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Esra Harmandaoğlu Baz, Ankara Music and Fine Arts University, Ankara, Türkiye, esraharmandaoglu@gmail.com

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An Investigation into the Relationship among Turkish EFL Students' Learning Styles, Motivation and English Proficiency

Esra Harmandaoğlu Baz[1]

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ABSTRACT

This study sets out to find out the relationship among Turkish EFL students' learning styles, motivation and English proficiency. Data have been collected via online questionnaires from 92 Turkish EFL students during 2022-2023 academic year and analyzed by Point biserial correlation, Chi-square, Mann-Whitney U, Kruskal Wallis, One-way ANOVA and descriptive statistics. The findings indicate that there is no relationship between motivation and foreign language passing grade but English success level. There is no correlation among some learning style dimensions, English proficiency and motivation. There is no difference in gender, age groups and faculties in terms of learning styles but there is a significant relationship between the gender of the students and their perception learning style (male students: sensing learning style). With a regard to the gender of the students and age groups, there is no significant relationship between English proficiency and motivation scores. Nevertheless, students show a significant difference in terms of English success level, foreign language passing grade, instrumental motivation and total motivation scores but integrative motivation according to their faculties.

[1] Common Courses Department, Ankara Music and Fine Arts University, Ankara, Türkiye, esraharmandaoglu@gmail.com

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Foreign language learning process has been a concern for not only language learners but also language researchers for long years. While some have difficulties in dealing with a different language and keeping up with its rules, communication social aspects, others experience this process as if it is meant for them. Therefore, such factors as motivation, learning styles, learning strategies, age, gender, luck, consistency, etc. that contribute to the language achievement have been identified and studied for long centuries. With a view to scope of the studies, there is a paucity of research about such non-major students as music, fine arts and communication students' English learning process and to the knowledge of the researcher, this can be the first study looking into the relationship among Turkish EFL students' learning styles, motivation and English proficiency.

1.1. English Learning Motivation

There has been a quite amount of discussion about motivation in language learning (Dörnyei, 2001; Ellis, 1997). Gardner (1985, p. 10) describes motivation to learn a second or foreign language as "the extent to which the individual works or strives to learn the language because of a desire to do so and the satisfaction experienced in this activity". According to Dörnyei (2001, p. 7), motivation gives us opinions about "*why* people decide to do something, *how hard* they are going to pursue it and *how long* they are willing to sustain the activity". Motivation includes the attitudes and affective states which affect the level of effort that learners need to dedicate so as to learn L2 (Ellis, 1997). Dörnyei and Ushioda (2011, p. 6) shed light on the opinion that "motivation to do something usually evolves gradually, through a complex mental process that involves initial planning and goal setting, intention formation, task generation, action implementation, action control and overcome evaluation".

1.2. Learning Styles

Studies on learning style have gone to before 1940s and researchers have been dealing with the connections among memory, oral or visual teaching methods (Arslan, 2003). In time, it has been observed that there seem discrepancies in the ways learners learn and keep information (Aljasir, 2016). Learning style is defined as "characteristic cognitive, affective, and psychological behaviours that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment" (Keefe, 1979, p. 2). According to Felder and Silverman (1988, p. 674), "a *learning-style model* classifies students according to where they fit on a number of scales pertaining to the ways they receive and process information". In this study's scope, Felder and Silverman (1988) describe dimensions of learning styles perception (sensory & intuitive), input (visual & auditory), processing (active & reflective) and understanding (sequential & global). "Sensing involves observing, gathering data through the senses, intuition involves indirect perception by way of the unconscious – speculation, imagination, hunches" (Felder & Silverman, 1988, p. 676) "Visual learners remember best what they see: pictures, diagrams, flow charts, time lines, films, demonstrations… Auditory learners remember much of what they hear and more of what they hear and then say" (Felder & Silverman, 1988, p. 676). "Active experimentation involves doing something in the external world with the information—discussing it or explaining it or testing it in some way—and reflective observation involves examining and manipulating the information introspectively" (Felder & Silverman, 1988, p. 678). "Sequential learners follow linear reasoning processes when solving problems; global learners make intuitive leaps and may be unable to explain how they came up with solutions" (Felder & Silverman, 1988, p. 679).

2. Review of Literature

Kim and Kim (2014) studied the causal relationships between perceptual learning styles, imagination, the ideal L2 self, motivated behavior, and English proficiency of EFL learners in South Korea (henceforth Korea). Collecting data from 2239 Korean EFL students from grades 3 to 12, the

researchers came up with the result that visual style had the most crucial role for both motivation and achievement in English. On the other hand, kinesthetic style had an adverse effect on motivation and English proficiency (with high-school students' English proficiency not elementary and junior high school students'). From another perspective, motivation was seen as the most significant factor for English proficiency among high school students.

Aljasir (2016) collects data from 334 freshman students of Humanities and Science divisions from Saudi Arabia so as to find out their affective factors and learning style preferences influencing their language learning. The findings indicate that there is a moderate positive correlation between the visual learning style and motivation and between kinesthetic learning style and motivation. On the other hand, there is a weak positive correlation between the aural learning style and motivation and between the read/write learning style and motivation. It can be commented that high preferences for these learning styles are in relation with high levels of motivation and all four perceptual learning styles are associated significantly and positively with motivation.

Rachmawati and Putri (2017) try to find out English Language Learning Strategy usage viewed from intrinsic motivation and learning styles. The researchers collect data from 120 students whose levels are Intermediate to Advance level in terms of TOEFL results in the Faculty of Economics in this quantitative study. The findings demonstrate that the utilization of language learning strategies by students with low, medium and high levels differ significantly. The students with high intrinsic motivation level often use all language learning strategies such as memory, cognitive, compensation, metacognitive, affective and social strategies in comparison to the students with moderate and low intrinsic motivation level. From another perspective, language learning strategies the students with visual, auditory, individual and group learning styles use do not differ significantly. Intrinsic motivation has been found to make contribution to the use of language learning strategies with a ratio of 62% and to be one of the crucial factors reinforcing English language learning success via elevating the use of language learning strategies.

Harpain (2014) researches whether there is any significant effect of learning styles, motivation and types of schools on 430 students' achievement in learning English at junior high schools in Bandar Lampung city, Indonesia. It can be observed from the findings that there isn't any significant relationship between motivation and learning styles on students' English Achievement. Learning styles have significant impact on students' English achievement. Motivation does not have significant effect on students' English achievement. Finally, types of school have a significant influence on students' English achievement.

Masela and Subekti (2021) design a study about 24 non-English major university students' auditory and kinesthetic learning styles and their relationships to foreign language success at a university in Indonesia. The results indicate that participants utilize auditory learning styles slightly more dominantly than kinesthetic ones. On the other hand, both of them are only made use of low to moderate levels. The relationship between learning styles and foreign language success is not only very weak but also statistically not significant.

Purwanti and Puspita (2019) in their study about the correlation between English learning motivation and proficiency success collect data from 77 students enrolled in English Study Program in Bengkulu University, Indonesia. According to the findings, the participants hold strong feelings for learning English and have English proficiency scores at a medium level. From the aspect of correlation between two variables, it is at a weak level.

Chu (2013) carries out a study in order to research the relationship among learning strategies, learning styles and spoken English proficiency of 174 non-English major sophomore students enrolled in Yanshan University, China. The findings indicate that the students make use of learning strategies at a low rate. Tactile and kinesthetic learning styles are found to be the most preferred ones among students. The researcher finds a correlation between perceptual learning styles and learning strategies. What is more, it can be

understood that spoken English proficiency of the students is not very high and the relationship between the perceptual learning styles and spoken English proficiency does not exist except group styles (positively) and individual styles (negatively), which shows that learning styles do not have an impact on language learners' English success directly. Lastly, it is revealed that most learning strategies influence learners' spoken English proficiency except memory strategy in a direct and strong way.

Dai, Wu and Dai (2015) look into the relationship among English proficiency, learning styles and motivation of 308 Xinghai Conservatory of Music students, China. The results indicate that music students make use of a great variety of learning styles and learning style does not have much to do with English proficiency. From another perspective, there is a moderate correlation between motivation and English proficiency. On the other hand, there is no correlation between learning styles and English proficiency but active learners seem to have slightly worse grades in the final exam. One more finding reveals that visual learning style has a negative correlation with motivation.

Up to now, studies have been conducted about the relationship among learning styles, learning strategies, the ideal L2 self, and motivation. It is interesting to see that there are some contradictory findings with the literature like the positive relationship among motivation, learning styles and English proficiency. It must be noted that very little work has been published with a regard to Turkish EFL students' learning styles, motivation and English Proficiency at music (Dai et al., 2015), fine arts and communication departments and this might be the first investigation examining how Turkish EFL students' learning styles, motivation, and English proficiency interplay.

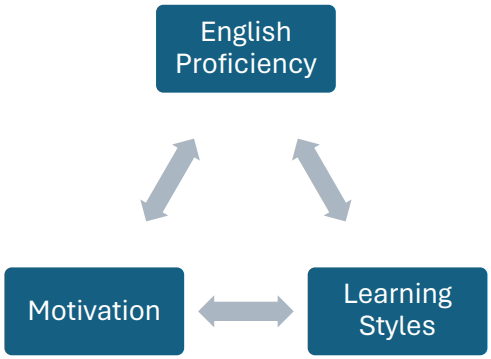

Figure 1. Suggested relationship

3. Methodology

3.1. Research Design

Correlational research design "which describes the degree to which two or more quantitative variables are related, and it does so by using a correlation coefficient" is used in this study and "the relationships among two or more variables are studied without any attempt to influence them" (Fraenkel et al., 2011, p. 331).

1. What is the relationship among Turkish EFL students' learning styles, motivation and English Proficiency?

1.1. There is a positive bi-directional relationship between Turkish EFL students' English proficiency and their motivation.
1.2. There is a positive bi-directional relationship between Turkish EFL students' English proficiency and learning styles.
1.3. There is a positive bi-directional relationship between Turkish EFL students' motivation and learning styles.
2. Do Turkish EFL students' learning styles, motivation and English Proficiency differ in terms of faculties, gender and age groups??
3. What are the levels of Turkish EFL students' learning styles, motivation and English Proficiency?

3.2. Participants

The population of this study is all students at a state university in Türkiye. The sample is chosen based on convenience sample, "a group of individuals who (conveniently) are available for study" (Fraenkel et al., 2011, p. 95). The questionnaires are distributed via online tools and the participants are informed about the study during 2022-2023 academic year. They are guaranteed that they can withdraw from the study any time they want. The researcher adhered to the Scientific Research and Publication Ethics Statements for Higher Education Institutions, and none of the actions listed under the section titled "Actions Contrary to Scientific Research and Publication Ethics" were carried out during the research.

The frequency distributions of the students whose data were collected within the scope of the research are given in the table 1, 2, 3 and 4 below according to gender, age, and departments and faculties.

Table 1
Gender Profile

Gender	Frequency	Percent
Male	35	38
Female	57	62
Total	92	100

Table 2
Age Profile

Age Range	Frequency	Percent
17-19	25	27,2
20-22	36	39,1
23+	31	33,7
Total	92	100

Table 3
Distribution of Departments

Departments	Frequency	Percent
Music Education	13	14,1
Visual Arts Education	6	6,5
Radio and Television Programming	27	29,3
Traditional Handicraft	4	4,3
Music Technologies	11	12
Musicology	2	2,2
Music Theory	8	8,7
Instrument Education	14	15,2
Voice Education	6	6,5
Composition and Conducting	1	1,1
Total	92	100

Table 4
Distribution of Faculties

Faculties	Frequency	Percent
Faculty of Music and Fine Arts Education	19	20,7
Vocational School of Music and Fine Arts	31	33,7
Faculty of Music Sciences and Technologies	21	22,8
Faculty of Performing Arts	21	22,8
Total	92	100

3.3. Data Collection Instruments

As can be seen in table 5, the Motivation/Attitude Questionnaire by Mendi (2009) is adapted from Dörnyei (1990) who developed this tool especially for foreign language learning contexts. The instrument consists of 30 items which include 9 items of Instrumental Motivation (α: .85) and 21 items of Integrative Motivation (α: .83). The overall reliability is .87.

The Index of Learning Styles (ILS) adapted by Arslan (2003) has been originally designed by Felder and Silverman (1988). They present four learning styles dimensions which are processing dimension (active/reflective), perception dimension (sensing/intuitive), input dimension (visual/verbal) and understanding dimension (sequential/global) so as to demonstrate four bipolar scales related to preferences for learning style. The instrument is composed of 44 two-part (a and b items) by summing the scores on the "a" parts of the relevant

items and subtracting the sum of the relevant "b" parts (or vice versa if the "b" total is greater than the "a" total). Responses "a" indicate that the participants are active, sensing, visual, and sequential learner whereas responses given to "b" show that the participants are reflective, intuitive, verbal, and global learners. Responses "a" are coded as 1 and responses "b" are coded as 2 in order to come up with mean scores for each of four learning style dimension. The mean scores range between 11 and 22. The means from 11 to 16 represent active, sensing, visual, and sequential learners while the means scores from 17 to 22 represent reflective, intuitive, verbal, and global learners. The reliability coefficients of items in each dimension are as active-reflective (α: .49), sensing-intuitive (α: .55), visual-verbal (α: .53) and sequential-global (α: .29).

English proficiency of the participants is evaluated based on the grade they get from Foreign Language I course during 2022-2023 semester. This is a compulsory course offering elementary level of English for all the freshman students in Türkiye. Due to the fact that these students do not have any other common exam except for the ones carried out by Measurement, Selection and Placement Center, the researcher takes into account the grade of a one-semester course. Additionally, the students are given a choice to enter the placement test at the beginning of the semester so as to be exempt from the course. The placement test scores are taken from the students having passed the placement test. The grades are categorized as A (90-100), B (75-89), C (65-74), Conditionally Passing (55-64) and Fail (0-54) based on the regulation of the university. What is more, for English proficiency, the students' perceptions about their level of success in English have been taken based on the categorizations 1 (very unsuccessful), 2 (unsuccessful), 3 (average), 4 (successful) and 5 (very successful).

Table 5
Data Collection Instruments

The Index of Learning Styles by Arslan (2003)	44 items
The Motivation/Attitude Questionnaire by Mendi (2009)	30 items Instrumental Motivation (9 items) 20,21,22,23,24,25,26,27,30 Integrative Motivation (21 items) 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,28,29
English Proficiency	Grade from Foreign Language I course Placement test score of Foreign Language I course English Success Level (their own perceptions)

3.4. Data Analysis

Data analysis can be observed from table 6 in terms of research questions. To explore the connection between the learning styles, motivation, and English proficiency of Turkish EFL students, Point Biserial correlation was utilized. Additionally, Chi-square, Mann-Whitney U, Kruskal Wallis, and One-way ANOVA tests were employed to compare these factors across different faculties, genders, and age groups. Lastly, descriptive analysis was applied to assess the levels of Turkish EFL students' learning styles, motivation, and English proficiency.

Table 6
Data Analysis

1. What is the relationship among Turkish EFL students' learning styles, motivation and English Proficiency?	Point biserial correlation

2. Do Turkish EFL students' learning styles, motivation and English Proficiency differ in terms of faculties, gender and age groups?	Chi-square, Mann-Whitney U, Kruskal Wallis, One-way ANOVA
3. What are the levels of Turkish EFL students' learning styles, motivation and English Proficiency?	Descriptive statistics

4. Results

4.1. What is the relationship among Turkish EFL students' learning styles, motivation and English Proficiency?

4.1.1. There is a positive bi-directional relationship between Turkish EFL students' English proficiency and their motivation.

When the variables were examined in order to determine the relationship between students' English success level, foreign language passing grade and motivation scores, it was seen in table 7 that the variables were continuous, but the motivation scores deviated from the normal distribution. For this reason, Spearman's rho correlation coefficient was calculated to determine the relationships between variables.

Table 7
The Relationship between English Success Level, Grade and Motivation

		English Success Level	Grade	Inst_Mot	Intg_Mot	Motivation
English Success Level	r	-	,507**	,287**	,344**	,344**
	p	.	0	0,005	0,001	0,001
	N	92	92	92	92	92
Grade	r	,507**	-	0,132	0,051	0,08
	p	0	.	0,211	0,629	0,446
	N	92	92	92	92	92
Inst_Mot	r	,287**	0,132	-	,859**	,924**
	p	0,005	0,211	.	0	0
	N	92	92	92	92	92
Intg_Mot	r	,344**	0,051	,859**	-	,987**
	p	0,001	0,629	0	.	0
	N	92	92	92	92	92
Motivation	r	,344**	0,08	,924**	,987**	-
	p	0,001	0,446	0	0	.
	N	92	92	92	92	92

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

When the table was examined, a low r=0.287, p<.01 relationship was found between their English success level and instrumental motivation scores. There was a moderate r=0.344, p<.01 relationship between their English success level and integrative and total motivation scores. The sign of the correlation coefficient is positive, that is, as English success level increases, the motivation scores in question also increase. No significant correlation was found between the foreign language passing grade and the motivation scores, p<.01. A moderate positive correlation was found between students' English success level and foreign language passing grade =0.507, p<.01.

4.1.2. There is a positive bi-directional relationship between Turkish EFL students' English proficiency and learning styles.

4.1.3. There is a positive bi-directional relationship between Turkish EFL students' motivation and learning styles.

Learning Styles: Process Dimension (dominant active versus dominant reflective)

Table 8
The Relationship between Process Dimension, English Success Level, Foreign Language Passing Grade and Motivation Scores

		English Success Level	**Grade**	**Inst_Mot**	**Intg_Mot**	**Motivation**	**Process**
English Success Level	rpbs	-	,511**	,242*	,313**	,297**	-0,009
	p		0	0,02	0,002	0,004	0,929
	N	92	92	92	92	92	92
Grade	rpbs	,511**	-	0,12	0,075	0,092	0,049
	p	0		0,253	0,478	0,385	0,644
	N	92	92	92	92	92	92
Inst_Mot	rpbs	,242*	0,12	-	,896**	,951**	0,179
	p	0,02	0,253		0	0	0,089
	N	92	92	92	92	92	92
Intg_Mot	rpbs	,313**	0,075	,896**	-	,989**	0,154
	p	0,002	0,478	0		0	0,142
	N	92	92	92	92	92	92
Motivation	rpbs	,297**	0,092	,951**	,989**	-	0,166
	p	0,004	0,385	0	0		0,114
	N	92	92	92	92	92	92
Process	rpbs	-0,009	0,049	0,179	0,154	0,166	-
	p	0,929	0,644	0,089	0,142	0,114	
	N	92	92	92	92	92	92

**Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
rpbs: point biserial correlation

For the process dimension of learning styles, students were classified as dominant active and dominant reflective according to the scores they got from the items in the dimension as in table 8. No significant relationship was found between this dimension of learning style and instrumental motivation, integrative motivation, motivation,

English success level and foreign language passing grade (p<.05).

Learning Styles: Perception Dimension (dominant sensing versus dominant intuitive)

Table 9
The Relationship between Perception Dimension, English Success Level, Foreign Language Passing Grade and Motivation Scores

		English Success Level	**Grade**	Inst_Mot	Intg_Mot	Motivation	Perception
English Success Level	rpbs	-	,511**	,242*	,313**	,297**	0,035
	p		0,000	0,020	0,002	0,004	0,737
	N	92	92	92	92	92	92
Grade	rpbs	,511**	-	0,120	0,075	0,092	-0,035
	p	0,000		0,253	0,478	0,385	0,741
	N	92	92	92	92	92	92
Inst_Mot	rpbs	,242*	0,120	-	,896**	,951**	-0,151
	p	0,020	0,253		0,000	0,000	0,152
	N	92	92	92	92	92	92
Intg_Mot	rpbs	,313**	0,075	,896**	-	,989**	-,228*
	p	0,002	0,478	0,000		0,000	0,029
	N	92	92	92	92	92	92
Motivation	rpbs	,297**	0,092	,951**	,989**	-	-,208*
	p	0,004	0,385	0,000	0,000		0,046
	N	92	92	92	92	92	92
Perception	rpbs	0,035	-0,035	-0,151	-,228*	-,208*	-
	p	0,737	0,741	0,152	0,029	0,046	
	N	92	92	92	92	92	92

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
rpbs: point biserial correlation

For the perception dimension of learning styles in table 9, students were classified as dominant sensing or dominant intuitive according to the scores they got from the items in the dimension. No significant relationship was found between this dimension of learning style and instrumental motivation, English success level and foreign language passing grade (p<.05). The point biserial correlation between this dimension of learning styles and integrative motivation was -0.228 (p<.05) and the correlation between perception dimension of learning styles and motivation was calculated as -0.208 (p<.05). Accordingly, there is a low level of correlation between the domain of perception and integrative motivation and motivation. Since sensing is coded as 1 and intuitive as 2 in this dimension, as the integrative motivation and motivation scores increase, the frequency of students having the sensing learning style increases, but the relationship is low.

Learning Styles: Input Dimension (dominant visual versus dominant verbal)

Table 10
The Relationship of Input Dimension with English Success Level, Foreign Language Passing Grade and Motivation Scores

		English Success Level	Grade	Inst_Mot	Intg_Mot	Motivation	Input
English Success Level	rpbs	-	,511**	,242*	,313**	,297**	0,023
	p		0,000	0,020	0,002	0,004	0,825
	N	92	92	92	92	92	92
Grade	rpbs	,511**	-	0,120	0,075	0,092	-,256*
	p	0,000		0,253	0,478	0,385	0,014
	N	92	92	92	92	92	92
Inst_Mot	rpbs	,242*	0,120	-	,896**	,951**	0,105
	p	0,020	0,253		0,000	0,000	0,317
	N	92	92	92	92	92	92
Intg_Mot	rpbs	,313**	0,075	,896**	-	,989**	0,183
	p	0,002	0,478	0,000		0,000	0,081
	N	92	92	92	92	92	92
Motivation	rpbs	,297**	0,092	,951**	,989**	-	0,162
	p	0,004	0,385	0,000	0,000		0,124
	N	92	92	92	92	92	92
Input	rpbs	0,023	-,256*	0,105	0,183	0,162	-
	p	0,825	0,014	0,317	0,081	0,124	
	N	92	92	92	92	92	92

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
rpbs: point biserial correlation

For the input dimension of learning styles in table 10, students were classified as dominant visual or dominant verbal according to the scores they got from the items in the dimension. No significant relationship was found between this dimension of learning style and instrumental motivation, integrative motivation, motivation, and English success level ($p<.05$). The point biserial correlation between this dimension of learning styles and foreign language passing grade was calculated as -0.256 ($p<.05$). Since visual is coded as 1 and verbal as 2 in this dimension, as the foreign language passing grade increases, the frequency of students having a visual learning style increases, but the relationship between them is low.

Learning Styles: Understanding Dimension (dominant sequential versus dominant global)

Table 11
The Relationship of Understanding Dimension with English Success Level, Foreign Language Passing Grade and Motivation Scores

		English Success Level	Grade	Inst_Mot	Intg_Mot	Motivation	Understanding
English Success Level	rpbs	-	,511**	,242*	,313**	,297**	0,202
	p		0,000	0,020	0,002	0,004	0,054
	N	92	92	92	92	92	92

Grade	rpbs	,511**	-	0,120	0,075	0,092	0,185
	p	0,000		0,253	0,478	0,385	0,078
	N	92	92	92	92	92	92
Inst_Mot	rpbs	,242*	0,120	-	,896**	,951**	0,170
	p	0,020	0,253		0,000	0,000	0,106
	N	92	92	92	92	92	92
Intg_Mot	rpbs	,313**	0,075	,896**	-	,989**	0,084
	p	0,002	0,478	0,000		0,000	0,425
	N	92	92	92	92	92	92
Motivation	rpbs	,297**	0,092	,951**	,989**	-	0,114
	p	0,004	0,385	0,000	0,000		0,278
	N	92	92	92	92	92	92
Understanding	rpbs	0,202	0,185	0,170	0,084	0,114	-
	p	0,054	0,078	0,106	0,425	0,278	
	N	92	92	92	92	92	92

**** Correlation is significant at the 0.01 level (2-tailed).**
*** Correlation is significant at the 0.05 level (2-tailed).**
rpbs: point biserial correlation

For the understanding dimension of learning styles in table 11, students were classified as dominant sequential or dominant global according to the scores they got from the items in the dimension. No significant relationship was found between this dimension of learning style and instrumental motivation, integrative motivation, motivation, English success level and foreign language passing grade ($p<.05$).

4.2. Do Turkish EFL students' learning styles, motivation and English Proficiency differ in terms of their faculties, gender and age groups?

4.2.1. Chi-square Results of Learning Styles by Gender

Chi-square test was conducted for two variables in order to determine whether students' learning styles differ according to their faculty, gender and age group. In the chi-square test, it is tested whether there is a significant relationship between the two classified variables. The expected value in the chi-square test requires the expected value to be greater than 5 in one of the pores in a 2x2 table with 1 degree of freedom, and if the degree of freedom is greater than 1, the expected value requires that the number of pores less than 5 should not exceed 20%. These conditions were taken into consideration in the analysis where Chi-Square was used.

It was analyzed for each sub-dimension respectively whether there is a relationship between students' gender and learning styles as can be seen in table 12, 13, 14, 15, 16, and 17.

4.2.1.1. Process

Table 12
Process Dimension and Gender Relationship Chi-square Test Results

			Process		
			Active	Reflective	Total
Gender	Male	N	22	13	35
		% within Gender	62,9%	37,1%	100,0%

	Female	Count	33	24	57
		% within Gender	57,9%	42,1%	100,0%
Total		Count	55	37	92
		% within Gender	59,8%	40,2%	100,0%

$\chi^2 = 0,222$ sd=1 p= 0,637

The expected value in all cells is greater than 5. The table shows the results of the Chi-square test on whether the gender of the students differ in terms of the process dimension learning style or whether it is related to the process learning style. When the table is examined, it is seen that 62.9% of male and 57.9% of female have active learning style. It was found that the learning styles of students of different genders did not differ significantly in the process dimension, $\chi 2$ (df=1, n=92) = 0.222, p>.05. In other words, there is no significant relationship between the gender of the students and their process learning style.

4.2.1.2. Perception

Table 13
Perception Dimension and Gender Relationship Chi-square Test Results

			Perception		Total
			Sensing	Intuitive	
Gender	Male	Count	32	3	35
		% within Gender	91,4%	8,6%	100,0%
	Female	Count	40	17	57
		% within Gender	70,2%	29,8%	100,0%
Total		Count	72	20	92
		% within Gender	78,3%	21,7%	100,0%

$\chi^2 = 5,757$ sd=1 p= 0,016

The expected value in all cells is greater than 5. The table shows the results of the Chi-square test to determine whether the gender of the students differ with a view to the perception dimension, which is one of the learning styles. When the table is examined, it is seen that 91.4% of male and 70.2% of female have sensing learning style. The difference observed in the perception dimension of the learning styles of students of different genders was found to be significant, $\chi 2$ (sd=1, n=92) =5,757, p<.05. In other words, there is a significant relationship between the gender of the students and their perception learning style.

4.2.1.3. Input

Table 14
Input Dimension and Gender Relationship Chi-square Test Results

			Input		
			Visual	Verbal	Total
Gender	Male	Count	31	4	35
		% within Gender	88,6%	11,4%	100,0%
	Female	Count	43	14	57
		% within Gender	75,4%	24,6%	100,0%
Total		Count	74	18	92
		% within Gender	80,4%	19,6%	100,0%

$\chi^2 = 2,737$ sd=1 p= 0,123

The expected value in all cells is greater than 5. The table shows the results of the Chi-square test on whether the gender of the students differ from the perspective of their learning styles in terms of the input dimension or whether they are related. When the table is examined, it is seen that 88.6% of male and 75.4% of female have visual learning style. It was found that the difference observed in the input dimension of the learning styles of students of different genders was not significant, $\chi 2$ (df=1, n=92) =2.737, p>.05. In other words, there is no significant relationship between the gender of the students and their input learning style.

4. 2.1.4. Understanding

Table 15
Understanding Dimension and Gender Relationship Chi-square Test Results

			Understanding		
			Sequential	Global	Total
Gender	Male	Count	15	20	35
		% within Gender	42,9%	57,1%	100,0%
	Female	Count	25	32	57
		% within Gender	43,9%	56,1%	100,0%
Total		Count	40	52	92
		% within Gender	43,5%	56,5%	100,0%

$\chi^2 = 0{,}009$ sd=1 p= 0,925

The expected value in all cells is greater than 5. The table shows the results of the Chi-square test on whether the gender of the students differ in terms of the understanding dimension from their learning styles or whether they are related. When the table is examined, it is seen that 42.9% of male and 43.9% of female have sequential learning style. It was found that the difference observed in the understanding dimension of the learning styles of students of different genders was not significant, $\chi 2$ (sd=1, n=92) =0.009, p>.05. In other words, there is no significant relationship between the gender of the students and their understanding learning style.

4.2.2. Chi-square Results of Learning Styles by Age Groups

Table 16
Learning Styles and Age Relationship Chi-square Test Results

		Processing[1]		Perception[2]		Input[3]		Understanding[4]		Total
Age Group		Active	Reflective	Sensing	Intiutive	Visual	Verbal	Sequential	Global	
17-19	Count	15	10	18	7	20	5	8	17	25
	% within Age Group	60%	40%	72%	28%	80%	20%	32%	68%	100%
20-22	Count	23	13	28	8	32	4	17	19	36
	% within Age Group	63,9%	36,1%	77,8%	22,2%	88,9%	11,1%	47,2%	52,8%	100%
23+	Count	17	14	26	5	22	9	15	16	31
	% within Age Group	54,8%	45,2%	83,9%	16,1%	71,00%	29,00%	48,40%	51,60%	100%
Total	Count	55	37	72	20	74	18	40	52	92

	% within Age Group	59,8%	40,2%	78,3%	21,7%	80,40%	19,60%	43,50%	56,50%	100%
1: $\chi^2 = 0{,}568$ sd=2 p= 0,753										
2: $\chi^2 = 1{,}154$ sd=2 p= 0,561										
3: $\chi^2 = 3{,}403$ sd=2 p= 0,182										
4: $\chi^2 = 1{,}850$ sd=2 p= 0,397										

According to age groups, the expected value is greater than 5 in all cells in the dimensions of process, perception and understanding. In the input dimension, the expected value is less than 5 in only one cell (16.7%). The relationships between the age groups of the students and the learning styles were examined respectively. No significant relationship was found with age groups in any of the dimensions. There is no significant difference in process dimension $\chi 2$ (sd=1, n=92) =0.568, p>.05; perception dimension $\chi 2$ (sd=1, n=92) =1,154, p>.05; input dimension $\chi 2$ (sd=1, n=92) =3,403, p>.05 and understanding dimension $\chi 2$ (sd=1, n=92) =1,850, p>.05 according to age groups.

4.2.3. Chi-square Results of Learning Styles by Faculties

Table 17
Learning Styles and Faculties Relationship Chi-square Test Results

		Processing[1]		Perception[2]		Input[3]		Understanding[4]		
Fakülte		Active	Reflective	Sensing	Intiutive	Visual	Verbal	Sequential	Global	Total
Faculty of Music and Fine Arts Education	Count	12	7	12	7	15	4	8	11	19
	% within Faculty	63,2%	36,8%	63,2%	36,8%	78,9%	21,1%	42,1%	57,9%	100,0%
Vocational School of Music and Fine Arts	Count	18	13	25	6	23	8	13	18	31
	% within Faculty	58,1%	41,9%	80,6%	19,4%	74,2%	25,8%	41,9%	58,1%	100,0%
Faculty of Music Sciences and Technologies	Count	14	7	17	4	20	1	6	15	21
	% within Faculty	66,7%	33,3%	81,0%	19,0%	95,2%	4,8%	28,6%	71,4%	100,0%
Faculty of Performing Arts	Count	11	10	18	3	16	5	13	8	21
	% within Faculty	52,4%	47,6%	85,7%	14,3%	76,2%	23,8%	61,9%	38,1%	100,0%
Total	Count	55	37	72	20	74	18	40	52	92
	% within Faculty	59,8%	40,2%	78,3%	21,7%	80,4%	19,6%	43,5%	56,5%	100,0%

1: $\chi^2 = 1{,}021$ sd=3 p= 0,796
2: $\chi^2 = 3{,}426$ sd=3 p= 0,330
3: $\chi^2 = 3{,}959$ sd=3 p= 0,266
4: $\chi^2 = 4{,}845$ sd=2 p= 0,184

According to the faculties, the expected value is greater than 5 in all cells in the process and understanding dimensions. In the Perception and Input dimensions, the expected value is less than 5 in only three cells (37.5%). Chi-square statistics were not interpreted for these two dimensions. The relationships between the age groups of the students and the learning dimensions were

examined respectively. In other dimensions, no significant relationship was found between the faculties and learning styles: Process dimension, $\chi 2$ (sd=1, n=92) =1.021, p>.05 and understanding dimension $\chi 2$ (sd=1, n=92) =4.845 p>.05.

4.2.4. Comparison of Student Motivation, English Success Level and Foreign Language Passing Grades by Gender, Age and Faculty

4.2.4.1. Gender

In order to determine whether students' motivation scores, English success levels and foreign language passing grades show a significant difference according to gender, first of all, it was examined whether the scores were normally distributed in the subgroups and their deviations from the normal distribution were determined as in table 18. Therefore, non-parametric Mann-Whitney U test was used to compare the genders.

Table 18
U-Test Results of Motivation Scores and English Success Levels and Foreign Language Passing Grades by Gender

	Gender	n	Mean Rank	Sum of Ranks	U	p
English Success Level	Male	35	48,27	1689,5	935,5	0,591
	Female	57	45,41	2588,5		
Grade	Male	35	44,76	1566,5	936,5	0,612
	Female	57	47,57	2711,5		
Inst_Mot	Male	35	48,43	1695	930	0,587
	Female	57	45,32	2583		
Intg_Mot	Male	35	50,87	1780,5	844,5	0,218
	Female	57	43,82	2497,5		
Motivation	Male	35	49,93	1747,5	877,5	0,334
	Female	57	44,39	2530,5		

The Mann-Whitney U test results of the students' English success levels, foreign language passing grades, instrumental motivation, integrative motivation and total motivation points by gender are indicated in the table. Considering the mean rank, it is seen that the student scores according to gender are generally close to each other. In terms of the variables examined, there is no significant difference in terms of the gender of the students. For English success levels, U: 935.5 p>.05, for foreign language passing grades U: 936.5 p>.05; for instrumental motivation U: 930 p>.05; for integrative motivation U: 845.5 p>.05; and for total motivation scores, U: 877.5 p>.05.

4.2.4.2. Age Groups

In order to determine whether students' motivation scores, English success levels, foreign language passing grades and motivation show a significant difference according to age groups, it was first examined whether the scores were normally distributed in the subgroups and it was determined that they deviated from the normal distribution. Therefore, non-parametric Kruskal-Wallis H test was used to compare the age groups.

Table 19
Kruskal Wallis Test Results of Motivation Scores and English Success Levels and Foreign Language Passing Grades by Age Groups

	Age	n	Mean Rank	sd	χ^2	p

English Success Level	17-19	25	54,04	2	3,549	0,17
	20-22	36	45,4			
	23+	31	41,69			
Foreign Language Passing Grade	17-19	25	55,28	2	4,151	0,125
	20-22	36	44,51			
	23+	31	41,73			
Inst_Mot	17-19	25	47,08	2	0,136	0,934
	20-22	36	45,24			
	23+	31	47,5			
Intg_Mot	17-19	25	45,84	2	0,226	0,893
	20-22	36	45,38			
	23+	31	48,34			
Motivation	17-19	25	46,18	2	0,17	0,918
	20-22	36	45,39			
	23+	31	48,05			

The Kruskal-Wallis test results of students' English success levels, foreign language passing grades and motivation scores according to age groups are given in the table 19. In terms of the variables examined, students do not show a significant difference according to age groups, $\chi 2$ (sd=2, n=92) = 3,549, p>.05 for English success levels, $\chi 2$ (sd=2, n=92)= for foreign language passing grades. 4.151, p>.05, $\chi 2$ for instrumental motivation (sd=2, n=92)=0.136, p>.05; $\chi 2$ (sd=2, n=92)=0.226, p>.05 for integrative motivation; and for total motivation scores $\chi 2$ (sd=2, n=92)=0.17, p>.05.

4.2.4.3. Faculty

In order to determine whether students' motivation scores, English success levels, foreign language passing grades and motivation show a significant difference according to age groups, it was first examined whether the scores were normally distributed in the subgroups and it was determined that they deviated from the normal distribution, except for integrative motivation scores. Therefore, one-way ANOVA for integrative motivation scores and non-parametric Kruskal-Wallis H test for the others were used to compare the groups.

Table 20
Kruskal Wallis H Test Results of Motivation Scores and English Success Levels and Foreign Language Passing Grades by Faculties

	Faculty	n	Mean Rank	sd	χ^2	p
English Success Level	Faculty of Music and Fine Arts Education	19	53,55	3	14,924	0,002
	Vocational School of Music and Fine Arts	31	42,11			
	Faculty of Music Sciences and Technologies	21	60,02			
	Faculty of Performing Arts	21	33,07			

Grade	Faculty of Music and Fine Arts Education	19	58,18	3	9,312	0,025
	Vocational School of Music and Fine Arts	31	42,05			
	Faculty of Music Sciences and Technologies	21	52,74			
	Faculty of Performing Arts	21	36,26			
Inst_Mot	Faculty of Music and Fine Arts Education	19	51,11	3	5,463	0,141
	Vocational School of Music and Fine Arts	31	41,02			
	Faculty of Music Sciences and Technologies	21	56			
	Faculty of Performing Arts	21	40,93			
Motivation	Faculty of Music and Fine Arts Education	19	54,26	3	3,619	0,306
	Vocational School of Music and Fine Arts	31	41,06			
	Faculty of Music Sciences and Technologies	21	50,48			
	Faculty of Performing Arts	21	43,52			

The Kruskal-Wallis test results of the students' English success levels, foreign language passing grades and motivation scores according to their faculties are given in the table. In terms of the variables examined in table 20, students show a significant difference in terms of English success level and foreign language passing grade according to their faculties, $\chi 2$ for English Success Levels (sd=3, n=92) = 14,924, p<.05, $\chi 2$ for foreign language passing grades (sd= 3, n=92)= 9.312, p<.05, $\chi 2$ for instrumental motivation (sd=3, n=92)= 5.463, p>.05; and for total motivation scores $\chi 2$ (sd=2, n=92)= 3.619, p>.05.

In cases where the test results are significant, it is necessary to examine whether there is a difference between the two groups. For this purpose, according to the results of multiple comparisons made with Bonferroni correction, the difference between the Faculty of Performing Arts and Faculty of Music Sciences and Technologies is significant in terms of English success level. According to the results of the pairwise comparison of the foreign language passing grade, the difference between the Faculty of Performing Arts and Faculty of Music and Fine Arts Education is significant.

Table 21
Descriptive Statistics of Integrative Motivation Scores

	N	Mean	Std. Deviation

Faculty of Music and Fine Arts Education	19	116,5263	13,09524
Vocational School of Music and Fine Arts	31	105,6129	23,10076
Faculty of Music Sciences and Technologies	21	113,6667	11,84202
Faculty of Performing Arts	21	110,5238	16,36343
Total	92	110,8261	17,81690

Table 22
ANOVA Results of Students' Integrative Motivation Scores by Faculties

	Sum of Squares	df	Mean Square	F	p
Between Groups	1631,221	3	543,740	1,756	,162
Within Groups	27255,996	88	309,727		
Total	28887,217	91			

Analysis results indicate that with a regard to students' integrative motivation there is no significant difference between their scores according to their faculties as can be seen in table 21 and 22, $F(3, 88) = 1.756$, $p<.05$.

4.3. What are the levels of Turkish EFL students' learning styles, motivation and English Proficiency?

The learning styles of the students was examined in four dimensions. Accordingly, the distribution of the students regarding the learning style in each dimension is as follows in table 23:

Table 23
Descriptive Statistics of Learning Styles Scores

		Frequency	Percent
Process	Active	55	59,8
	Reflective	37	40,2
Perception	Sensing	72	78,3
	Intuitive	20	21,7
Input	Visual	74	80,4
	Verbal	18	19,6
Understanding	Sequential	40	43,5
	Global	52	56,5
	Total	92	100

When each learning style is examined in terms of dimensions, it is seen that students have an active learning style in the process dimension, sensing in the perception dimension, visual in the input dimension, and global learning style, although they are closer to each other in the understanding dimension.

Descriptive statistics regarding the motivation scale and its sub-dimensions, which is another data collection tool, are given in table 24.

Table 24
Descriptive Statistics of Motivation Scale Scores

Statistics	Inst_Mot	Intg_Mot	Motivation
Range	40	96	136

Minimum	15	48	63
Maximum	55	144	199
Mean	45,044	110,826	155,870
(Std. Error)	0,877	1,858	2,672
Std. Deviation	8,415	17,817	25,628
Variance	70,811	317,442	656,818
Skewness	-1,325	-1,046	-1,176
(Std. Error)	0,251	0,251	0,251
Kurtosis	2,020	1,464	1,754
(Std. Error)	0,498	0,498	0,498
N	92	92	92

When the table is examined, it is seen that the motivation score averages of the students are relatively high. When the kurtosis and skewness values are examined, it is seen that the scores diverge from the normal distribution. When the table is examined, it is seen that the scores have a left skewed distribution, that is, the motivation scores of the students are generally high.

The descriptive statistics of the students' English success level and foreign language passing grades are given in table 25.

Table 25
Descriptive Statistics of English Success Level and Foreign Language Passing Grades

		English Success Level	Grade
N	Statistic	92	92
Range	Statistic	4	4
Minimum	Statistic	1	1
Maximum	Statistic	5	5
Mean	Statistic	2,79	2,63
	Std. Error	0,088	0,127
Std. Deviation	Statistic	0,846	1,22
Variance	Statistic	0,715	1,488
Skewness	Statistic	0,077	0,005
	Std. Error	0,251	0,251
Kurtosis	Statistic	0,102	-1,128
	Std. Error	0,498	0,498

When the descriptive statistics related to student scores are examined, it is 2.79 for English success level average; for foreign language passing grade, it is seen that it is 2.63. When the kurtosis and skewness coefficients are examined, it is seen that the distributions are normal.

5. Discussion

This study aims to find out the relationship among Turkish EFL students' English proficiency, motivation and learning styles.

5.1. What is the relationship among Turkish EFL students' learning styles, motivation and English Proficiency?

5.1.1. There is a positive bi-directional relationship between Turkish EFL students' English proficiency and their motivation.

It can be seen that there is a low relationship between English success level and instrumental motivation scores. There is a moderate relationship between English success level and integrative and total motivation scores. There is a positive correlation coefficient in the relationship between English success level and motivation scores. No significant correlation is found between the foreign language passing grade and the motivation scores. A moderate positive correlation has been found between students' English success level and foreign language passing grade.

5.1.2. There is a positive bi-directional relationship between Turkish EFL students' English proficiency and learning styles.

5. 1.3. There is a positive bi-directional relationship between Turkish EFL students' motivation and learning styles.

No significant relationship was found between process dimension of learning style (active vs. reflective) and instrumental motivation, integrative motivation, motivation, English success level and foreign language passing grade. No significant relationship was found between perception dimension of learning style (sensing vs. intuitive) and instrumental motivation, English success level and foreign language passing grade. There is a low level of correlation between the domain of perception and integrative motivation and motivation. Since sensing is coded as 1 and intuitive as 2 in this dimension, as the integrative motivation and motivation scores increase, the frequency of students having the sensing learning style increases, but the relationship is low. No significant relationship was found between input dimension of learning style (visual vs. verbal) and instrumental motivation, integrative motivation, motivation, and English success level. As the passing grade in the foreign language rises, there appears to be an increase in the number of students exhibiting a visual learning style (coded as 1), compared to those with a verbal style (coded as 2). However, the connection between these factors remains relatively weak. No significant relationship was found between understanding dimension of learning style (sequential vs. global) and instrumental motivation, integrative motivation, motivation, English success level and foreign language passing grade.

The findings of this study are not parallel with Kim and Kim's (2014) and Aljari's (2016) study in that visual learning style has a relationship with motivation because it is sensing learning style which has a low relationship with integrative motivation and motivation scores in this study. Additionally, there is no correlation between the foreign language passing grade and motivation scores in this study as in Harpain (2014) but Dai et al.'s (2015), Kim and Kim's (2014) study. This seems as a contradicting finding with the literature because it is widely suggested that motivation is a triggering factor for language learning (Dörnyei et al., 2015; Chen & Kent, 2020; Berardi-Wiltshire, 2012; Mitu, 2019; Omidi et al., 2023, Lee & Lu, 2023). This kind of finding can be explained by the fact that these students may look forward to passing the course for graduation without giving thorough consideration about the importance of learning English for communication as a lingua franca (Ou et al., 2023; Seidlhofer, 2005; Jenkins et al., 2011; Borras, 2023).

It is interesting that there seems a relationship between English success level, which is the students' own perceptions about their English proficiency, and instrumental, integrative and motivation scores. Additionally, the result indicating the relationship between their English success level and foreign language passing grade may be due to the fact that the students have low level of English Proficiency and they have honest perceptions about themselves and this is supported by their foreign language passing grades. Therefore, it can be said that knowing oneself and one's needs is really important in

language learning process because as Kelly (1995) indicates in personal construct theory, the students can turn into more responsible people for their deductions and directions for their own learning process. This process is assumably related to their learner autonomy (Little, 2007).

The findings of this study are in alliance with Chu's (2013), Dai et al.'s (2013), Harpain (2014), Masela and Subekti's (2021), Purwanti and Puspita's (2019) study in that there is low or no relationship among learning styles, motivation and English proficiency. This finding is in accordance with (Bailey et al., 2008; Ehrman and Oxford, 1995). Nevertheless, this finding is not in alliance with what literature suggests about the interplay between learning styles and English proficiency (Oxford & Anderson, 1995; Brumfit, 1995) or motivation and English proficiency (Dörnyei et al., 2015; Chen & Kent, 2020; Berardi-Wiltshire, 2012; Mitu, 2019; Omidi et al., 2023, Lee & Lu, 2023). Due to the fact that there seems low or no relationship between learning styles and English proficiency, it may not be necessary to organize personalized language learning procedures or grouping for the participants in this study as suggested in such studies as (Chen et al., 2021; Petersen et al., 2009; Dai et al., 2015).

5.2. Do Turkish EFL students' learning styles, motivation and English Proficiency differ in terms of their faculties, gender and age groups?

Chi-square results of learning styles by gender indicate that the process, input and understanding dimension of the learning style does not differ significantly in terms of gender, that is, there is no significant relationship. On the other hand, there is a significant relationship between the gender of the students and their perception learning style (male students: sensing learning style). Chi-square results of learning styles by age groups show that there is no significant difference in any dimension of learning styles. Additionally, chi-square results of learning styles by faculties indicate that perception and input dimensions have not been interpreted due to the low expected value and there is no significant relationship between the faculties and the process and understanding dimension of learning styles.

There is no significant relationship between the genders of the students, age groups and English success levels, foreign language passing grades, instrumental motivation, integrative motivation and total motivation scores. Nonetheless, students show a significant difference in terms of English success level, foreign language passing grade, instrumental motivation and total motivation scores but integrative motivation according to their faculties. In addition, the difference between the Faculty of Performing Arts and Faculty of Music Sciences and Technologies is significant in terms of English success level. According to the results of the pairwise comparison of the foreign language passing grade, the difference between the Faculty of Performing Arts and Faculty of Music and Fine Arts Education is significant.

It can be understood from the results that gender and age are not in relation with English success levels, foreign language passing grades, instrumental motivation, integrative motivation and total motivation scores. Therefore, it can be said that grouping students by gender or age do not have a significant effect on Turkish EFL students' English proficiency and motivation in this study and this may be due to the fact that there is no or low correlation between motivation, learning styles and foreign language passing grade. However, in Dai et al's (2015) study, homogenous grouping is advised because proficiency and motivation are correlated. From another perspective, there is a significant relationship between male students and sensing learning style. This may be because of the struggles men have in translating symbols into what they represent and sensory learners can be slow in translating words (Felder & Silverman, 1988). The differences in faculties in terms of English success level and foreign language passing grade can be due to the fact that there are some students who have their second university and they are either free from Foreign Language I course or study really hard because they are

going to be the future teachers and need their grade point average to be high. From another perspective, differences in faculties may trigger the idea of motivation as more field-specific than previously thought.

5.3. What are the levels of Turkish EFL students' learning styles, motivation and English Proficiency?

In terms of the learning styles, students seem to have an active learning style in the process dimension, sensing in the perception dimension, visual in the input dimension, and global learning style, although they are closer to each other in the understanding dimension. Also, the motivation scores of the students are relatively high. It can be seen as an advantage because motivation is a prominent factor in language learning process (Dai, Wu & Dai, 2015; Dörnyei, 2009; Dörnyei & Ushioda, 2011). Students' English success level and foreign language passing grade are average. Foreign language passing grades of the students and motivation scores in this study are in alliance with those in Purwanti and Puspita's (2019) study.

6. Conclusion

The aim of this study is to reveal the relationship among Turkish EFL students' English proficiency, motivation and learning styles. There is no significant relationship between motivation and foreign language passing grade but English success level. There is no correlation among some learning style dimensions, English proficiency and motivation. On the other hand, there is a low relationship between English success level and instrumental motivation scores; the domain of perception and integrative motivation and motivation. There are no differences in gender, age groups and faculties in terms of learning styles but there is a significant relationship between the gender of the students and their perception learning style (male students: sensing learning style). With a regard to the genders of the students and age groups, there is no significant relationship between English proficiency and motivation scores. Nevertheless, students show a significant difference in terms of English success level, foreign language passing grade, instrumental motivation and total motivation scores but integrative motivation according to their faculties. In terms of the learning styles, students seem to have an active learning style in the process dimension, sensing in the perception dimension, visual in the input dimension, and global learning style, although they are closer to each other in the understanding dimension. Also, the motivation scores of the students are relatively high. Students' English success level and foreign language passing grade are average.

7. Pedagogical Implications & Suggestions

This study is designed to investigate the relationship among Turkish EFL students' English proficiency, motivation and learning styles. With a respect to the findings some pedagogical implications for teachers and policy makers will be presented below:

1. This study suggest that there is no relationship among motivation, learning styles and English proficiency among Turkish EFL students in this study. Therefore, new approaches or teaching methods can be followed with this group such as fostering learner autonomy or pragmatics so that they can monitor, reflect and evaluate their own process.
2. The awareness between students' their own English success level and foreign language passing grade should provide teachers with choices for accomodating self and peer focused learning process and assessment.
3. The students can be informed more thoroughly about ELF and importance of learning English for communication by integrating intercultural elements into the courses so as to enhance their intercultural communicative competence.
4. This study can be replicated with other non-major students all over the world and the results can be discussed cross-culturally.
5. Some other factors affecting language learning process can be included to see the interplay between them.

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