psychologists and parents to predict children's academic success which is considered to be an outcome of the learning environment as well as cognitive and intellectual potentials of children. Now researchers are focusing on the role of related factors other than traditional contributing factors like cognitive ability (IQ) and school environment in children's academic achievement and success.

Personality trait based model of emotional intelligence (EI) proposed by Bar-On (2000) distinguishes among five domains e.g., Interpersonal, Intrapersonal, Adaptability, Stress management and General mood. This emotional-social intelligence (ESI) predicts various aspects of human performance in different settings like workplace, school, and other situations involving social interaction; even physical and psychological health. It is the cross-section of emotional and social competencies and skills determining how effectively one can understand and express oneself, understands others and relates to them and copes with daily demands (Bar-On, 2006).

Researchers strongly support that EI (trait or ability) predicts the life success outcomes and academic achievement among adolescents and adults. Qualter and Gardner (2007) believed that predictability of academic success could be enhanced by using EQ-I because it contains larger number of components relevant to academic success. Abisamra (2000) reported a significant relationship between EI and academic achievement in students of 11th grade. A qualitative study on primary school children demonstrated that social and emotional intelligence both predict and facilitate the academic achievement (Brunker, 2007). The growing influence of emotional intelligence in educational setting encouraged researchers to explore further; Petrides, Frederick, and Furnham (2004) examining the role of trait emotional intelligence in academic

performance and deviant behavior in students depicted a strong relationship between trait EI and scholastic achievement. Similarly Aremu, Tella, and Tella (2006) found emotional intelligence as a strong predictor of academic achievement while recommending a need to introduce emotional and social wellbeing programs in primary schools. Mavroveli, Petrides, Shove, and Whitehead (2008) found emotional intelligence was pertinent to coping with school pressures in the school drop outs and non drop outs. Children perceiving themselves emotionally intelligent were less likely to be dropped out from school. Recently a growing number of studies have shown mediational and incremental trait EI effects over various relevant variables including academic achievement(e.g., Austin, Saklofske, & Mastoras, 2010; Downey, Johnston, Hansen, Birney, & Stough, 2010; Gardner & Qualter, 2010; Hogan et al., 2010; Johnson, Batey, & Holdsworth, 2009; Kluemper, 2008; Mavroveli, Petrides, Sangareau, & Furnham, 2009; Petrides, Pe´rez-Gonza´lez, & Furnham, 2007; Saklofske, Austin, & Minski, 2003; Schutte Thorsteinsson, Hine, Foster, Cauchi, & Binns, 2010).

To determine gender difference with reference to emotional intelligence is another interesting area to discover for researchers; some studies reported girls as more emotionally intelligent than boys; for being more empathetic, more perceptive and adaptive than boys (Argyle, 1990). Similarly, Sanchez-Nunez, Fernandez-Berrocal, Montenes, and Latorre (2008) justified gender differences found in emotional intelligence while reviewing the findings of different studies (e.g., Houtmeyers, 2002;Young, 2006) and suggested that gender differences in EI might be explored right from the infancy due to different trainings strategies used for boys and girls' child rearing practices. Another interesting study demonstrated that boys believed that they had higher EI than girls; most of the correlations between measured and self-estimated scores of EI were significant and positive, correlations between measured and self-estimated scores were generally higher for boys than girls (Petrides & Furnham, 2000). Paker, et al. (2004) found a significant gender effect for interapersonal, interpersonal and adaptability scales of EQ-i youth version. Boys scored higher on adaptability while girls scored higher on interapersonal and interpersonal scales. Tapia and Marsh (2006) also found significant differences in empathy and self-control of girls and boys; girls scored higher than boys. High and low achieving boys and girls showed different kind of emotional intelligence skills associated with academic achievement.

Researchers in the filed of emotional intelligence convincingly agree upon the positive contribution of emotional intelligence especially in the academic setting. Though lot of research has been carried out in the area of emotional intelligence and academic achievement in different student samples around the globe on the bases of which number of intervention programs are being introduced round the globe. However few studies have been carried out so far on primary and secondary school children to predict their academic success; a qualitative study in primary school children sample reported the predicting and facilitating role of the social and emotional intelligence in their academic achievement (Brunker, 2007). Therefore the most important reason behind the idea of current study was the scarcity of research in the area of emotional intelligence on the child sample generally and especially in Pakistani cultural context. Some of the researches done in Pakistan focused adolescents and adults (Farooq, 2003; Malik, Malik, & Anjum, 2009, Aslam, 2009) which also reported significant association between emotional intelligence and academic achievement in these samples, hence the need to explore emotional intelligence in the child sample was recognized by the researchers focusing the trait based model and measure which is considered the most useful instrument carrying its five dimensions. It is also pertinent to highlight that the socio-economic, political and educational systems in Pakistan that is unlike other countries; especially in educational setting there exist two parallel school systems i.e., English medium which is mostly adapted in private schools and Urdu medium (Urdu is Pakistan's national language) which is mostly prevalent in public/government schools. Private schools (English medium) are more equipped with computer and other facilities, therefore, students

in private have more exposure to technology and latest instructional methods. Unluckily public/ government (Urdu medium) schools are the most neglected segment in the educational setting. Consequently, students face lack of resources and up to date learning environment. Moreover children are brought up and socialized in very different scenario in our society where certain social skills are emphasized such as obedience of elders, unquestioned acceptance of parents' and teachers' demands and orders that make it difficult for children to develop emotional stability and social adjustment. On the bases of existing literature, the main objective of this study was to investigate the relationship between emotional intelligence and academic achievement in school children and to determine the level of emotional intelligence in high and low achiever children. Further to determine gender differences in EQ and academic achievement; role of the learning environment in terms of type of schools (private/ government) in emotional intelligence and academic achievement was other focuses of study.

Based on the already existing literature findings it was hypothesized that there would be a positive correlation between emotional intelligence and academic achievement; high achievers would be high on emotional intelligence as compared to low achievers. It was further hypothesized that girls would be high on emotional intelligence as well as academic achievement than boys; children from private school systems (English medium) would be better in EQ and academic achievement than their counterparts from government schools (Urdu medium).

Method

Sample:

The sample of 300 children, 150 boys and 150 girls of 4-8th grades was drawn from eight schools, four government and four private, form two cities in Pakistan (Lahore and Sargodha). The sample was stratified as high ($n = 107$) and low achievers ($n = 97$) ending up with 204 children as per criteria of their marks percentage in the previous grade annual/ final examination; 65% and above was taken for high achievement while below

40% for low achievement. The grades of the high and low achiever groups were confirmed with the school examination office records. Children's age ranged form 9 to 13 years ($M = 11.48, SD = 1.43$) and they belonged to different SES classes. 56% children belonged to private/English medium schools and 51% to public/government Urdu medium schools. Almost 20%of children were drawn from each grade. Sample included 52.3 % were high achievers and 47.5 % low achieves and majority of students belong to middle socio-economic class (46.5 %).

Measures

Bar-On Emotional Quotient Inventory: Youth Version (BarOn EQ-i: YV, 1997, 2000): It was developed based on Bar-On's Emotional and Social Model (ESI) to measure emotional intelligence in children of age 6-18 years which was based on. The long form of Bar-On EQ-i: YV was used in the current study that comprised 60 statements and 7 subscales labeled as Intrapersonal scale (6 items), Interpersonal scale (12 items), Adaptability scale (10 items), Stress management scale (12 items), General mood scale (14 items), total EQ (40 items), Positive impression scale (6 items) and an inconsistency index. General mood scale was not contributing in total EI, so it was not considered. Response format of EQ-i: YV was "very seldom true of me", "seldom true of me", "often true of me" and "very often true of me" and score range was 1-4; "1 for very seldom true of me" and "4 for very often true of me". Scoring was reversed for negative items. Positive impression scale (6 items) and inconsistency index were used as special measure of validity of Bar-On EQ-I: YV (BarOn, 1997). Internal reliability coefficients for age and gender were also computed; internal reliability coefficient for both males and females of these age groups ranged from .65-.90. Test-retest reliability over the three week period ranged between .77-.84 (BarOn, 1997). For the current study, Urdu version of Bar-On EQ-i: YV was used which showed (á = .96) highly significant reliability (Malik, 2009).

Academic Achievement Measure: Percentage of marks in the annual examination of previous classes of children was taken as a

criterion for children's academic achievement. Children obtaining 65% and above marks were grouped as the high achievers while children securing 40% and below were grouped as low achievers. The children in both groups were identified with the help of class teachers and their percentage of marks was confirmed through examination office record of respective schools.

The consent form was developed in Urdu for the convenience of parents and children describing the research purpose and procedures

Procedure:

The data were collected after seeking official permission from school authorities, principals and class teachers of all the designated government and private schools in Lahore and Sargodha. Informed consent was taken from the parents/ guardians through school administration and also from children before starting data collection. Data were collected in the first few weeks in the first term of their promotion to the new grades with the help of class teachers of every grade (4th to 8th). Children were asked to give honest responses on Urdu version of Bar-On Emotional Intelligence Scale-Youth version (EQ-i YV) and demographic form completed in 20-30 minutes in the presence of the researcher. Students of afterwards were grouped as high and low achievers on the bases of their obtained %age of marks in the school final/annual promotion examinations and grades mentioned by the students were confirmed with the examination office records of the concerned schools.

Results

The data of study were subjected to statistical analysis to test the proposed hypotheses through statistical evidences.

Reliability estimates of Urdu version of Bar-On Emotional Quotient Inventory: Youth Version (EQ-i: YV) were compatible to the original psychometric properties of EQ-i: YV (BarOn, 1997). Cronbach's alpha coefficients for EQ-i and

Table 1. Reliability Analyses and Intercorrelations of EQ with Academic Achievement (N=204)

Variables	2	3	4	5	6	á
1. Intrapersonal Scale	.21**	.17*	.34***	.61***	0.02	0.64
2. Interpersonal Scale	-	0.07	.50***	.71***	.22**	0.69
3. Stress Management Scale		-	.30***	.60***	-0.02	0.64
4. Adaptability Scale			-	.80***	.20**	0.78
5. Total EQ Scale				-	.16*	0.85
6. AACH					-	-

*p<.01. **p< .001. *** p<.0001.
Note: EQ = Emotional intelligence, Note: AACH = % of Marks obtained

Table 2. *Hierarchical Regression Analysis for Predictor Variables of Academic Achievement (N= 204)*

Predictors	B	SE	Å	t	p
Step I (R= .16, R^2= .025)					
Emotional Intelligence	.216	.095	.159	2.07	.02
Step II (R=.21, R^2= .042)					
Emotional Intelligence	0.223	0.094	0.164	2.37	0.01
Gender	4.7	2.5	0.13	1.87	0.06
Step III (R = .27, R^2 = .071)					
Emotional Intelligence	0.257	0.094	0.188	2.73	0.01
Gender	4.74	2.47	0.131	1.92	0.05
School	.-6.22	2.49	-0.172	-2.49	0.01

Step I F = (1, 203) = 5.21, *Step II F* = (1, 203) = 4.40, *Step III F* = (1, 203) = 5.08.

its subscales ranged from .64 to .85. Inter-correlations between Bar-On EQ-i: YV and its four subscales were ranged from .61 through .80; with the highest correlation for the Adaptability scale ($r = .80$, $p < .0001$), Intrapersonal ($r = .61$, $p < .0001$), Interpersonal ($r = .71$, $p < .0001$) and Stress Management scale ($r = .60$, $p < .0001$).

Hierarchical regression model illustrated that EQ as the strongest predictor of academic achievement at the first step with $\hat{a} = .216$, $F (1, 202) = 5.21$, $p < .02$, which explained 16% of the variance ($R = .16$); also in the second ($\hat{a} = .223$) and third model ($\hat{a} = .257$). Gender ($\hat{a} = 4.74$) and type of school (private/English medium and public/Urdu medium, $\hat{a} = -6.22$) also emerged as two other significant predictors of academic achievement for children.

When computed correlation for all the variables entered in the hierarchical regression, academic achievement and emotional intelligence were significantly correlated with each other ($r = .21$), academic achievement was correlated with gender ($r = -.12$) and school ($r = -.15$). Emotional intelligence was not correlated with gender ($r = .05$) but was correlated with school ($r = -.13$).

The differences across high and low achiever groups were further explored while computing t-test analysis which indicated high achievers were more emotionally intelligent than low achievers but difference between the means of high and low achievers was moderately significant, $t (202) = 2.33$, $p < .05$. The significant differences between the scores of high and low achievers were on two subscales of interpersonal, $t (202) = 3.11$, $p < .001$. and adaptability, $t (202) = 3.51$, $p < .001$.

Gender differences for EQ measure and its four subscales were determined through t-test which indicated no differences for boys and girls on total emotional intelligence score, $t (202) = .582$, $p = ns$. However differences were significant on the subscales of interpersonal, $t (202) = 3.49$, $p < .001$, with girls' high scores ($M = 39.26$) than boys ($M = 36.77$) and stress management, $t (202) = 2.73$, $p < .01$, with boys' high score ($M = 34.47$) than girls ($M = 32.35$). When gender differences across high and low achiever groups were explored through t-test, the results in Table 5 depicted that on total EQ scores high achievers girls and boys didn't differ but the difference on the interpersonal subscale of EQ-i were significant with girls' high mean score ($M = 40.17$) than boys ($M = 37.85$).

When data were further explored for the differences on emotional intelligence and academic achievement across gender and school

Table 3. Intercorrelations among the EQ, Academic Achievement, Gender and School Type (N=204)

	Variables	2	3	4
1	Emotional Intelligence	.215*	.058	-.131*
2	Academic Achievement	-	-.123*	.15*
3	Gender		-	.00
4	School (Public/Private)			-

*p < .05.

Note: School = Private (English medium) and Public (Urdu medium) Schools

Table 4. Differences between High (n = 107) and Low (n = 97) Achievers' Scores on EQ Total and its Four Subscales

	High Achievers M (SD)	Low Achiever M (SD)	t value
Intrapersonal Scale	15.55(4.24)	15.23(3.09)	.62
Interpersonal Scale	39.02(5.15)	36.92(5.13)	3.11**
Stress Management	33.32(5.77)	33.52(5.50)	.25
Adaptability	31.52(5.15)	29.43(5.31)	3.51**
Total EQ	119.41(13.59)	115.09(12.75)	2.33*

* p<.05. ** p<.001.

Table 5. Mean Scores of High Achievers and Low Achievers Boys and Girls on Emotional Intelligence and its Subscales

Scales	High Achievers		
	Boys(n = 53) M (SD)	Girls (n = 54) M (SD)	t
Intrapersonal Scale	15.26 (3.32)	15.83 (4.99)	.693
Interpersonal Scale	37.85 (4.87)	40.17 (5.21)	2.37**
Stress Management scale	34.06 (5.57)	32.59 (5.92)	1.31
Adaptability	31.40 (4.91)	31.65 (5.41)	.252
Total EQ	118.57 (12.7)	120.24 (14.47)	.636
	Low Achievers		
	Boys(n = 49)	Girls (n = 48)	
Intrapersonal Scale	16.24(2.61)	14.19(3.22)	3.46***
Interpersonal Scale	35.61(5.34)	38.25(4.60)	2.60**
Stress Management scale	34.92(4.36)	32.08(6.18)	2.61**
Adaptability	30.41(5.69)	28.44(5.40)	1.85*
Total EQ	117.18(12.23)	112.96(13.04)	1.64

* $p<.05$. ** $p<.01$. ***$p< .001$.

Table 6. Mean, Standard Deviation and t values of Private School Students and Government School Students on Emotional , SC and GPA (N=204)

Schools variables	Private M (SD)	Public/Govt. M (SD)	t
EQ Total Score	115.50 (13.28)	119.32 (13.29)	2.04*
AACH	72.09 (17.03)	67.44 (18.99)	2.07*

* $p< .05$.   Note: AACH = % of Marks obtained

through multivariate ANOVA, there was a significant effect of gender on academic achievement, $F(1, 203) = 3.84$, $p<.05$ and effect of school on emotional intelligence, $F(1, 203) = 7.69$, $p< .01$, however interaction effect of gender and school on emotional intelligence remained non significant.

The data further broke into t-analysis (Table 6) also demonstrated that students of government/public (Urdu medium) schools were high on emotional intelligence than their counterparts from the private (English medium) schools, $t(203) = 2.04$ whereas academic achievement level of children from private schools was higher than government school students, $t(203) = 2.07$, $p < .05$. Mean score differences are depicted in Figure 4 below.

Discussion

Researchers claim that those children who are well aware of their own and others' emotions and better adjusted in society are more likely to show good academic performance and success in school. The positive socialization might help in developing good interpersonal relationships and social adjustment. These findings of the current study get support from existing research for example Abisamra (2000); Adeyemo (2001); Aremu, Tella, and Tella (2006); BarOn (1997); Brunker (2007); Malik (2009); Mavroveli, Petrides, Shove, and Whitehead (2008), Parker et al.(2004); and Zee, Thijs, and Schakel (2002).

Emotional intelligence, and school type emerged as significant predictors of academic achievement and gender was the least significant predictor. It might imply that academic achievement or performance might be determined by emotional intelligence and also by school and gender where girls show high academic achievement level than boys (Tapia & Marsh, 2006)

Boys and girls remained even in their level of emotional intelligence depicting no difference for

overall EQ measure scores, differences were significant on interpersonal and stress management skills where girls showed better interpersonal skills and boys better stress management skills.When gender differences were determined separately for high and low achiever groups for emotional intelligence and its four dimensions, the difference between high achiever boys and girls as well as low achiever boys and girls on total EQ remained non-significant; the current finding receives support from Katyal and Awasthi, (2005) who also found no gender differences for emotional intelligence. However boys and girls within high achievers' group were significantly different on interpersonal skills scale where girls had high score depicting particular inherent empathetic potential of interpersonal relationships. Many researchers have established that gender differences can be seen from infancy due to different brought up training given to boys and girls (Houtmeyers, 2002; Sanchez-Nunez, Fernandez-Berrocal, Montenes, & Latorre, 2008; Young, 2006) which is particularly true in Pakistani culture. Girls are taught interpersonal skills right from the beginning during childhood. Feinggold (1994); and Crick and Grotpeta (1995) also establish that boys show greater dominance and insensitivity during interaction and girls are more focused on intimate relationships.

Interestingly, when explored the low achiever children's group individually significant differences were found between boys and girls on all the subscales of emotional intelligence measure though their total emotional intelligence scores were similar. Low achiever boys were high on intrapersonal scale, stress management scale and adaptability while girls were high on interpersonal scale; finding consistent with Parker et al., 2004 suggesting boys might score higher on adaptability than girls who score higher on interapersonal and interpersonal scales of BarOn EQ measure. Similarly Tapia and Mash (2006) well established that high and low achieving boys and girls have different kind of EQ skills which are also associated with academic achievement.

When discovered the role of the school environment through the type of school children were studying, children form government/public school students were high in emotional intelligence but low in academic achievement as compared to children form private schools.

Furthermore the private school administrations area more concerned with academic achievements and grades of the students to raise their popularity graphs being in the commercial competition and to attract more and more parents and children might serve as a plausible explanation of better academic achievement of children from private English medium schools. On a conclusive note, children in the government schools not only lack resources and modern technology that they have to strive for but face harsh and abusive behaviors by teachers which is not generally widespread in the private schools. Unluckily harsh corporal punishment still prevails in Pakistani school system especially in government sector having no state legislation to prevent it. Due to the continuous exposure to stressful emotional social situations at schools, these children might learn to better identify emotions of self and others to be well adjusted and cope with in their stressful environment than their counter parts form private school system. On a conclusive note the findings of our study established the relationship of emotional intelligence with academic achievement in children in Pakistan. Findings of the current research might lead researchers to explore new dimensions of EI within educational context in future. Longitudinal research might portray a comprehensive picture about the influence of the emotional intelligence on the academic achievement of children and adolescents. The research might be expanded to the diversified and cross-cultural samples from different cities and provinces in Pakistan as well as internationally for comparison purposes. In lieu of relaying on single measure of EQ, multiple EQ measures might be used in order to investigate diverse dimensions of emotional intelligence.

References

AbiSamra, N. (2000). The relationship between emotional intelligence and academic achievement in eleventh graders. *Research in Education,* 661-668.

Adeyemo, A. D. (2001). The buffing effect of emotional

intelligence on the adjustment of secondary school students in transition. *Journal of Research in Educational Psychology, 3*(2), 79-90.

Aremu, O. A., Tella, A., & Tella, A. (2006). *Relationship among emotional intelligence, parental involvement and academic achievement of secondary school students in Ibadan, Nigeria.* Retrieved April 27, 2008, from http://www.usca.edu/essays/vol182006/-tella/pdf.

Argyle, M. (1990). *The psychology of interpersonal behavior*. Harmondsworth, UK: Panguin.

Aslam, S. (2009). *Emotional intelligence and academic achievement of university students: A comparison of self report and performance based measures.* Unpublished MPhil thesis, GC University, Lahore, Pakistan

Austin, E. J., Saklofske, D. H., & Mastoras, S. M. (2010). Emotional intelligence, coping, and exam-related stress in Canadian undergraduate students. *Australian Journal of Psychology, 62,* 42–50.

Bar-On, R. (1997). *The Emotional Quotient Inventory (EQ-i): Technical manual.* Toronto, Canada: Multi-Health Systems, Inc.

Bar-On, R. (2000). Emotional and social intelligence: Insight from the Emotional Quotient Inventory (EQ-i). In R. Bar-On & J. D. A. Parker (Eds.), *Handbook of emotional intelligence*. San Francisco: Jossy- Bass.

Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema, 18,* 13-25.

Brunker, N. (2007). *Primary schooling and children's social and emotional wellbeing: A teacher perspective.* Paper presented at AARE, Perth.

Crick, N. R., & Grotpeta, J. K. (1995). Relational aggression, gender and social-psychological adjustment. *Child Development, 66,* 710-722.

Downey, L. A., Johnston, P. J., Hansen, K., Birney, J., & Stough, C. (2010). Investigating the mediating effects of emotional intelligence and coping on problem behaviors in adolescents. *Australian Journal of Psychology, 62,* 20–29.

Farooq, A. (2003). *Effect of Emotional Intelligence on Academic performance.* Unpublished PhD thesis, University of Karachi, Pakistan.

Feingold, A. (1994). Gender differences in personality. *Psychological Bulletin, 116,* 429-456.

Gardner, K. J., & Qualter, P. (2010). Concurrent and incremental validity of three trait emotional intelligence measures. *Australian Journal of*

Psychology, 62, 5–13.

Hogan, M. J., Parker, J. D. A., Wiener, J., Watters, C., Wood,L. M., & Oke, A. (2010). Academic success in adolescence: Relationships among verbal IQ, social support and emotional intelligence. *Australian Journal of Psychology, 62,* 30–41.

Houtmeyers, K. A. (2002). Attachment Relationship and Emotional Intelligence in Preschoolers. Dissertation Abstract: Section B: *The Science and Engineering, 62*(10), 4818b.

Johnson, S. J., Batey, M., & Holdsworth, L. (2009). Personality and health: The mediating role of trait emotional intelligence and work locus of control. *Personality and Individual Differences, 47,* 470–475.

Katyal, S., & Awasthi. (2005). Gender Differences in Emotional Intelligence among Adolescents of Chandigarh. *J. Hum. Ecol, 17*(2), 153-155.

Kluemper, D. H. (2008). Trait emotional intelligence: The impact of core-self evaluation and social desirability. *Personality and Individual Differences, 44,* 1402–1412.

Malik, T. (2009). *Relationship of Emotional Intelligence with Academic Achievement and Social Competence in High and Low Achievers.* Un-published M Phil thesis, GC University, Lahore, Pakistan.

Malik, F., Malik, T., & Anjum, S. (2010). Emotional intelligence, academic achievement and social competence in high and low achiever Pakistani adolescents. *Pakistan Journal of Psychology*, 41 (2), 75-89.

Mavroveli, S., Petrides, V. K., Shove, C., & Whitehead, A. (2008). Investigation of the construct of trait emotional intelligence in children. *Eur Child Adolesc Psychiatry, 17,* 516-0526.

Mavroveli, S., Petrides, K. V., Sangareau, Y., & Furnham, A. (2009). Relating trait motional intelligence to objective socioemotional outcomes in childhood. *British Journal of Educational Psychology, 79,* 259–272.

Parker, J. D. A., Sr.Creque, R. E., Barnhart, D. L., Harris, J. I., Majeski, S. A., Wood, L. M., Bond, B. J., & Hogan, M. J. (2004) Academic achievement in high school: Does emotional intelligence matter? *Personality and Individual Differences, 37,* 1321-1330.

Petrides, K. V., & Furnham, A. (2000). Gender differences in measured and estimsted trait emotional intelligence. *Sex Roles, 42,* 449-461.

Petrides, K. V., Frederickson, N., & Furnham, A.

(2004). The role of trait emotional intelligence in academic performance and deviant behavior at school. *Personality and Individual differences, 36,* 277-293.

Petrides, K. V., Pe´rez-Gonza´lez, J. C., & Furnham, A. (2007).On the criterion and incremental validity of trait emotional intelligence. *Cognition and Emotion, 21*, 26–55.

Petrides, K. V., Pita, R. & Kokkinaki, F. (2007).T he location of trait emotional intelligence inpersonality factor space. *British Journal of Psychology, 98*, 273–289

Qualter, P., & Gardner, K. J. (2007). Emotional intelligence: Review of research and educational implications. *Pastoral care,* 11-20.

Saklofske, D. H., Austin, E. J., & Minski, P. S. (2003). Factor structure and validity of a trait emotional intelligence measure. *Personality and Individual Differences, 34*, 707–72

Sanchez-Nunez, T. M., Fernandez-Berrocal, P., Montanes, J., & Latorre, M. J. (2008). Does emotional intelligence depend on gender? The socialization of emotional competences in men and women and its implications. *Journal of Research in Educational Psychology, 6*(2), 455-474.

Schutte, N. S., Thorsteinsson, E. B., Hine, D. W., Foster, R., Cauchi, A., & Binns, C. (2010). Experiential and rational processing styles, emotional intelligence and wellbeing. *Australian Journal of Psychology, 62,* 14–19.

Tapia, M., & Marsh, G. E. (2006). The effect of sex and grade point average on emotional intelligence. *Psicothema, 18,* 108-111.

Young, L. D. (2006). Parental influences on individual differences in emotional understanding. Dissertation Abstract: Section B: *The Science and Engineering, 66*(9), 5128b.

Zee, K. V. D., Thijs, M., & Schakel, L. (2002). The relationship of emotional intelligence with academic intelligence and the big five. *European Journal of Personality, 16*(2). 103-125.

Farah Malik, PhD, Associate Professor and Incharge, Clinical Unit, Department of Psychology, GC University, Lahore-54000, Pakistan

Sultan Shujja, Lecturer, Department of Psychology, University of Sargodha, Pakistan.