The correlation between EQ and Verbal IQ: The case of Turkish EFL learners

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Abstract

Verbal or linguistic intelligence is one of the types of intelligence that can be vital to acquiring both spoken and written language as well as using language to accomplish goals. The study can be categorized as a survey-based correlation study that sought to examine the relationship between two variables, namely, the verbal and emotional intelligence of learners, using gender as the moderator variable to demonstrate how gender differences affect the relationships between two dependent variables. 120 intermediate EFL male and female students from the Tokat Gaziosmanpasa ELT department's relevant classes held in the fall semester of 2022 were initially chosen to participate in the study. The Bar-On Emotional Intelligence Questionnaire's domestic version's items were administered to the subjects. According to the results of the present study, there was a strong positive and significant correlation between the verbal and emotional intelligence of male learners, indicating that participants with higher emotional intelligence levels appeared to be better language users and more effective communicators.

Keywords : Emotional intelligence ; intelligence ; IQ ; linguistics.

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1. Introduction

People have attempted to enhance learning throughout history in all areas of education, including language pedagogy. Reynolds (2000) and Yates (2005) claim that a sizable portion of this ongoing effort in educational theories and empirical research has mostly been focused on the characteristics of learners to find out whether manipulating such variables could aid in language learning. Among these variables are several forms of intelligence, such as Gardner's (1983) multiple intelligence and emotional intelligence.

According to Webster's American Dictionary (2003, p. 426), intelligence is the "capacity for learning, reasoning, and understanding." Most people still refer to the classic definition of intelligence quotient (IQ) when they talk about intelligence, even in the twenty-first century. The intelligence quotient, which gained popularity in the early 20th century, was primarily used to evaluate an individual's aptitude for verbal/linguistic and logical/mathematical skills (Gardner, 1983). Researchers like Gardner (1983) later questioned it since it failed to evaluate a person's other talents and abilities. The traditional idea of intelligence, according to Gardner (1983), was "an overall capacity dealing with language and mathematical capacities." Given that they have historically dominated intelligence testing and are the ones that are normally rewarded in schools, verbal/linguistic and logical/mathematical intelligence were the "coins of the realm." The only recognized components of human intellect at the time were the two types of intelligence—verbal and computational. Based on this idea, other talents and abilities of the pupils were ignored, as a student's achievement was only evaluated using verbal/linguistic and logical/mathematical intelligence.

1.1. Conceptual background

Gardner's (2005) Theory of Multiple Intelligences (MI) offered a theoretical framework for appreciating students' many skills and talents. According to this hypothesis, Gardner (2005) asserted that while some kids might not be verbally or mathematically brilliant, other skills, like music, spatial relations, or interpersonal understanding, may be possessed by some individuals. Since each intelligence addresses a different learning style, they all have significant usefulness in educational contexts. Gardner (1983) enlarged the definition of intelligence to include skills in music, interpersonal relationships, and intrapersonal knowledge in addition to linguistic and mathematical talents since he believed that intelligence is not simply an inborn quality but can also be learned. The core of instruction based on the many bits of intelligence theory is recognizing that students have varied strengths and offering exercises to amplify those strengths while making up for the weaker areas. The teacher's consideration of the kids' varied intelligence made it easier for a larger range of students to engage in successful classroom learning (Barnard & Olivarez, 2007).

In the 1990s, the idea of emotional quotient (EQ), also referred to as emotional intelligence (EI), became increasingly important when analyzing the variables affecting a person's success. According to Salovey, Brackett, and Mayer's (2007) definition "Emotional intelligence (EI) refers to the processes involved in the recognition, usage, comprehension, and management of one's own and other emotional states to solve emotionally charged problems and regulate behavior." In a later revised definition, the term "emotional intelligence" (EI) was stated to include the following skills: " the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought;

The results of studies looking into the impact of emotional intelligence in the educational system together with the growth of IQ in education found that it has a considerably stronger impact on predicting success in a variety of educational and life issues than just IQ (Salovey & Mayer, 1990). According to scientific findings, the majority of thoughts take place at levels well below conscious awareness and control, involving the processing of a continuous stream of sensory data; metaphors connected to physical experiences and emotions represent abstract thought; physical sensations and

emotions are crucial to thought and learning. Therefore, it can be inferred that for some researchers, reasoning may not be conceivable without experience and emotion (Gullatt, 2008). According to Goleman (1995), who asserted that IQ and emotional intelligence work hand in hand to lead learners towards success, IQ and emotional intelligence have equal strength in pushing learners toward success.

Numerous studies conducted over the past 20 years, particularly in the field of business, have investigated and demonstrated that emotional intelligence can be used as a measure to identify employers and employees who have affective skills that may be capable of motivating and relating to others (Othman, Abdullah, & Ahmad, 2008; Rozell, Pettijohn, & Parker, 2006). However, the results of the aforementioned and related studies raise the question of whether or not emotions are involved.

There is a chance that emotional intelligence may help educational leaders create motivated students in schools if an emotional intelligence evaluation helps identify which individuals in the business sector have effective abilities and can inspire others. According to Salovey and Mayer (2007, pp. 57–58),

> "Few would disagree that the purpose of schools is to promote academic skills and knowledge and to take students from one level to the next. However, that is difficult to accomplish if the student is absent; if the student is suspended, or expelled; if the student is dropping out of school: if the student is dealing with death; if the student believes that life is something that happens to him and he has no control over it. To get these students to their next academic level, we must meet them where they are and give them the skills and resources to cope with stressors so that they will then be better able to attend to academics. Without these social/emotional skills, the stressors take over and prevent our students from living up to their academic potential."

Students should be taught to create meaning because they are not merely recipients of knowledge. Because of this, teachers should transition from playing the role of knowledge transmitters to that of learning facilitators. Therefore, it is important to consider the pupils' specific characteristics and intelligence types when conducting the assessment (Gullatt, 2008). To determine whether or not differences in students' emotional intelligence in an EFL setting may result in an enhanced ability to lead to increased verbal intelligence, the current study set out to investigate the correlation between male and female intermediate learners' verbal intelligence and their EQ.

1.2. Related Studies

The following studies have aimed at investigating the different aspects of intelligence and their interaction with or relationship with different skills.

Ayduk (2006) examined the connection between linguistic intelligence—one of Gardner's seven multiple intelligences—and self-control. He divided the participants into two groups for the study: 58 from a treatment camp for boys with poor income and adjustment behavior issues, and 98 from middle school who were low income and primarily of minority ethnicity. According to the study's findings, there is a substantial relationship between verbal intelligence and self-regulation, such that boys with successful self-regulation showed less aggression when their verbal intelligence was higher than those in the group with poor self-regulation.

Sarıçam, Elik, and Halmatov (2010) sought to determine the likely connection between the emotional intelligence and empathic inclination of preschool teachers. To do this, 90 university students were chosen at random from the preschool teaching department, with 28 men and 62 women. The Scale of Emotional Intelligence and the Scale of Empathic Tendency were among the study's resources. There

was a strong link between the ability to empathize and emotional intelligence, according to data analysis using the t-test, Pearson Moment Correlation Analysis, and simple regression analysis.

Hashemi and Ghanizadeh (2011) looked at the connection between the emotional intelligence of EFL students and their feeling of self-efficacy beliefs. 98 Iranian EFL university students with ages ranging from 21 to 34 years old and majoring in English literature, teaching, and translation from various institutions around Iran participated in the study for this reason. The emotional quotient inventory (EQ-I), created by Bar-On in 1980, is a self-report measure of emotionally and socially intelligent behavior that provides an assessment of emotional-social intelligence. It was used by the researchers to gauge the emotional intelligence of the pupils. The Gahungu (2009) created and standardized Learners' Self-Efficacy Survey was used to assess the level of self-efficacy among EFL learners. The questionnaire uses scores on 40 items, ranging from never to always, to operationalize the self-efficacy construct. The Learners' Sense of Efficacy Survey and the Bar-On EI test were given to the participants, who were instructed to complete them at home and return them to the researcher during the ensuing weeks. The findings showed a substantial correlation between EFL learners' self-efficacy views and emotional intelligence.

Adeyemo and Chukwudi (2014) looked into the relationship between emotional intelligence and teacher efficacy and how it affected the effectiveness of pre-service instructors. From two Universities in the South-West of Nigeria, a total of 300 students between the ages of 21 and 29 were chosen at random. Both the teacher efficacy scale (a 5-point scale from none at all to a great deal) and the emotional intelligence scale (a 33-item scale structured in a 5-point Likert format) were given to the participants. Using the Teaching Performance Assessment Scale, teacher effectiveness was evaluated (a multidimensional scale assessing 12 vital teaching features including 20 items with theoretical value varying from 1 poor to 5 very good with a total score of 100). Emotional intelligence and teacher efficacy both have a predictive impact on teacher effectiveness, according to data analysis using Pearson Product Moment Correlation and multiple regression.

Srinivasan (2015) recently investigated the effects of teachers' emotional intelligence and intelligence on students' academic progress. The study's sample was made up of 59 school teachers from the Tamil Nadu districts of Thanjavur and Villupuram. The emotional intelligence scale developed and validated by the researcher, the performance intelligence test for adults, and quarterly marks of students, which served as the student's academic performance, were used to collect data. The quarterly grades of all the pupils in a single class in which the instructor teaches his or her topic were gathered after the teachers were given the emotional intelligence scale and the performance intelligence test. The study's findings showed that teachers' emotional intelligence is more crucial to student progress than their intellectual ability.

By accounting for the gender, age, and years of teaching experience of Iranian EFL teachers working in language institutes, Tabatabaei and Farazmehr (2015) explored the link between emotional intelligence (EQ) and job satisfaction. They did this by choosing 100 language institute instructors from Iran's five largest cities. The Bar-On Emotional Quotient Inventory (EQ-i) Self-Report Scale and the Job Descriptive Index (DI) were then administered to the subjects. The researchers used independent-samples t-tests and Pearson product-moment correlations to assess the data. According to the findings, emotional intelligence and job happiness are positively correlated. Additionally, when the data of male and female EFL teachers were compared, it became clear that men had higher job satisfaction than women. Less research has been done on the connection between emotional intelligence and the different parts or features of multiple intelligences, even though a large body of

evidence supports the significance of emotional intelligence in educational settings. As was already established, emotionally intelligent learners typically have an aptitude for improvement.

Additionally, it appears that variables for empowering kids' emotions have been overlooked and pupils' many multiple intelligences have received no consideration. To close the gaps described above, it would appear that an inquiry is required. The goal of the current study was to ascertain how verbal intelligence among Turkish EFL learners and emotional intelligence relate to one another.

1.3. Purpose of study

By examining the relationship between verbal intelligence and emotional intelligence in EFL students, it is hoped that more students will receive training to improve their EQ, which could eventually result in higher verbal intelligence. This is crucial in educational settings because it can help students become more proficient language users and effective communicators. Additionally, it is hoped that educators and language instructors will use the study's findings to inform their curricula and aid in raising students' EQ. The primary takeaway from this study may be that language instructors should seriously consider their students' emotional intelligence. The verbal intelligence of their students may also increase as a result of this.

In this study, the following inquiries were looked at and addressed:

> RQ1: Is there a relationship between verbal IQ and emotional intelligence (EQ) among Turkish intermediate EFL learners who are male?

> RQ2: Is there a relationship between verbal IQ and emotional quotient (EQ) among Turkish female intermediate EFL learners?

> RQ3: Does the verbal intelligence of intermediate EFL learners who are male and female differ significantly when their EQ levels are the same?

In the current investigation, the following three null hypotheses were investigated:

> H01: The verbal intelligence and emotional intelligence of Turkish intermediate EFL male learners are not significantly correlated?
> H02: The verbal IQ and emotional intelligence of Turkish female intermediate EFL learners are not significantly correlated?
> H03: With the same level of EQ, are the verbal IQ of intermediate EFL learners who are male and female significantly different?

2. Materials and Methods

2.1. Design of the Study

Student's verbal intelligence and emotional intelligence were the key factors examined in the current study to see whether there was any correlation between them. Since the study included both male and female students, gender was a further variable that was used to demonstrate the clear distinction between male and female verbal intelligence at the same EQ level.

Regarding the variables and methodology, the study can be categorized as a survey-based correlation study that sought to examine the relationship between two variables, namely, the verbal and emotional intelligence of learners, using gender as the moderator variable to demonstrate how gender differences affect the relationships between two dependent variables. Additionally, since the study included intermediate EFL students, the control variable was chosen to be the level of proficiency.

2.2. Participants

To conduct this study, 120 male and female EFL students within the age range of 18-24 at an intermediate proficiency level were asked to participate. All the participants were from the Department of English Language Teaching at Tokat Gaziosmanpaşa University.

2.3. Data Collection Instruments

2.3.1. A domestic version of the Bar-On Emotional Intelligence Questionnaire

Data on the emotional intelligence of EFL learners weregathered using the Bar-On (1997) Emotional Intelligence Questionnaire. There are 133 Likert-type items in the original version of this questionnaire. Its primary purpose is to collect participant self-report data on their emotional and social intelligence to evaluate their emotional and social intelligence. Samouei created a domestic version of the Bar-On (1997) Emotional Intelligence Questionnaire.

The domestic version has 90 items that are broken down into five higher-order scales and 15 subscales, and it is translated into Turkish. Samouei's (2003) home version of the Bar-On Emotional Intelligence Questionnaire allowed the study's participants to rate their emotional intelligence on a scale from "strongly agree" to "strongly disagree." On their response sheets, they were also required to write down their name, age, and sex.

2.3.2. Verbal Intelligence Questionnaire

The researcher used a multiple intelligence questionnaire based on Gardner's nine profiles of intelligence—linguistic/verbal, logical/mathematical, musical, bodily/kinesthetic, interpersonal, intrapersonal, naturalistic, and existential intelligence—to measure the students' verbal intelligence. This was another variable that was studied in the current study (linguistic intelligence). In this study, the test was administered in Turkish to prevent any understanding issues. Since the questionnaire was a component of the main inventory, the chosen portion was tested on 30 students who were comparable to the participants in the main study in terms of age, gender, and proficiency level before being given to them. This test's reliability was also determined, and a reliability of.63 was obtained.

2.4. Data Collection Procedures

120 intermediate EFL male and female students from the Tokat Gaziosmanpasa ELT department's relevant classes held in the fall of 2022 were initially chosen at random to participate in the study. The Bar-On (1997) Emotional Intelligence Questionnaire's domestic version's items were given to the subjects to respond to. The questionnaire has 90 items that were broken down into 15 subscales and five higher-order scales in Turkish. The ten-item linguistic intelligence questionnaire, which is a component of a multiple intelligence questionnaire based on Gardner's nine profiles of intelligence, was presented to the participants a few days later. It is important to note that this study used the Turkish version of the test, which was piloted with 30 students whose age, gender, and proficiency level were similar to those of the main study before being given to study participants. This survey has a 10-minute time limit for responses.

2.5. Data Analysis

The researcher utilized SPSS statistical software to examine the collected data and determine the responses to the research questions provided in the study. Accordingly, she used Pearson's correlation coefficient twice to ascertain the connection between students' emotional intelligence and verbal intelligence. The first time was for the analysis of the results from the male participants, and the second time was for the female participants. After analyzing the data related to the first and second research questions, a two-way ANOVA test was performed on the data to answer the third research

question and determine whether there was any significant difference between the verbal intelligence levels of male and female students with the same level of emotional intelligence.

3. Results

The correlations between the variables were looked at after the necessary data were gathered using the available questionnaires. First, the researcher used a K-S test, which is shown in Tables 1 and 2 below, to determine whether the distribution of results was normal.

3.1. Quantitative Data Analysis for the Reliability of Learners' Verbal Intelligence Questionnaire

A ten-item linguistic intelligence questionnaire was one of the key questionnaires utilized in the current study to assess learners' verbal intelligence. The exact questionnaire utilized in this study was a component of a multiple intelligence questionnaire based on Gardner's nine intelligence profiles: linguistic/verbal, logical/mathematical, musical, bodily/kinesthetic, interpersonal, intrapersonal, naturalistic, and existential intelligence. Before administering the test, the researcher utilized Cronbach Alpha to determine the reliability of the questionnaire because only the component relating to linguistic intelligence was retrieved and used in the study. The results are summarized in Table 1.

Table 1
Cronbach Alpha for the Verbal Intelligence Questionnaire

N of Items	Cronbach Alpha
10	0.63

The reliability of the questionnaire using Cronbach Alpha was 0.63, according to the test done on the items from the extracted segment. The questionnaire was used to assess the verbal IQ of the chosen population when it had attained an acceptable and desirable level of reliability.

3.2. Checking the Distribution Normality of the Emotional and Verbal Intelligence Scores

The Kolmogorov-Smirnov test was used as the initial stage in the analysis of the data to identify whether the researcher needed to use parametric or non-parametric correlation tests.

Table 2
Kolmogorov-Smirnov Test Analyzing the Normality of EQ Scores

		Emotional Intelligence
N		103
Normal Parameters[a,b]	Mean	250.70
	Std. Deviation	100.264
Most Extreme Differences	Absolute	.145
	Positive	.130
	Negative	-.145
Kolmogorov-Smirnov Z		1.070
Asymp. Sig. (2-tailed)		.077

		Emotional Intelligence
N		103
Normal Parameters[a,b]	Mean	250.70
	Std. Deviation	100.264
Most Extreme Differences	Absolute	.145
a. Test distribution is Normal.		
b. Calculated from data.		

Since p =.07 and z=1.07, which demonstrate a greater significance level than the.05 specified for the current study, the results of the emotional intelligence surveys are normally distributed, according to the data shown in Table 1. To confirm the normalcy of verbal intelligence results, the same exam was administered. The table below provides a summary of the findings.

Table 3
Kolmogorov-Smirnov Test Analyzing the Normality of Verbal Intelligence Scores

One-Sample Kolmogorov-Smirnov Test		
		Verbal Intelligence
N		103
Normal Parameters[a,b]	Mean	33.33
	Std. Deviation	8.896
	Absolute	.088
Most Extreme Differences	Positive	.088
	Negative	-.068
Kolmogorov-Smirnov Z		.889
Asymp. Sig. (2-tailed)		.408
a. Test distribution is Normal.		
b. Calculated from data.		

The distribution of the verbal IQ scores followed a regular trend, as was deduced from Table 2. The significance level (p =.4, z =.88) was higher for the current investigation than the predetermined alpha level (0.05), confirming the normality of the score distribution. As a result, a closer examination of the data shows that it does not stray considerably from a normal distribution. Therefore, parametric techniques must be used to explore the outcomes more.

3.3. Examining the Relationship between EQ and Verbal Intelligence of Male Participants of the Study

The first research question mentioned earlier addressed finding any relationship between male learners' emotional intelligence and their verbal intelligence. Therefore, the researcher tabulated the

scores related to the variables on a scatter plot diagram, which has been shown below, to check whether the scores are somehow correlated or not.

Figure 1

Depicting the Relationship between Male Learners' Emotional Intelligence and their Verbal Intelligence

When the scores are examined, they appear to follow a convergent pattern that targets the right side upward, possibly showing a positive association between the emotional intelligence and verbal intelligence of male Turkish EFL teachers. The researcher performed a Pearson Moment correlation test on the sets of scores to make sure the correlation was statistically significant and to determine the answer to the initial study question. Table 4 summarizes the outcomes.

Table 4

The Correlation between Emotional Intelligence and Verbal Intelligence of Male Participants

Correlations

		Male Verbal Intelligence	Male EQ
Male Verbal Intelligence	Pearson Correlation	1	.663[**]
	Sig. (2-tailed)		.000
	N	54	54
Male EQ	Pearson Correlation	.663[**]	1
	Sig. (2-tailed)	.000	
	N	54	54
[**]. Correlation is significant at the 0.01 level (2-tailed).			

The correlation between the male learners' emotional intelligence and their verbal intelligence was found to be statistically significantly positive, as shown in Table 4, which examined the results. The significance level was.000, which was lower than the significance level set for the current study, i.e. p.05. As a result, the proposed hypothesis was accepted, and the first null hypothesis of the study, which claimed that there was no significant association between Turkish intermediate EFL male learners' verbal IQ and their EQ, was rejected. The investigation of the bond between the two variables was the next stage in this part of the data analysis. Cohen's (1988) classification of correlations into

three groups of weak, moderate, and strong relationships, as indicated in the following table, was used by the researcher to estimate the strength of the acquired correlation coefficient.

Table 5

The Correlation Classification Proposed by Cohen (1988)

| Relationship Score	Relationship Strength
r= .10 to .29	Weak relationship
r= .30 to .49	Moderate relationship
r= .50 to 1.0	Strong relationship

It was determined that the male participants' verbal and emotional intelligence are positively and significantly correlated, based on the classification of correlation coefficients mentioned above and the acquired correlation coefficient, which is r= +.66. The researcher analyzed the data in the same way that it was done for the male participants to identify any relationships between the study variables because the second question of this study looked at the relationship between the emotional and verbal intelligence of the female participants. The entire results are reported in the next section.

3.4. *Examining the Relationship between EQ and Verbal Intelligence of Female Participants of the Study*

Both verbal and emotional intelligence in students were considered independent characteristics. The link between the aforementioned variables was then looked at using a scatter plot to determine whether there was a connection between the verbal aptitudes of Turkish intermediate EFL female learners and their EQ.

Figure 2

Depicting the Relationship between Female Learners' Emotional Intelligence and Their Verbal Intelligence
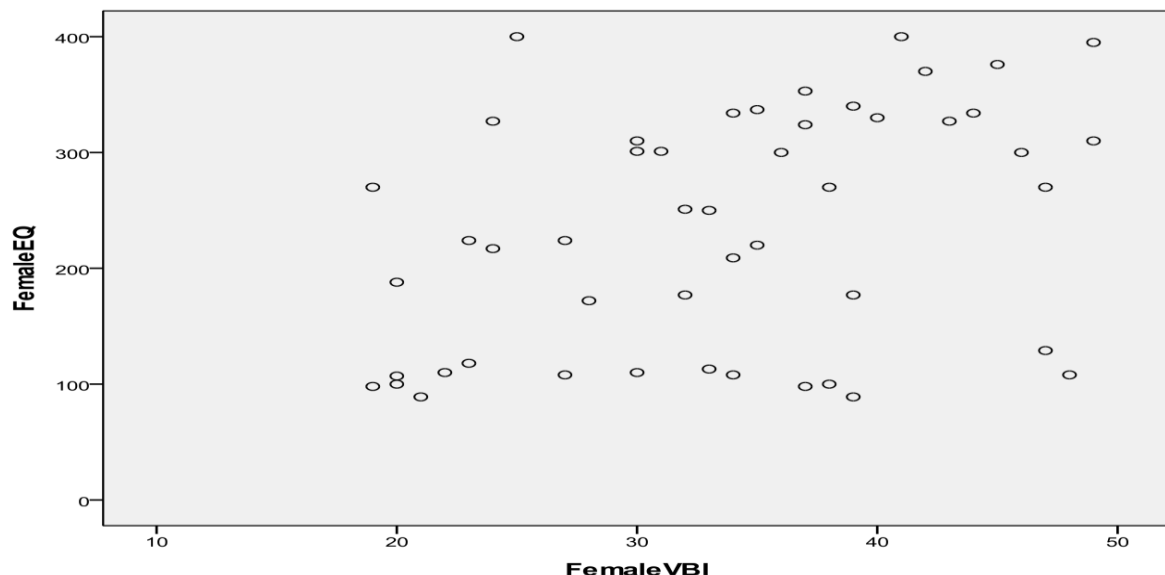
In response to the second research question, a connection between the female participants' linguistic and emotional intelligence was sought. According to the graph above, the results appear to have a somewhat convergent trend, which is evidence that the verbal and emotional intelligence of female students are positively correlated. Pearson correlation was once again employed to test the second

hypothesis, to determine whether there is a strong or weak relationship between linguistic and emotional intelligence. The following lists the necessary tables.

Table 6

The Correlation between Emotional Intelligence and Verbal Intelligence of Female Participants

Correlations

		Female VBI	Female EQ
Female VBI	Pearson Correlation	1	.389**
	Sig. (2-tailed)		.006
	N	49	49
Female EQ	Pearson Correlation	.389**	1
	Sig. (2-tailed)	.006	
	N	49	49

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

As seen in Table 6, there was a link between female students' linguistic and emotional intelligence (0.38). It was possible to determine that the correlation coefficient was significant and positive by looking at the p-value (.00). The correlation coefficient score was compared to the numbers Cohen (1988) presented in Table 5 to estimate the size of the association. The classification indicates that there is a moderate association between the verbal and emotional intelligence of female students. That is, among female participants, the two factors had a modestly favorable correlation. Since there was a positive correlation between verbal and emotional IQ in both sexes, the third study question asked about the influence of gender on verbal IQ was addressed by comparing the verbal IQ of participants with equal emotional IQ but different genders. The following section discusses the findings.

3.5. Comparing the Verbal Intelligence of Male and Female Learners with Similar Emotional Intelligence

The researcher then moved on to address the third research question, which was about the disparity in verbal intelligence between male and female students who had the same level of emotional intelligence, after statistical confirmation of the relationship between emotional intelligence and verbal intelligence among both genders. According to the articles that have used this questionnaire, such as Samouei (2003) and Baron (2002)'s classification, the participants were divided into three groups using the SPSS statistical software: low, medium, and high emotional intelligence groups. Following that, a two-way ANOVA test was used to analyze the verbal intelligence of male and female participants in three EQ classes, as shown in the graph below. The descriptive statistics for the three emotional intelligence groups are presented in Table 7.

Table 7

Categorization and Grouping of Participants based on EQ Level and Gender

Between-Subjects Factors			
		Value Label	N
EQ Groups	1	Low	21
	2	Medium	58
	3	High	24
Gender	1	Male	54
	2	Female	49

Table 7's classification of the participants by gender and EQ level shows that 54 and 49 of them are men and women, respectively. Additionally, the total number of students—21, 58, and 24—belongs to the low, medium, and high emotional categories, respectively. The results of the comparison between male and female students with identical EQ levels in terms of verbal intelligence are displayed in the following tables:

Table 8

Descriptive Statistics of Verbal Intelligence of Low, Medium, and High Emotional Intelligence Groups

Dependent Variable: Verbal Intelligence				
EQ Groups	Gender	Mean	Std. Deviation	N
Low	Male	24.38	5.829	8
	Female	29.85	9.209	13
	Total	27.76	8.378	21
Medium	Male	30.50	7.239	30
	Female	33.75	8.553	28
	Total	32.07	8.000	58
High	Male	42.31	4.854	16
	Female	39.13	7.220	8
	Total	41.25	5.795	24
Total	Male	33.09	8.987	54
	Female	33.59	8.881	49
	Total	33.33	8.896	103

The descriptive statistics of the groups with various degrees of emotional intelligence are shown in Table 8, together with the mean scores, standard deviation, gender, and number of each group. The researcher used a two-way ANOVA test, the results of which are summarized in Table 9, to determine whether there was any significant difference in the verbal intelligence level of the male and female

teachers within the same emotional intelligence group. It was evident that there appeared to be differences between different groups at the same level.

Table 9

Two-way ANOVA Analyzing the Difference of Verbal Intelligence between Different Genders in Low, Medium and High Emotional Intelligence Groups

Tests of Between-Subjects Effects

Dependent Variable: Verbal Intelligence

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2604.147ª	5	520.829	9.238	.000	.323
Intercept	87166.901	1	87166.901	1546.126	.000	.941
EIGrouping	2002.401	2	1001.200	17.759	.000	.268
Gender	66.790	1	66.790	1.185	.279	.012
EIGrouping * Gender	223.472	2	111.736	1.982	.143	.039
Error	5468.630	97	56.378			
Total	122495.000	103				
Corrected Total	8072.777	102				

a. R Squared = .323 (Adjusted R Squared = .288)

A two-way ANOVA was conducted to answer the study's final research question, which asked whether there were any differences in verbal intelligence between Turkish men and EFL learners who shared the same emotional intelligence. The test findings showed that there was no significant difference in verbal intelligence between male and female Turkish EFL learners with the same level of emotional intelligence (F (2, 97) = 11.85, p =.14). This means that the difference in mean scores between the genders was not statistically significant. As a result, the study's third null hypothesis was confirmed.

4. Discussion

The goal of the current study was to investigate and identify any potential differences in verbal intelligence between male and female students who had the same degree of emotional intelligence, as well as any potential relationships between learners' emotional intelligence and verbal intelligence. The results presented above will be rationalized in this part in light of earlier research in the fields of emotional intelligence and verbal intelligence. Along with the overall conclusions, the statistical analysis results are provided.

According to the results, there was a substantial positive association between the verbal, linguistic, and emotional intelligence of learners who were both male and female. Furthermore, it was discovered that the observed correlation between the variables for male learners was strongly positive, whereas the connection between the emotional intelligence and verbal intelligence of female learners was reported to be positively moderate. In the end, it was found that, among both male and female learners, having high emotional intelligence can be an indicator of greater verbal intelligence.

To go deeper into the results, it was discovered that learners who were both male and female and who scored at the same emotional intelligence level did not exhibit any discernible differences in verbal intelligence. For regulated (identical) levels of emotional intelligence, gender cannot be used as a reliable predictor of better or lower verbal intelligence. As was mentioned previously in Chapter 2, a variety of researchers, including Gardner (1983) and Armstrong (1994), have emphasized the significance of verbal intelligence in the success of language learners.

However, numerous studies, including those by Salovey and Mayer (1990), Goleman (1995), Boyd (2005), Nelson and Low (2011), and Mayer, Salovey, and Caruso (2004), demonstrate the value and significance of emotional intelligence in learning, particularly in the learning of second languages. Simply put, there have been many instances of people who scored highly on IQ tests but were not particularly successful in their lives or schooling, even though IQ plays a significant role in forecasting success and its degree. According to Gardner (1983) and Sternberg (1985), IQ tests only accurately assess a very small portion of human intelligence. Additionally, they claim that there are various general types of intelligence. Linguistic/verbal intelligence, one of the various forms of intelligence described by Gardner (1983), is concerned with the mastery of verbal and written language abilities required for EFL learners' success. There is no denying that a person's education is one of the most significant periods of his or her life. Success in this stage of life, as was previously discussed, depends on more than just scholastic achievement. Instead, they must learn to manage their sensations and emotions. In other words, Salovey and Mayer (1990) contend that success in academic life depends on one's ability to understand and manage their emotions.

The findings of the current study should be compared to those of earlier emotional intelligence-based studies. Hashemi and Ghanizadeh (2011) found that two of emotional intelligence's main components, namely intrapersonal and interpersonal intelligence, can predict language achievement, which is consistent with the results of this study regarding the effectiveness and relationship of emotional intelligence with students' language achievement. The findings are in contrast to those of the same study, which found no correlation between language proficiency and overall emotional intelligence. The other study that produced comparable findings was conducted by Janfeshan and Nazeri (2014) and focused on the connection between Iranian EFL learners' emotional intelligence and their communicative openness. They discovered a statistically significant link between participants' openness to communicating and emotional intelligence. In other words, students with higher EQs are generally more inclined to communicate. In contrast to the current study, which found no differences between the genders, it was also found that females scored higher than males in terms of emotional intelligence and communicative readiness.

Since Goleman (1995) published Emotional Intelligence, it has been possible to assert that the concept of emotional intelligence is important in the field of education and that it is associated with success in academic and professional endeavors as well as language learning. Similar claims were made by Mayer (2000), who claimed that the concept of emotional intelligence as a predictor of academic and other sorts of achievement was quickly adopted and accepted. Significant public acceptance of the EI idea has prompted several authors (such as Gazzaniga 2005; Srinivasan, 2015) to recommend methods for fostering and enhancing EI in our schools, according to Othman (2008), who also indicates that it is widely accepted in education.

On the other hand, intelligence—more specifically, multiple intelligences, as proposed by Gardner (2005)—is seen as a crucial and important determinant of success, particularly in language learning. The present study has concentrated on linguistic intelligence. Each form of intelligence, as was previously established, has a significant benefit in educational environments because they all address various learning styles. Gardner (1983) expanded the definition of intelligence to include skills in music, interpersonal relationships, and intrapersonal knowledge in addition to linguistic and mathematical abilities because he believed that intelligence is not only an inborn quality but can also be developed.

In other words, verbal/linguistic intelligence is one of the types of intelligence that, following Gardner (1993), can be vital to acquiring both spoken and written language as well as using language to accomplish goals. Gardner, Chapman, and Freeman (1996) assert that those with higher verbal/linguistic IQs typically have a broad lexical potential, which helps them read and absorb books and speak effectively in English classrooms.

According to the information stated above, emotional intelligence has a far stronger impact on predicting success in a variety of educational and life issues than merely IQ. This is in addition to the growth of IQ's effect on education (Salovey & Mayer, 1990). Goleman (1995) confirms this reality by stating that while only 20% of life success is attributable to a person's IQ or reasoning thinking, the other 80% of accomplishments and successes are attributable to their emotional intelligence. The present study, therefore, sought to investigate the relationship between EFL learners' verbal intelligence and emotional intelligence to help more students be trained to increase their EQ, which may ultimately lead to higher verbal intelligence, which is of utmost importance in educational settings since it can help students be better language users and successful communicators.

5. Conclusion

According to the results of the present study, there was a strong positive and significant correlation between the verbal and emotional intelligence of male learners, indicating that participants with higher emotional intelligence levels appeared to be better language users and more effective communicators. Additionally, there was a substantial association between female students' verbal and emotional intelligence, showing that raising one can raise the other.

The two aforementioned constructs were shown to have a linear association, and a predictability relationship was also formed between them. As a result, the findings suggested that in language learning classrooms, learners' emotional intelligence may be a substantial predictor of having greater verbal intelligence. Thus, it may be said that students who score higher on the EI scale are more verbally intelligent, which can result in better performance in language learning settings and better and more successful use of the language that has been learned.

The results of this study may have pedagogical ramifications for educational administrators in addition to teachers and students. One of the implications of the study is for teachers who can use the findings to help their students develop their emotional intelligence (EQ), since it was discussed that this is a skill that can be learned. Improving EQ can then help students develop their verbal intelligence, which will ultimately improve their language use and communicative skills. It would also enable pre-service teachers to make responsible decisions, care for their students, act more effectively, and understand how to act more efficiently if teachers' training centers taught emotional intelligence competencies to pre-service teachers. This would enable teachers to provide opportunities for students to learn and improve emotional intelligence.

The second application of the findings is directed at curriculum developers, who can utilize the findings to create the best materials with the right emphasis on emotional intelligence and verbal intelligence. Finally, the teacher will be able to comprehend the learners better now that they are aware of the correlation between their EQ and VI. Additionally, the instructor will be better able to organize the delivery of the material in a way that appeals to most or all of the student's intelligence.

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