


## Co-relational Study on Emotional Intelligence and Academic Achievement among Adolescent Girls in Peshawar, Khyber Pakhtunkhwa, Pakistan

Tabassum Faiz Solehria <sup>1</sup>  Nageena Qamar <sup>2</sup>



### Abstract

The purpose of the current study was to explore the relationship between academic achievement and emotional intelligence among adolescent girls in Peshawar, KP, Pakistan. Emotional Intelligence is now not a novice phenomenon in the field of education, and many of the researches proved that emotional intelligence is an important contributor to academic success. In this advanced era of time, people still believe that academic grades are the only source of high grades and success in life, but this is not true for every person. In fact, some of the research studies stated that EQ is more important for success in the academic field in comparison to IQ. However, educators often overlook the significance of emotional well-being, prioritizing academic performance instead. The sole aim of the study is to find out the relationship between EI and AA (academic achievement). The major objectives of the study were to investigate the impact of EI on AA (academic achievement) and to examine the relationship between EI (emotional intelligence) and (academic achievement) among intermediate school girls in Peshawar Cantonment. Regression analysis revealed a significant relationship ( $R^2 = 0.125$ ,  $F(134) = 19.020$ ,  $P < 0.01$ ), indicating that trait emotional intelligence predicts academic achievement.

### Key Words

Academic Performance, Emotional Intelligence, Adolescent Development, Educational Outcomes, Emotional Quotient, Adolescent Populations

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## Introduction

Many studies have been conducted on the relationship of EI on AA (academic achievement) across various educational levels, including primary, secondary, and tertiary. These studies consistently highlight EI as a crucial factor influencing not only academic success but also overall human behavior and future prospects. The basic aim of the current study is to investigate the correlation between emotional intelligence (EI) and academic achievement (AA) among adolescent female students.

The notion that Intelligence Quotient (IQ) is the sole determinant of success has been debunked by research on emotional intelligence (EI). In 1996, pioneering work (Goleman, 1996) suggested that IQ accounts for only 20% of a person's success by giving equal or more preference to emotional intelligence. Later on, other studies

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conducted by various scholars on this same phenomenon reinforced this idea, challenging the outdated concept that academic grades are the primary predictor of personal and professional success.

Recent research has introduced a more nuanced understanding, highlighting the significance of emotional intelligence and social intelligence in achieving academic success (Afridi & Ali, [2019](#)). These factors can be intrinsic, stemming from the students themselves, or extrinsic, influenced by external factors such as teaching methodologies, curriculum design, and cultural context.

Emotional Intelligence (EI) has emerged as a vital concept in recent times, captivating the interest of diverse groups and influencing all educational levels. A growing body of research suggests that individuals with average intelligence often lead happier and more successful lives, whereas those with exceptionally high intelligence may struggle to cope with life's demands, highlighting the importance of emotional intelligence in achieving overall well-being (Goldenberg et al., [2006](#)).

Magnano et al. ([2016](#)), along with his colleagues, reported a study that supported the findings about Emotional Intelligence (EI), which encompasses self-regulatory processes of emotion and motivation that enable individuals to adapt and achieve goals at personal, collective, and institutional levels.

Costa and Faria, ([2015](#)) studied EI and found the relationship between various theories of EI which were related to the ability, trait emotional intelligence, and academic achievement. In their findings of the study they reported that there is a significant and direct impact of EI on students' academic success by giving more importance and preference to emotional intelligence in academic achievement (AA).

Suleman, ([2019](#)) along with his supporters in his work found the significant and positive correlation between emotional intelligence and academic achievement among undergraduate students at university level. He further reported that if emotional intelligence is higher in undergraduate students then this is associated with their greater academic success.

Karibeeran and Mohanty, ([2019](#)) reported that the development of emotional intelligence in adolescents is influenced by various factors which are family, school, and media and they can play a significant and prominent role in developing and enhancing their emotional intelligence.

There are many studies conducted on students of various levels, and one such study was about the relationship between EI and academic achievement, which was conducted by Chamundeswari ([2013](#)) among students of higher secondary school. He later on reported that the findings of a study revealed that there is a correlation between EI and academic achievement, which is positive and significant. The results of his findings supported the past studies that students with higher EI achieve better academic grades and thus will show good academic performance overall.

A study by Serrano et al. ([2022](#)) confirmed educators' long-held suspicions that emotional stability is closely tied to academic achievement. The findings suggest that students who possess better emotional regulation skills tend to be more engaged, focused, and motivated in their academic pursuits. In essence, superior emotional abilities foster a positive and productive attitude towards learning, enabling students to approach their studies with greater enthusiasm and effectiveness.

In literature, there is much research about the connection between EI and academic achievement, and such broad research has established a predictive relationship between emotional intelligence and academic achievement simultaneously by giving equal importance to the phenomenon both individually and at institutional levels. Swart et al. ([2010](#)) revealed in their study that there are significant differences in emotional intelligence scores between

those students who are academically successful and those who are unsuccessful. These findings of the study pointed out that there are other factors beyond academic ability, such as emotional intelligence, that play a vital role in influencing academic success.

The findings imply that students' ability to manage stress, to interact with others, and to develop social skills are essential for achieving academic success. To excel in their education, students must cultivate emotional intelligence to effectively navigate personal and social challenges, ultimately enhancing their academic performance.

The role of emotional intelligence in students' academic success is highly influential, and research has proved that emotional intelligence surpasses both academically and personally because it significantly influences social-emotional competencies. Due to the significance and value of EI in today's real world, throughout the world and especially in the US, educational administrations have incorporated EI training into their freshman curricula, aiming to boost overall students' academic performance and institutional efficiency (Skura & Świderska, [2022](#)).

A study was conducted in Iran on high school students' EI and other important factors, and the researchers reported similar findings by revealing a strong positive correlation between emotional EI and its relationship with social competence and academic achievement. Research by Akbaribooreng et al. ([2015](#)) suggests that those students who have high emotional intelligence along with social competence tend to be more socially and academically successful compared to those students who have lower emotional intelligence.

Nasir and Masrur ([2010](#)) conducted a correlation study at the International Islamic University Islamabad (IIUI). The researchers explored many variables to check their relationship with EI such as age, gender, and academic achievement among students. The results revealed that there is sound and positive relationship between EI and academic achievement.

## Objectives of the Study

The objectives of the study are two-fold:

1. To investigate the impact of emotional intelligence on the academic achievement of adolescent girls at the school level.
2. To examine the relationship between emotional intelligence and academic achievement among adolescent girls at the school level.

## Hypotheses

The following are the hypotheses of the study:

1. Emotional intelligence significantly predicts academic achievement among adolescent girls at the school level.
2. A significant positive correlation exists between emotional intelligence and academic achievement among adolescent girls at the school level.

## Significance of the Study

Nowadays, due to excessive workload and social burdens, emotional regulation is a significant challenge for everyone, whether a student or layperson. Effective emotion management is crucial for optimal performance, as unmanaged stress and emotions can hinder academic success. Research also proved that EI is a very strong predictor of academic intelligence. Despite this, parents and educators often prioritize academic performance over emotional well-being, overlooking the profound impact of emotions on students' learning experiences. EI plays an important role in enhancing learning and academic success, so the aim of the study is to investigate the relationship

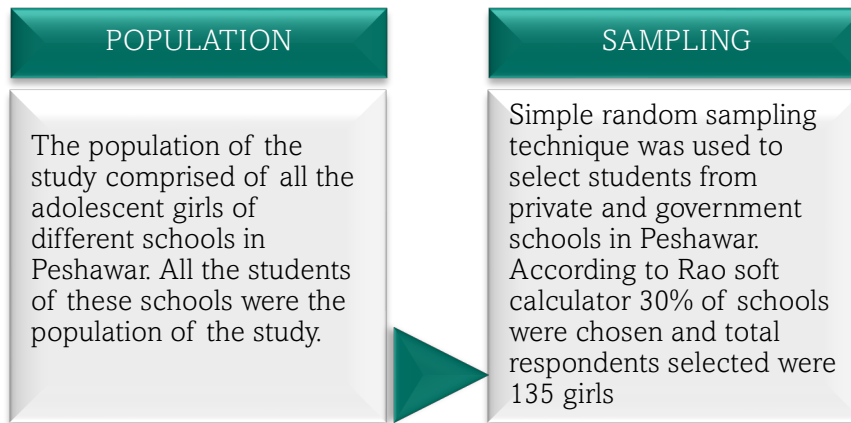
between emotional intelligence and academic achievement among adolescent school girls. The findings of the study will help shed light on the importance of EI in promoting academic excellence and improving academic achievement.

## Methodology

This section deals with the discussions of method and procedure that was used for the study. This chapter describes the population, sampling procedure research instrument and procedure of administration of the questionnaire and analysis of data.

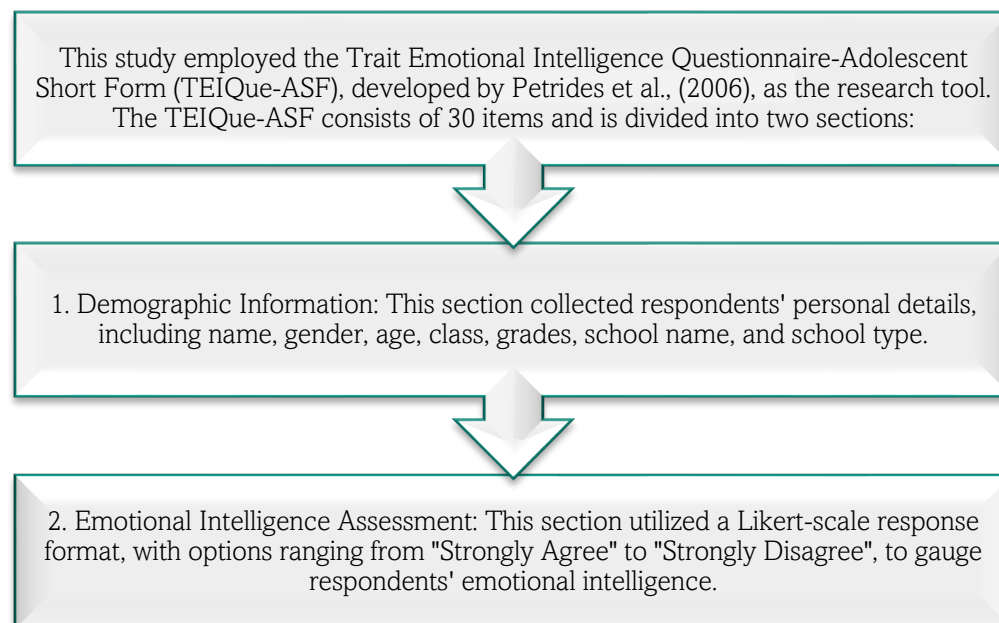
## Population and Sample

### Population



The age range was Fifteen (15) to Seventeen (17) years with the mean age of Sixteen (16) years. The educational level of students was first year and second year. Data was collected during class time, with the support of schools principal and following the ethical guidelines applicable for Peshawar, Pakistani culture.

## Data Collection Instrument



## Data Analysis and Interpretations

### Analysis

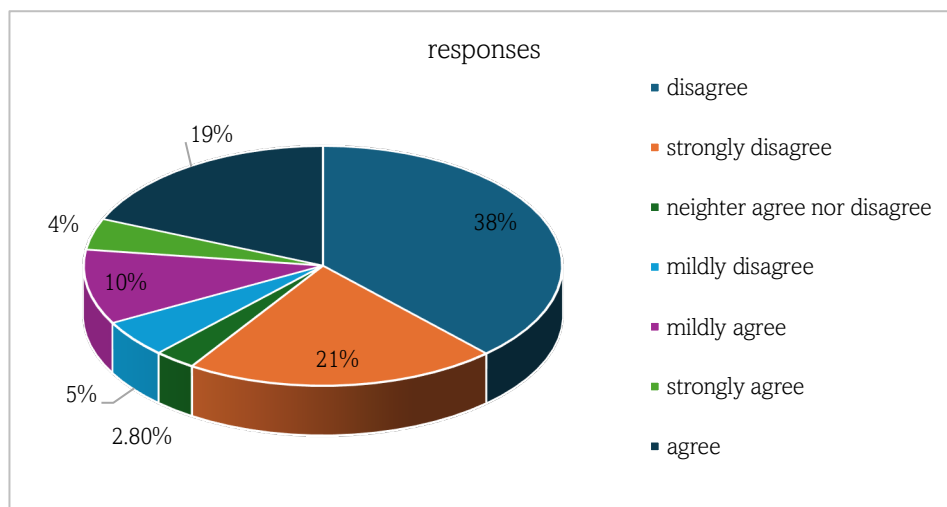
**Table 1**

*It's Easy for me to Talk about my Feelings to Other People.'*

	Frequency	Percentages
Strongly Disagree	30	21.4%
Disagree	53	38%
Mildly disagree	7	5%
undecided	4	2.8%
Mildly agree	14	10%
Agree	26	19%
Strongly Agree	6	4.2%
Total	140	100%

Table 1 indicates that 38% girls disagree with the statement, 21.4% strongly disagree, 2.8% girls unsure about the statement, 5% Mildly disagree, 10% mildly agree, 4.2% girls strongly agree and 19% girls only agreed. This showed that it is difficult for girls to talk about their feelings to other people.

**Graph 1**

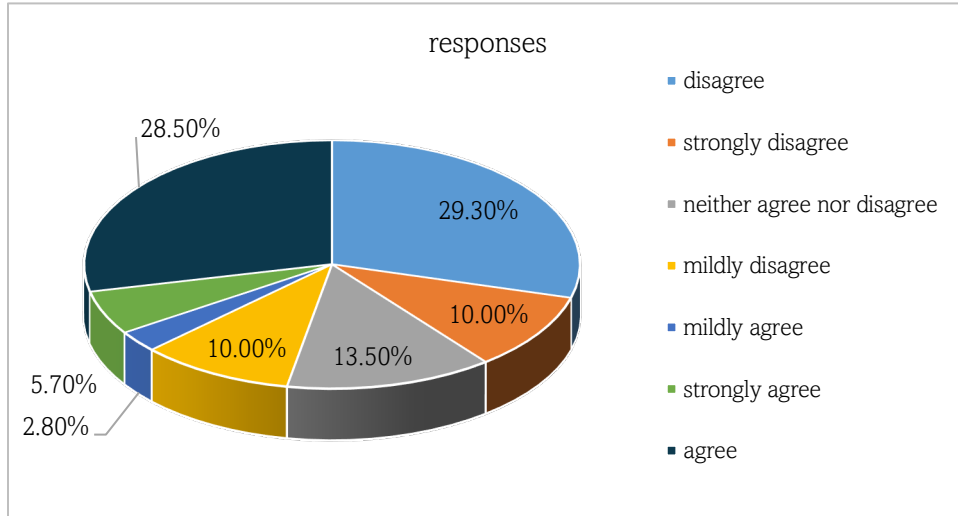


**Table 2**

*I Often Find it Hard to See Things from Someone else's Point of view*

	Frequency	Percentages
Strongly Disagree	14	10%
Disagree	41	29.3%
Mildly disagree	14	10%
undecided	19	13.5%
Mildly agree	4	2.8%
Agree	40	28.5%
Strongly Agree	8	5.7%
Total	140	100%

Graph 2



**Analysis**

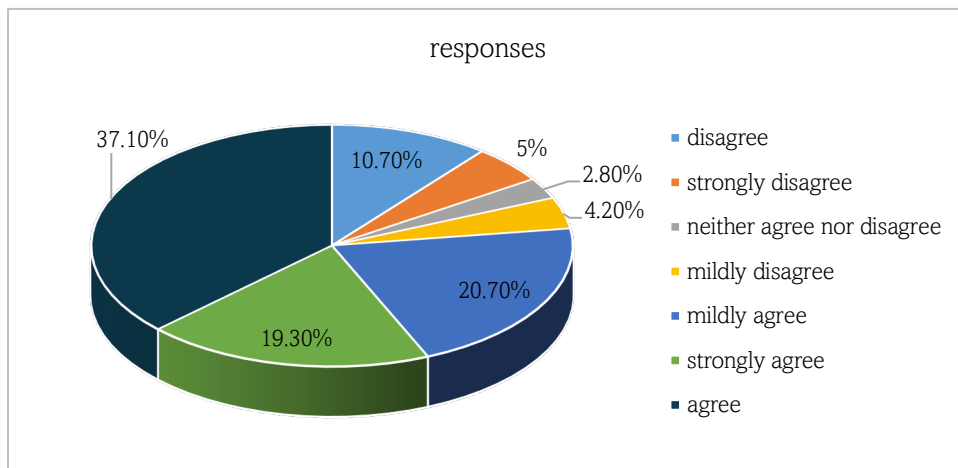
Table 2 indicates that 29.3% girls disagree with the statement, 10% Strongly disagree, 13.5% girls unsure about the statement, 10% Mildly disagree, 2.8% mildly agree, 5.7% girls strongly agree and 28.5% girls agree. This showed that it is hard for the girls to see things from someone else perspective.

Table 3

*I am a Motivated Person*

	Frequency	Percentages
Strongly Disagree	7	5
Disagree	15	10.70
Mildly disagree	6	4.2
undecided	4	2.8
Mildly agree	29	20.7
Agree	52	37.1
Strongly Agree	27	19.3
Total	140	100%

Graph 3



### Analysis

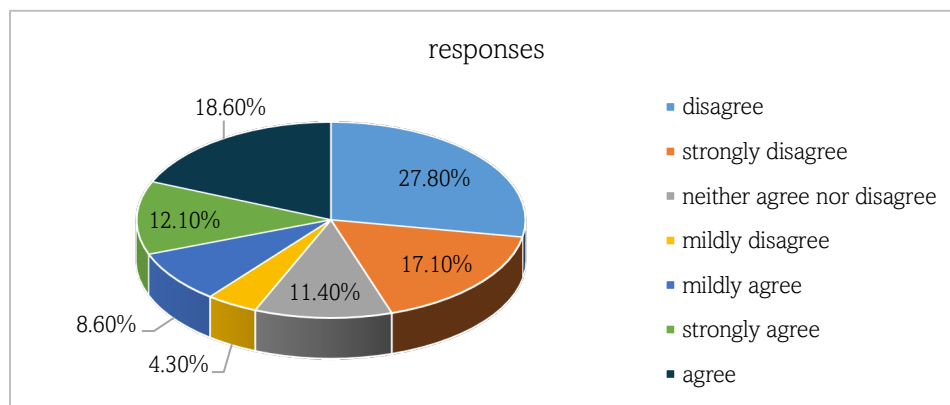
Table 3 indicates that 10.70% girls disagree with the statement, 5% Strongly disagree, 2.80% girls unsure about the statement, 4.20% Mildly disagree, 20.70% mildly agree, 19.30% girls strongly agree and 37.10% girls agree. This showed that the girls are usually motivated.

**Table 4**

*I Find it Hard to Control my Feelings*

	Frequency	Percentages
Strongly Disagree	24	17.10
Disagree	39	27.80
Mildly disagree	6	4.30
undecided	16	11.40
Mildly agree	12	8.60
Agree	26	18.60
Strongly Agree	17	12.10
Total	140	100%

**Graph 4**



### Analysis

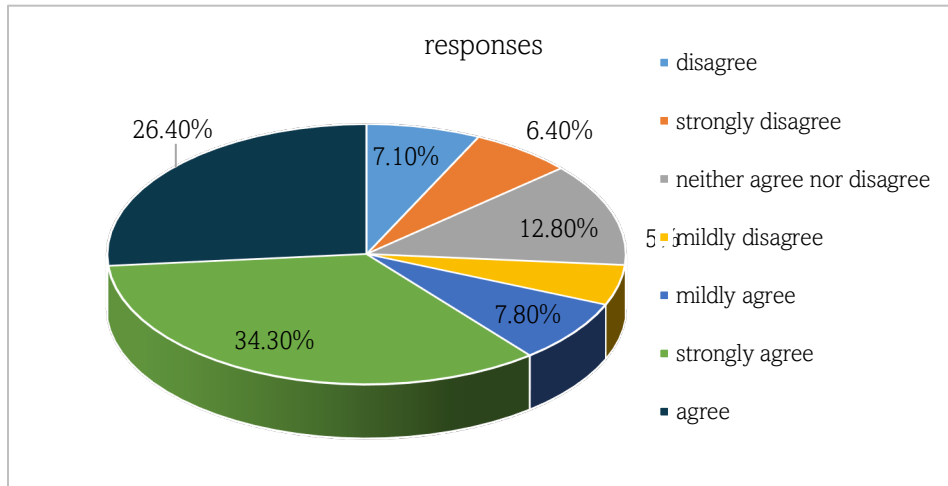
Table 4 indicates that 27.80% of girls disagree with the statement, 17.10% Strongly disagree, 11.40% of girls are unsure about the statement, 4.30% Mildly disagree, 8.60% mildly agree, 12.10% of girls strongly agree, and 18.60% of girls agree. This shows that the majority of girls respond that it is not hard for them to control their feelings

**Table 5**

*My Life is not Enjoyable*

	Frequency	Percentages
Strongly Disagree	9	6.4
Disagree	10	7.10
Mildly disagree	7	5
undecided	18	12.80
Mildly agree	11	7.80
Agree	37	26.4
Strongly Agree	48	34.3
Total	140	100%

Graph 5



**Analysis**

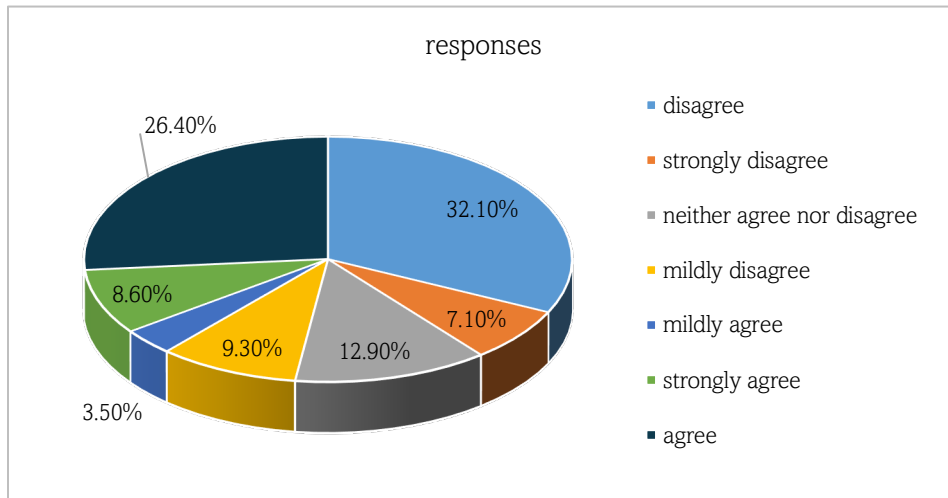
Table 5 indicates that 7.10% girls disagree with the statement, 6.40% Strongly disagree, 12.80% girls unsure about the statement, 5% Mildly disagree, 7.80% mildly agree, 34.30% girls strongly agree and 26.40% girls agree. This shows that majority of the girls respond that their life is not enjoyable.

Table 6

*I Find it Hard to Know Exactly what Emotion I'm Feeling*

	Frequency	Percentages
Strongly Disagree	10	7.10
Disagree	45	32.1
Mildly disagree	13	9.30
undecided	18	12.90
Mildly agree	5	3.50
Agree	12	8.60
Strongly Agree	37	26.40
Total	140	100%

Graph 6





### Analysis

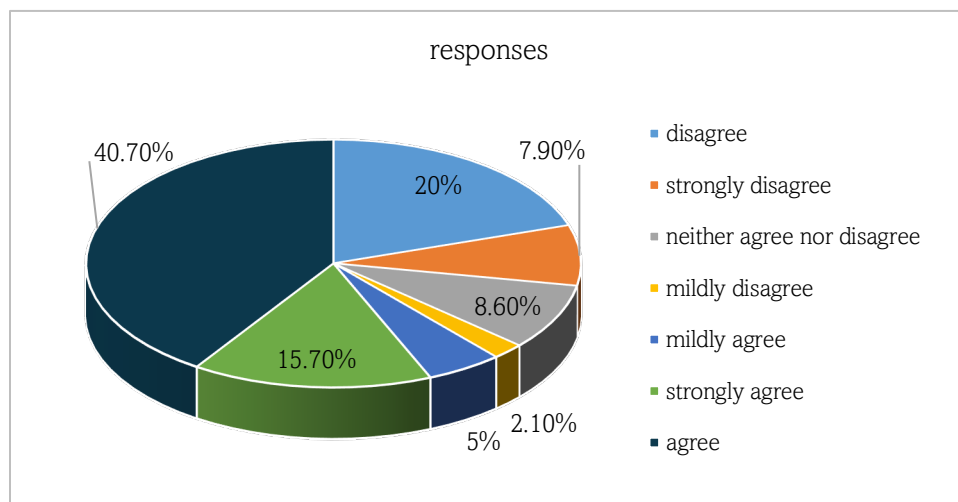
Table 6 indicates that 32.10% girls disagree with the statement, 7.10% Strongly disagree, 12.90% girls unsure about the statement, 9.30% Mildly disagree, 3.50% mildly agree, 8.60% girls strongly agree and 26.40% girls agree. This shows that the respondents know about their feelings.

**Table 7**

*Sometimes, I think my whole Life is going to be Miserable.*

	Frequency	Percentages
Strongly Disagree	11	7.90
Disagree	28	20
Mildly disagree	3	2.10
undecided	12	8.60
Mildly agree	7	5
Agree	57	40.7
Strongly Agree	22	15.70
Total	140	100%

**Graph 7**



### Analysis

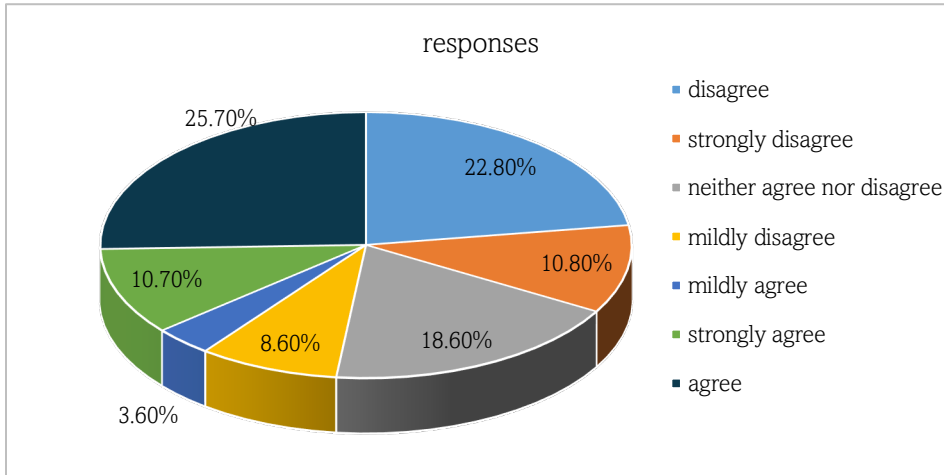
Table 7 indicates that 6.40% girls disagree with the statement, 7.90% Strongly disagree, 8.60% girls unsure about the statement, 2.10% Mildly disagree, 5% mildly agree, 15.70% girls strongly agree and 40.70% girls agree. This shows that the girls are feel miserable about their life.

**Table 8**

*I Find it Hard to Cope when Things Change in my Life*

	Frequency	Percentages
Strongly Disagree	14	10.80
Disagree	32	22.80
Mildly disagree	2	8.60
undecided	26	18.6
Mildly agree	5	3.60
Agree	36	25.70
Strongly Agree	15	10.70
Total	140	100%

Graph 8



Analysis

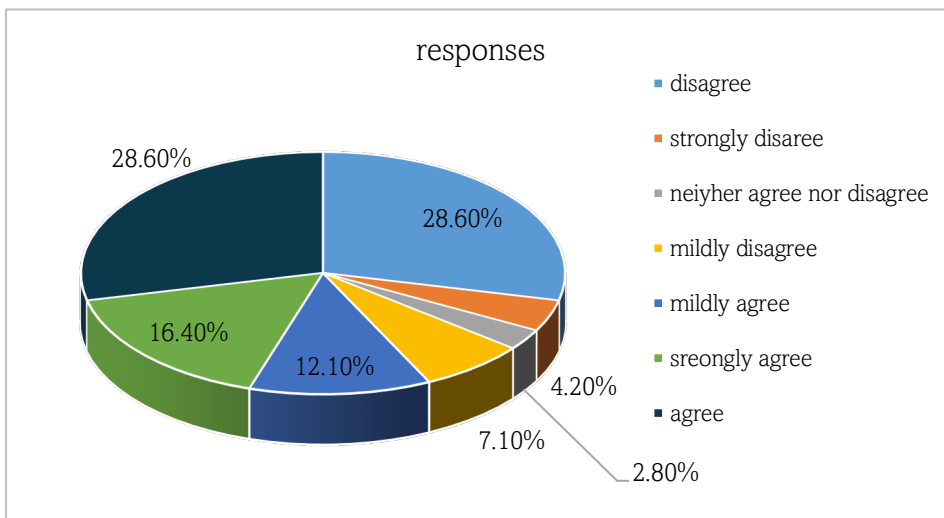
Table 8 indicates that 22.80% girls disagree with the statement, 10.80% Strongly disagree, 18.60% girls unsure about the statement, 8.60% Mildly disagree, 3.60% mildly agree, 10.70% girls strongly agree and 25.70% girls agree. This shows that the students respond that it is difficult for them to cope with changes.

Table 9

*I'm able to "get into Someone's Shoes" and Feel their Emotions.*

	Frequency	Percentages
Strongly Disagree	6	4.20
Disagree	46	28.60
Mildly disagree	10	7.10
undecided	4	2.80
Mildly agree	17	12.10
Agree	40	28.60
Strongly Agree	23	16.40
Total	140	100%

Graph 9



### Analysis

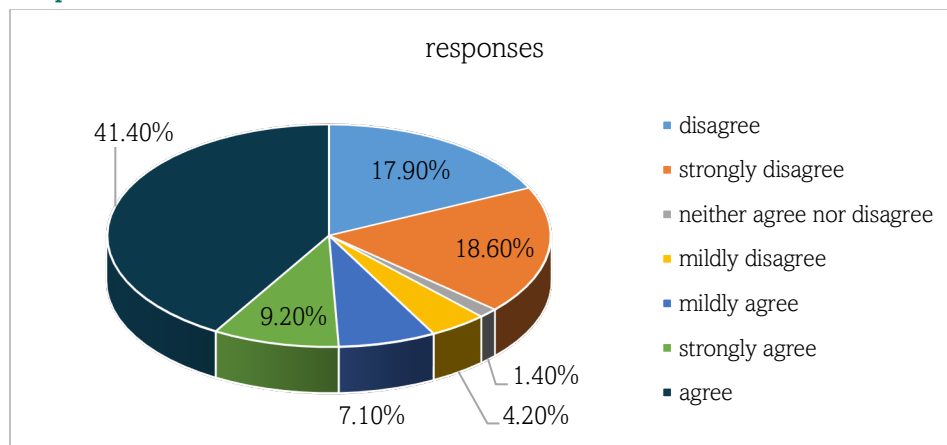
Table 9 indicates that 28.60% girls disagree with the statement, 4.20% strongly disagree, 2.80% girls unsure about the statement, 7.10% Mildly disagree, 12.10% mildly agree, 16.40% girls strongly agree and 28.60% girls agree. This shows that the girls are able to feel the emotions of others.

**Table 10**

*I can control my Anger when I want to*

	Frequency	Percentages
Strongly Disagree	26	18.60
Disagree	25	17.90
Mildly disagree	6	4.20
undecided	2	1.40
Mildly agree	10	7.10
Agree	58	41.40
Strongly Agree	13	9.20
Total	140	100%

**Graph 10**



### Analysis

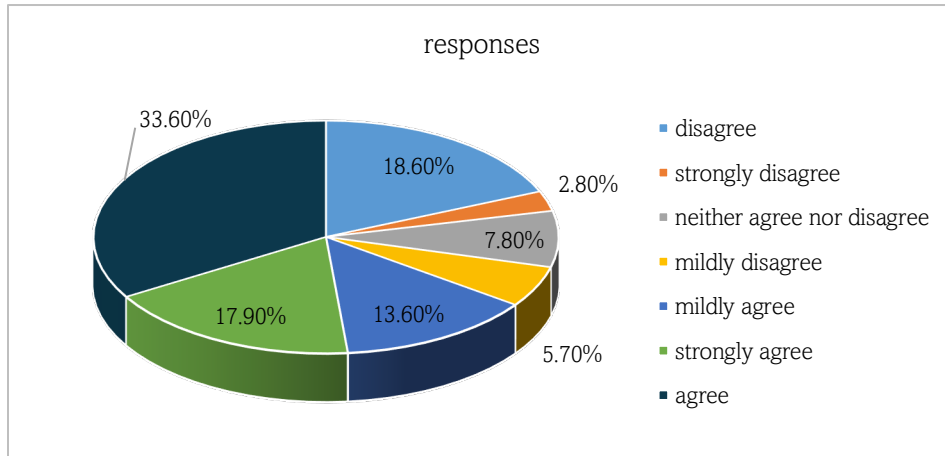
Table 10 indicates that 17.90% girls disagree with the statement, 18.60% Strongly disagree, 1.40% girls unsure about the statement, 4.20% Mildly disagree, 7.10% mildly agree, 9.20% girls strongly agree and 41.40% girls agree. This shows that the girls are able to control their anger.

**Table 11**

*I Pay a Lot of Attention to my Feelings*

	Frequency	Percentages
Strongly Disagree	4	2.80
Disagree	26	18.60
Mildly disagree	8	5.70
undecided	11	7.80
Mildly agree	19	13.60
Agree	47	33.60
Strongly Agree	25	17.90
Total	140	100%

Graph 11



**Analysis**

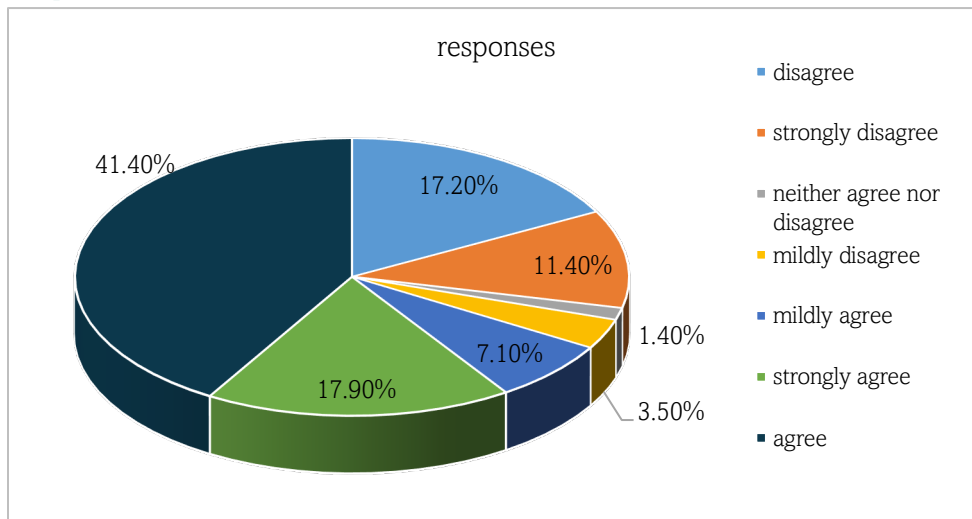
Table 11 indicates that 18.60% of girls disagree with the statement, 2.80% Strongly disagree, 7.80% of girls are unsure about the statement, 5.70% Mildly disagree, 13.60% Mildly agree, 17.90% of girls strongly agree, and 33.60% of girls agree. This shows that the majority of girls pay a lot of attention to their feelings.

Table 12

*I try to control my thoughts and not Worry too much about Things.*

	Frequency	Percentages
Strongly Disagree	16	11.40
Disagree	24	17.20
Mildly disagree	5	3.50
undecided	2	1.40
Mildly agree	10	7.10
Agree	58	41.40
Strongly Agree	25	17.90
Total	140	100%

Graph 12



## Analysis

Table 12 indicates that 17.20% girls disagree with the statement, 11.40% Strongly Disagree, 1.40% girls unsure about the statement, 3.50% Mildly disagree, 7.10% Mildly agree, 17.90% girls were strongly agree and 41.40% girls agree. This shows that the girls try to control their thoughts and not too much worry about things.

## Correlation between Emotional Intelligence and Academic Achievement

### Descriptive Statistics

Table 13

	Mean	Std. Deviation	N
AC	.7115	.09984	135
Average	4.222214	.5826452	135

Above table describes the descriptive statistics of the sample which shows that total sample is 135, their mean is 4.22 and standard deviation is 0.582.

Table 14

		AC	Average
Pearson Correlation	AC	1.000	.354
	Average	.354	1.000
Sig. (1-tailed)	AC	.	.000
	Average	.000	.
N	AC	135	135
	Average	135	135

The above table shows the correlation between emotional intelligence and academic achievement, which is 0.354, the total sample is 135, and their significance is .000, which shows that  $p < .01$ .

## Linear Regression with Emotional Intelligence as Determinant of Academic Achievement

Table 15

Variable	R	R <sup>2</sup>	F	Sig.	df
Acad Ach	.354	.125	19.020	.000	134

The results indicate that emotional intelligence is a significant predictor of academic achievement, accounting for 12.5% of the variance ( $R^2 = 0.125$ ,  $F(134) = 19.020$ ,  $p < 0.01$ ). The correlation analysis reveals a moderate positive correlation between emotional intelligence and academic achievement ( $r = 0.354$ ,  $n = 135$ ,  $p < 0.01$ ).

The regression analysis confirms a significant relationship between emotional intelligence and academic achievement ( $R^2 = 0.125$ ,  $F(134) = 19.020$ ,  $p < 0.01$ ). The findings suggest that the Trait of Emotional Intelligence is a significant predictor of academic achievement. The statistical significance ( $p < 0.01$ ) indicates a strong relationship between emotional intelligence and academic achievement.

## Summary

This study investigated the relationship between emotional intelligence and academic achievement among intermediate school girls in Peshawar Cantonment. The objectives were to examine the impact of emotional intelligence on academic achievement and to determine the correlation between the two variables.

Two hypotheses were tested: (1) Emotional intelligence predicts academic achievement in intermediate school girls, and (2) there is a significant correlation between emotional intelligence and academic achievement in this population.

Data were collected using the Trait Emotional Intelligence Questionnaire-Adolescent Short Form (TEIQue-ASF), and students' academic achievement was assessed based on their class percentages. Regression analysis revealed a significant relationship between emotional intelligence and academic achievement ( $R^2 = 0.125$ ,  $F(134) = 19.020$ ,  $p < 0.01$ ).

The findings confirm that the Trait of Emotional Intelligence is a predictor of academic achievement. The study's conclusions and recommendations are based on these findings, highlighting the importance of emotional intelligence in academic success.

### Recommendations

This research advances the following recommendations:

- 1) Educational institutions may include such tasks that enable the students to understand, use and regulate their emotions.
- 2) The administration of schools may provide resources to students to facilitate their thinking improve level of concentration and control their emotions in the face of stressful situations.
- 3) The cognitive development and academic performance may reinforce each other. This may also enhance student's motivation level and as a result they attain better outcomes in life.
- 4) Teachers of schools should have knowledge of emotional intelligence to help their students to develop the emotional intelligence among their students.

### Concluding Remarks

The analysis reveals that emotional intelligence is a substantial predictor of academic achievement, explaining 12.5% of the variance ( $R^2 = 0.125$ ,  $df = 134$ ,  $p < 0.01$ ). Notably, students with high emotional intelligence scores also demonstrated high levels of academic achievement. These findings align with previous research, reinforcing the significance of emotional intelligence in academic success.

In Pakistani educational institutions, student achievement is linked only to cognitive development. One important aspect of one's success in life is associated with the person's success, and positive development is "affective development". This aspect is missing in the educational institutions. It is important to incorporate cognitive, affective and environmental and should be considered to obtain better outcomes in one's life. It should be kept in mind that a high level of IQ is necessary to get a better job, while a high level of emotional intelligence is necessary for a better position or appraisal. So, it is time to fill the missing gap in Pakistani education.

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