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Relationship between EFL Learners' Multiple Intelligence Scores, Gender, and Their Vocabulary Knowledge

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Abstract

This study was designed to investigate the relationship between EFL learner's multiple intelligence (MI) scores, their gender, and their vocabulary knowledge. That is, an attempt was made to determine which of the intelligences (naturalist intelligence, musical intelligence, logical mathematical intelligence, existential intelligence, interpersonal intelligence, bodily-kinesthetic intelligence, linguistic intelligence, intrapersonal intelligence, and visual-special intelligence) can better predict vocabulary knowledge of the EFL learners. Furthermore, this study sought to find the difference between male and female learners in terms of their vocabulary size, and different types of intelligences. To pursue these objectives, a population of 88 students consisting of 64 females and 24 males were randomly selected from Khorasgan Azad University. The participants were M.A. students of English teaching and English translation. The students were asked to take part in two different kinds of tests. The first one was a standardized English language vocabulary test, i.e. the Receptive Nation Level Test. The second instrument was the Persian Version of McKenzie's Multiple Intelligences Inventory. The data gathered via these two instruments were then analyzed and led to the results of this study which unraveled four findings. First, only a small positive correlation existed between EFL learners MIs scores and their vocabulary knowledge. Second, linguistic intelligence, though not significantly was a better predictor for vocabulary knowledge of EFL learners, followed by naturalistic intelligence, existential intelligence, intrapersonal intelligence, and bodily-kinesthetic intelligence respectively. None of the MIs significantly predicted the vocabulary knowledge of EFL learners. Third, concerning vocabulary knowledge of learners, the mean score of male EFL learners was significantly higher than that of female learners. Fourth, the two groups of male and female EFL learners were not significantly different in terms of their multiple intelligence scores.

Keywords: Multiple intelligences, EFL, Gender, Vocabulary knowledge.

Introduction

Individual differences have occupied an important position in any debate related to teaching/learning and the professional literature is replete with terms and phrases which try to capture the elusive concepts that distinguish one person from another. This renovation of interest can be attributed to the advent of a new intelligence theory, namely Multiple Intelligences (MI) of Howard Gardner[1]. In this view, intelligence is viewed as being a composite of different abilities or aptitudes. The theory includes eight intelligences, which embrace a wide range of human potentials and abilities. Gardner's theory divides human intelligence into musical, linguistic, logical mathematical, spatial, interpersonal, intrapersonal, natural, and bodily-kinesthetic.

According to this theory, human cognitive competence is better described according to a set of abilities, talents or mental skills called intelligences. All normal individuals have each of these skills to some extent; individuals differ in the degree of these different skills, though. The different types of MI are elaborated on in the following: i. *linguistic intelligence***:** is our ability to speak to each other in our daily conversation, or write a letter to someone, or perform any verbal activity; ii. *logical-mathematical intelligence:* is our ability to solve problems and meet new challenges; iii. *musical intelligence:* is our ability to sing a song or chant to the tune of a radio melody. We often use this type of intelligence to alleviate stress, but musical intelligence may also make some students more attuned to accent and pitch in language study; iv. *intrapersonal intelligence:* allows us to be independent, appreciate time alone, and be self-reflective. Intrapersonal intelligence involves knowledge about and awareness of the internal aspects of self, such as knowledge of feelings, thinking processes, and self-reflection. Study and homework performed in isolation are intrapersonal; v. *interpersonal intelligence:* is expressed in our human relationships where we cooperate with each other or agree or disagree with each other. The trait of interpersonal intelligence is the most common intelligence foreign language teachers use. These include, but are not limited to, caring for others, communicating with others, empathizing and sympathizing with others, leading and organizing groups, resolving conflicts, seeing from another's point of view, and working as a team member; vi. *bodily-kinesthetic intelligence:* requires physical movement such as shoveling snow, painting pictures, dancing to music, or performing sports; vii. *spatial*

intelligence: involves visualization of things or ideas, through which we can retain memories for a longer period of time. Visual-spatial intelligence enables us to grasp meanings better when they are traced with visual images; viii. *naturalistic intelligence:* enables human beings to recognize, categorize and draw upon certain features of the environment; and ix. *existential intelligence:* is a person's ability to look inside when interacting with other people. People who are highly existentially intelligent are expressive and they are expert in evaluating themselves.

Vocabulary acquisition is an important part of second language acquisition (SLA), and English language learners need to be able to use new vocabulary items productively in order to be fully proficient in the language. SLA researchers and second language experts have long recognized the centrality of vocabulary knowledge and started paying more attention to vocabulary learning and teaching. With regard to the significance of vocabulary, McCarthy states, "no matter how well the student learns grammar, no matter how successfully the sounds of L2 are mastered, without words to express a wide range of meanings, communication in an L2 just cannot happen in any meaningful way"[2]. In spite of all this, relatively little research has been done on second language vocabulary acquisition (SLVA) until recently[3].

This study aims to investigate the relationship between EFL learners multiple intelligence (MI) scores, and their vocabulary acquisition. It also seeks to consider the role of gender in MI and vocabulary knowledge. To find an answer to the problem posed in this study, the following research questions were formulated: i. Is there any relationship between EFL learners' multiple intelligence (MI) score and their vocabulary size? ii. Which of the multiple intelligences is a better predictor for vocabulary size of EFL learners? iii. Is there any significant difference between males and females in terms of their vocabulary size? and iv. Is there any significant difference between males and females in terms of different types of intelligences?

In relation to the aforementioned research questions, four research hypotheses were set forth to be investigated in the present study. They are as follows: i. EFL learners multiple intelligence scores does not correlate with their vocabulary acquisition, ii. None of the multiple intelligences can predict vocabulary knowledge of EFL learners, iii. There is not any significant difference between males and females in terms of vocabulary knowledge, and iv. There is not any significant difference between males and females in terms of different types of intelligences.

Methodology

Participants: For the present study, a total of 88 male and female students, aged 20-25, from Khorasgan Azad University were selected randomly. They were 64 females and 24 males. All the participants were M.A. students of English majoring in English language teaching or English translation. They were all native speakers of Persian.

Instrumentation: After choosing M.A. students of English majoring in English language teaching and translation, two instruments were given to the participants in this study. The first one was a standardized English language vocabulary test that is called the Receptive Nation Level Test. The second instrument was the Persian Version of McKenzie's Multiple Intelligence Inventory. The instruments used in this study are described in the following.

The first material used in this study was the Receptive Nation Level Test in order to measure the participants' size of vocabulary. Since the Vocabulary Level Test is a standard test of vocabulary, its validity and reliability were assumed to be satisfactory. According to Skourdi and Rahimi, all the committee members claimed the appropriateness and, the validity of the test with regard to subject matter content and the general objective of measuring the appropriate level of the learners in their study[4]. In order to estimate how reliable the use of Nation's Level Test is, Skourdi and Rahimi, computed the internal consistency of the test based on Cronbach alpha and the covariance figure was satisfactory, that is 0.90. After data collection in this research, the internal consistency of Nation Level Test based on Cronbach alpha was computed; it equaled 0.91, which was satisfactory and consistent with the result attained by Skourdi and Rahimi.

The Receptive Nation Level Test that was used in this study consists of three parts namely, the 2000 word-level, the 3000 word-level, and 5000 word-level. The difficulty level of the tests increases as the number of the word levels increases. It means the 2000 word-level test contains almost easier tests than 3000, and 5000 word-level tests, respectively. The total test includes thirty vocabulary questions, each part containing ten questions. Each question is made up of three words in one column, and another six words or definitions in another column, from which the participants should select the best definitions of the three words given in the column with three words, and write the number of the correct meaning in front of each response.

After data elicitation on the students' English language vocabulary, the same students underwent another test, that was the Persian version of McKenzie's MI Inventory in order to provide multiple intelligences scores. The reason for choosing the Persian version of McKenzie's MI inventory was that the students' knowledge of English language for measuring their MI scores was not the purpose of this study. Besides, using the translated version of the MI inventory, any difficulty related to the students' foreign language proficiency could be avoided and the students could easily follow the items.

The MI inventory consists of 90 Likert-type statements which are related to the nine intelligences presented by Gardner[5]. The

reliability of McKenzie's MI inventory was calculated and an overall internal consistency of 0.85 was attained.

The MI inventory which was used in this study has nine parts; each referring to one of the MIs of Gardner[5]. Each part is made up of ten statements in the Likert-scale format. The nine parts of this MI inventory according to the order that the participants were supposed to answer them were as follows: i. naturalist intelligence, ii. musical intelligence, iii. logical mathematical intelligence, iv. existential intelligence, v. interpersonal intelligence, vi. bodily kinesthetic intelligence, vii. linguistic intelligence, viii. intrapersonal intelligence, and ix. visual special intelligence.

Procedure: In this research, an effort was made to understand the relationship between EFL learners' MIs scores, and their vocabulary acquisition in addition to comparing male and female EFL learners concerning their MIs scores and their vocabulary knowledge. To achieve these objectives, the researchers decided to select 120 students majoring in English language teaching or English translation from Khorasgan Azad University randomly. So, they talked to some teachers and asked them to let them distribute two sets of questionnaires to their students in the class during two sessions. As far as there were two different kinds of tests, one the Persian form of McKenzie's MI inventory, and the other receptive Nation Level test, the participants had to answer both of the tests during two separate sessions. Gathering the required data, the researcher faced some problems. The same students who had answered one of the tests, were supposed to answer the second test as well, and in the second session of the class; some of the students who had took part the previous session were absent. This problem led to the omission of some of the participants who had only answered one of the two tests. Also there were a few of the students who had left either of the two tests without answering to all the questions. Such students were also excluded from the participants of the present study. So although 120 sets of questionnaire were answered by the learners for each of the two instruments, finally 88 completely answered pairs of questionnaires were collected. Hence, finally the number of the participants reached to 88 students, including 24 male, and 64 female EFL learners.

Results and Discussion

In order to accomplish the purposes of this study, the following statistical devices were used: Pearson correlation, multiple regression, *t*-test, and MANOVA.

Results of the First Research Question: The first research question aimed at unearthing the putative relationship between language learners' vocabulary knowledge and their multiple intelligences scores. In order to find an answer to this question, Pearcon correlation was put to use. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. The results of the correlation analysis are presented in table-1.

Table-1
Pearson correlation between vocabulary knowledge and multiple intelligence scores

		Vocab	MIs
Vocab	Pearson Correlation	1	.051
	Sig. (2-tailed)		.637
	N	88	88
MIs	Pearson Correlation	.051	1
	Sig. (2-tailed)	.637	
	N	88	88

There is a very small positive correlation between the two variables, r = .05, n = 88, indicating nearly no correlation between vocabulary knowledge and multiple intelligence scores.

Results of the Second Research Question: The second question of the study was an attempt in order to disclose which type of intelligence could better predict the students' vocabulary knowledge. Multiple regression analysis was run in order to answer this question. Preliminary analyses were performed in order to ensure no violation of the assumptions of multicollinearity, normality, linearity, homoscedasticity, and independence of residuals. The results of the analyses are presented below.

Table-2
Multiple regression: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.266(a)	.071	-.036	16.13088

In Table-2, the value given under the heading R Square should be checked. This shows how much of the variance in the dependent variable (vocabulary knowledge) is explained by the measures of multiple intelligence. The value here is .07. This means that the measures of multiple intelligences explain only 7 percent of the variance in vocabulary scores. However, to assess the statistical significance of the results, the following table should be consulted.

Table-3
Multiple regression: Statistical significance of the results

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1550.860	9	172.318	.662	.740
Residual	20296.004	78	260.205		
Total	21846.864	87			

In this table, Signature equals .74 which is far larger than the alpha level ($p > 0.05$), indicating that the model fails to reach a statistical significance. Nonetheless, it would be informative to look at the following table to see which of the variables included in the model (if any) contributed more to the prediction of the dependent variable.

Table-4
Predictive power of measures of multiple intelligences for vocabulary knowledge

	Unstandardized Coefficients		Standardized Coefficients			95% Confidence Interval for		Correlations			Collinearity Statistics	
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**	**Lower Band**	**Upper Band**	**Zero-order**	**Partial**	**Part**	**Tolerance**	**VIF**
Constant	43.323	18.33		2.363	.021	6.827	79.818					
NI	1.796	1.506	.168	1.193	.237	-1.202	4.793	.163	.134	.130	.601	1.66
MI	.197	1.199	.020	.164	.870	-2.189	2.583	.032	.019	.018	.803	1.24
LMI	-.600	1.328	-.059	-.452	.653	-3.243	2.043	.016	-.051	-.04	.696	1.43
EI	1.201	1.406	.117	.854	.396	-1.598	3.999	.079	.096	.093	.638	1.56
InterI	-.350	1.060	-.039	-.330	.742	-2.461	1.761	-.033	-.037	-.03	.841	1.88
BKI	-.754	1.178	-.079	-.640	.524	-3.099	1.592	-.018	-.072	-.07	.781	1.28
LI	-1.662	1.228	-.191	-1.353	.180	-4.106	.783	-.080	-.151	-.14	.599	1.66
IntraI	1.638	2.031	.104	.807	.422	-2.405	5.682	.134	.091	.088	.723	1.38
VSI	.522	1.483	.053	.352	.726	-2.431	3.475	.055	.040	.038	.529	1.88

To compare the different variables, the values under the column standardized coefficients should be considered. Looking down this column, one could notice that the largest value (ignoring any negative signs out the front) is the one for linguistic intelligence (LI = .19). Linguistic intelligence thus makes the strongest unique contribution to explaining the vocabulary knowledge of the students. The relevant value for naturalistic intelligence is slightly lower (NI = .16), indicating that it makes less of a contribution. Existential intelligence, intrapersonal intelligence, bodily-kinesthetic intelligence, logical-mathematic intelligence, visual-spatial intelligence, interpersonal intelligence, and musical intelligence respectively have less and less predictive value so far as vocabulary knowledge is concerned (EI = .11, IntraI = .10, BKI = .07, LMI = .059, VSI = .053, InterI = .03, MI = .02).

For each of these values, the value in the column marked Sig. must be checked. This shows whether this variable is making a statistically significant unique contribution to the equation. Since no variable here has a value smaller than .05, none of them is making a significant unique contribution to the prediction of vocabulary knowledge of the language learners.

Results of the Third Research Question: The third question of the study was posed in order to capture the difference between male and female language learners as far as their knowledge of vocabulary is concerned. To this end, an independent-samples t-test was conducted. The following table illustrates the descriptive statistics thereof.

As is shown in table-5, the mean score of male language learners in their vocabulary test is substantially greater than that of female learners (72.25 > 61.43) with standard deviations of 16.14 and 14.80, respectively. This, however, does not imply whether the difference between these two groups is statistically significant. To figure out the presence of any possible significance, one needs to refer to the t-test table. Table-6 below displays the results of the t-test.

Table-5
Descriptive statistics for gender differences in vocabulary knowledge

	Gender	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Vocab	Male	24	72.2500	16.14136	3.29484
	Female	24	61.4375	14.80769	1.85095

Table-6 indicates a significant difference in scores for males and females (t (88) = 2.97, p = .004 < 0.05). The magnitude of the difference in the means (mean difference = 10.81, 95% *CI*: 3.59 to 18.03) was very large (eta square = 0.093).

Results of the Fourth Research Question: The last question of the study sought to unravel the possible difference between males and females in terms of their multiple intelligence scores. Multivariate analysis of variance (MANOVA) was run to provide an answer to the fourth question. The means and standard deviations of these males and females for each type of intelligence are shown in table-7.

The mean scores of males and females for each type of intelligence are not very much different. However, to prove this (lack of) difference in means between the two groups of language learners, we need to cast a glance at the MANOVA table.

The *p* value in this table is printed under the column Sig. (two-tailed) in the lower row in front of Wilks' Lambda. This value is greater than the specified significance level ($p = 0.224 > 0.05$), indicating that the difference between the two groups is not statistically meaningful.

The following table shows the effect of gender on each of the dependent variables. In the third row, in front of each type of intelligence, its p value is displayed under the Sig. column. As it can be seen, the values are .10, .28, .83, .20, .97, .47, .03, .32, and .62 for NI, MI, LMI, EI, InterI, BKI, LI, IntraI, and VSI, respectively. This means that gender has just made a difference for linguistic intelligence ($p = .03 < .05$), and the other types of intelligence are not affected by gender differences.

Table-6
Independent-samples t-test for comparing the difference between males and females in their vocabulary knowledge

	Leven's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed Equal variances not assumed	.586	.446	2.977	86	.004	10.81250	3.63243	3.59146	18.03354
			2.861	38.411	.007	10.81250	3.77915	3.16469	18.46031

Table-7
Descriptive statistics for gender differences in multiple intelligences

	Gender	Mean	Std. Deviation	N
NI	Male	8.1739	1.46636	23
	Female	7.5846	1.46727	65
	Total	7.7386	1.48164	88
MI	Male	7.5652	2.01869	23
	Female	7.9846	1.44149	65
	Total	7.8750	1.61040	88
LMI	Male	6.9565	1.33070	23
	Female	6.8769	1.64419	65
	Total	6.8977	1.56131	88
EI	Male	7.7826	1.83294	23
	Female	8.2615	1.41727	65
	Total	8.1364	1.54013	88
InterI	Male	6.0000	2.27636	23
	Female	5.9846	1.58600	65
	Total	5.9886	1.77786	88
BKI	Male	7.2609	1.73775	23
	Female	7.5538	1.63965	65
	Total	7.4773	1.66075	88
LI	Male	6.0870	1.53484	23
	Female	7.0000	1.86246	65
	Total	6.7614	1.81940	88
IntraI	Male	8.9130	1.12464	23
	Female	9.1538	.95575	65
	Total	9.0909	1.00157	88
VSI	Male	7.9130	1.64905	23
	Female	7.7231	1.59597	65
	Total	7.7727	1.60264	88

Table-8
MANOVA results for comparing the difference between males and females in their multiple intelligence scores

		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Gender	Pillai's Trace	.135	1.354	9.000	78.000	.224	.135
	Wilk's Lambda	.865	1.354	9.000	78.000	.224	.135
	Hotelling's Trace	.156	1.354	9.000	78.000	.224	.135
	Roy's Largest Ro	156	1.354	9.000	78.000	.224	.135

Table-9
The effect of gender on different types of intelligence

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Gender	NI	5.900	1	5.900	2.741	.101	.031
	MI	2.988	1	2.988	1.154	.286	.013
	LMI	.108	1	.108	.044	.835	.001
	EI	3.897	1	3.897	1.655	.202	.019
	InterI	.004	1	.004	.001	.972	.000
	BKI	1.458	1	1.458	.526	.470	.006
	LI	14.163	1	14.163	4.448	.038	.049
	IntraI	.985	1	.985	.982	.325	.011
	VSI	.613	1	.613	.237	.628	.003

As it was mentioned before, the first research hypothesis was "EFL learners multiple intelligence scores does not correlate with their vocabulary acquisition". In the light of Pearson correlation, it was revealed that there was a very small positive correlation between EFL learners' MIs scores and their vocabulary knowledge, indicating no significant relation between learners multiple intelligences scores and their vocabulary knowledge. So the first null hypothesis was not retained.

This finding is consistant with the study carried out by Karimi, Pourdana, and Sayyedi, who did a research on the predictive power of multiple intelligences on vocabulary testing in EFL context[6]. They came to the conclusion that multiple intelligences and EFL learners' language component assessment correlated positively. Panahi studied the impact of spatial intelligence-based instruction on the vocabulary performance of EFL learners[7]. His result also agrees with the findings of the research mentioned earlier. Panahi found out that there was a significant relationship between spatial intelligence dominance and learning vocabulary. Another scholar who investigated the relationship between MIs and their role on vocabulary test among Iranian EFL learners is Javanmard[8]. The findings of his research are not consistent with the results of the studies mentioned above. He found out that the higher a specific intelligence, the lower the vocabulary test score will be. It means that if a specific intelligence score is high in a learner then the vocabulary score of that learner is lower. So there was a negative relationship between the students' MIs scores and their vocabulary knowledge. Javanmard concluded that, the only intelligence that correlated positively with vocabulary test scores was bodily kinesthetic intelligence.

The finding of the present study is in line with the results of the studies mentioned above. The only difference between the result of the present study and the investigations carried out by Panahi, and Karimi, Pourdana, and Sayyedi is that they found a significant positive relationship between students' MIs csores and their vocabulary knowledge, while in the present study this relation was not significant but positive.

The second research hypothesis was "None of the multiple intelligences is a better predictor for vocabulary knowledge of EFL learners." As for the relationship between vocabulary knowledge and linguistic intelligence, none of the MIs were significantly related to vocabulary knowledge. So the second null hypothesis of the study was retained. The findings of the data analyses showed that there was a positive, though not significant, relationship between linguistic intelligence and vocabulary knowledge.

Razmjoo and Javanmard found no significant relationship between MI and English language proficiency[9,8]. According to Karimi, Pourdana, and, Sayyedi, linguistic intelligence has the

highest correlation with vocabulary knowledge of the students [6]. Skourdi and Rahimi also concluded that that linguistic intelligence, and emotional intelligence are better predictors for learning vocabulary knowledge[4].

The third research hypothesis was "There is no significant difference between males and females in terms of vocabulary knowledge." After the data analysis, it was revealed that there was a significant difference between male and female students concerning their vocabulary knowledge. So the third null hypothesis of the study was rejected. According to the results of this study, male language learners performed better than female learners in their vocabulary test. Yan found out that obvious differences exist between male and female students in terms of their overall English proficiency level, and that female students excel male students. Also, significant differences exist between male and female students in terms of their vocabulary, and that female students excel male students. In addition, obvious differences exist between male and female students in terms of their overall English proficiency level, and that female students excel male students. His study is also consistent with conclusions by some other researchers, for example, Wu Yi'an, Liu Runqing who investigated English majors, and believed that female students obviously excel male students in terms of language learning[11].

Sallabas's study aimed to determine the effect of student gender in the process of reading comprehension and developing attitude towards reading[12]. The results of the study revealed that there was a large difference between the two genders over reading comprehension. In fact, girls were better at reading comprehension than boys.

Wei-Wei investigated the relationship between gender differences and reading comprehension at secondary level in China[13]. He suggests females are more global and prefer guessing meaning from context while males are more analytic and attend more to words. In other words, women utilize more top-down strategies and men more bottom-up strategies when reading a text. Females in the study were better in practicing from top to bottom and from bottom to top in their interaction with the reading passages. This involves the reader in a text and his/her background knowledge at the same time.

The fourth research hypothesis was "There is no significant difference between males and females in terms of different types of intelligences." In this research, approving the fourth hypothesis, it has been found out that there is no significant difference between males and females concerning different types of intelligences. To be more specific according to the MANOVA table, male EFL learners performed better in linguistic intelligence, and the other types of intelligences were not affected by gender differences. Göğebakan came to the conclusion that gender differences were statistically significant in logical-mathematical, bodily kinesthetic and musical intelligences scores[14,22,23]. It was observed that the male students' logical-mathematical and bodily kinesthetic intelligence mean score was higher than female students, whereas the female students' musical intelligence mean score was higher than male students. Lin studied eight aspects of MIs [15]. His study unraveled that males do not generally estimate their intelligence higher compared to females. Significantly higher self-estimates of male were shown for mathematical, visual-spatial, and bodily-kinesthetic intelligences, while females excelled significantly in verbal-linguistic and musical-rhythmic intelligences. The result of Lin's study is almost consistent with the results of studies by Furnham Fong and Martin, Rammstedt and Rammsayer, and Ksicinski[16-19]. These scholars came to the conclusion that males scored higher for mathematical intelligence, visual-spatial intelligence, and bodily-kinesthetic intelligence. Women on the other hand, didn't show any higher self-ratings compared to males. Rammstedt and Rammsayer reported that males sample had significantly higher self-estimates of mathematical, visual-spatial intelligences and reasoning [17,20,21]. While female sample, rated their musical-rhythmic intelligence significantly higher compared to males. The findings of the present study on the other hand, are contrary to the research mentioned in this part. The present study revealed that male and female students did not show any significant difference in terms of different types of MIs.

Conclusion

Based on the result of the present study the following can be concluded: first, it was hypothesized at the beginning of the study that EFL learners multiple intelligence scores do not correlate with their vocabulary knowledge. The results of the present study, however, suggest that there was a very small positive correlation between EFL learners' MIs scores and their vocabulary knowledge. But the correlation was very low. The first null hypothesis of the study, therefore, was retained. As for the second null Hypothesis, it was predicted that none of the multiple intelligences is a better predictor for vocabulary knowledge of EFL learners. The learners, however, performed differently on MIs questionnaire. On the face of it, the differences were not significant. Using the multiple regression analysis it was revealed that linguistic intelligence is a better predictor for vocabulary knowledge of the students, but even the contribution of LI to vocabulary knowledge did not reach statistical significance. So the outcome of the study retained the second null hypothesis. Third, it was hypothesized that there is no significant difference between males and females in terms of vocabulary knowledge. According to the results obtained, however, the third research hypothesis was rejected, concluding that there was a significant difference between male and female in terms of vocabulary knowledge, with males excelling the females in this respect. Finally, it was hypothesized at the beginning of the study that there is no significant difference between males and females in terms of different types of intelligences. MANOVA results proved the lack of difference between males and females in their multiple intelligence scores.

In this respect, the last null hypothesis of the study was retained, with the only exception that among the nine types of multiple intelligences, female students outperformed their male counterparts in linguistic intelligence.

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