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The Relationship between Perceptual Learning Styles and Language Learners' Success in Reading Tests

Öğrencilerin Algısal Öğrenme Stilleri ile Okuduğunu Anlamadaki Başarısı Arasındaki İlişki

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Abstract

Learning and teaching styles in learning and teaching foreign languages are two interrelated areas. A study in one of these fields sheds light on the other. Therefore, interest in how people learn and how they prefer learning has increased over the years due to an extensive amount of literature available pertaining to both learning styles and teaching styles. Thus, this research is grounded in clarifying the relationship between ENG 101 [1] students' preferred perceptual learning styles and their success in a reading test. In this regard, this paper is concerned with identifying the preferred perceptual learning styles of university students (N= 154) considering their age, gender and countries to determine if relationships exist between students' success in an IELTS reading test and preferred perceptual learning style. This study is significant as the number of studies based on examining the relationships between success in reading skills and perceptual learning styles is limited. Data were gathered from Reid's PLSPQ to determine the focused participants' preferred perceptual learning styles and an IELTS reading test to investigate the relationship between individuals' preferred perceptual learning styles and their success in the reading test. In the analysis of the data, a t-test and ANOVA were applied. Thus, this survey is both qualitative and quantitative. The

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results show there was a statistical difference between students' success in the IELTS reading test and preferred perceptual learning style as kinaesthetic learners significantly outperformed other learner groups.
Keywords: *preferred perceptual learning styles; reading comprehension, IELTS*

Öz
Yabancı dil öğrenme ve öğretme farklı iki alan gibi görünmesine rağmen birbirleriyle yakından bağlantılı alanlardır. Bu nedenle bir alanda yapılan çalışma diğer alanda da detaylı bir çalışma ihtiyaç gereksimi duyulmaktadır. Böylece bireylerin nasıl öğrendikleri ve bu öğrenme sürecinde nasıl bir yol izlemeyi tercih ettikleri üzerindeki ilgi literatürde oldukça geniş bir alan yer almaktadır. Bu çalışma ENG 101 dersi öğrencilerinin öğrenme biçemleriyle okuduğunu anlama sınav sonucu arasında anlamlı fark olup olmadığını esas almıştır. Bu doğrultuda 154 üniversite öğrencilerinin algısal öğrenme biçemlerini belirledikten sonra yaş, cinsiyet ve milletlerini de dikkate alarak okuduğunu anlama sınav başarısı arasında anlamlı bir ilişki olup olmadığını amaçlayıp incelenmiştir. Bu çalışma, okuma becerisindeki başarı ile algısal öğrenme tarzı arasındaki ilişkilerin incelenmesine dayanan çalışmaların sayısının sınırlı olmasından dolayı yabancı dil öğrenme ve öğretme konusunda önem taşırken yabancı dil öğrencilerine ve öğretmenlerine de yol gösterecektir. Bu çalışmadaki veriler, bireylerin tercih ettiği algısal öğrenme biçemleri ile okuma testindeki başarıları arasındaki ilişkiyi araştırmak için katılımcıların tercih edilen algısal öğrenme biçemlerini belirlemek üzere öncelikle Reid (1987) tarafından geliştirilen anket PLSPQ aracılığıyla toplanıp incelendikten sonra IELTS okuma testi verilmiştir. Verilerin analizinde t-test ve ANOVA kullanılmıştır. Dolayısıyla, bu araştırma hem nitel hem de niceldir. Araştırma sonucunda, IELTS okuma testi sonuçlarında öğrencilerin başarıları arasında anlamlı bir fark bulunmuş ve diğer öğrenci gruplarla ilgili olarak, kinestetik öğrenicilerden önemli ölçüde daha iyi performans gösteren algısal öğrenme tarzı tercih edilmiştir. Bu bağlamda diğer öğrenci gruplarının akademik başarılarını etkin bir şekilde artırabilmek için bu öğrencilerin yabancı dil öğretiminde farklı öğrenme biçemlerine göre neler yapılabileceği konusu irdelenip gerekli önemin verilmesi bu alanda gelişime ışık tutacaktır.
Anahtar sözcükler: *algısal öğrenme stilleri, okuduğunu anlama, IELTS*

Introduction

Living in this globalized world has necessitated the use of an international language in order to be able to have effective communication across different cultures and nations. In this sense, widely recognised global language that has been unquenchably desired to learn is unquestionably English. In other words, it is considered as a lingua franca in all types of communication. Moreover, as Hapci (2017) mentions it is seen as a survival necessity in this globalized world. Consequently, there has been extensively tendency towards learning English. However, lacking in reading skills can result being inefficient in that language and cause getting poor grades from reading tests and also from other courses as well since without comprehending efficiently what you read can result in unsuccessfulness in the academic field. According to Ramrathan & Mzimelaj (2016)

reading is considered as the cornerstone of learning.

Therefore, this issue has become considerably one of topical subjects for language teachers regarding how to improve students' success in reading comprehension tasks and they have precisely inspected what may affect language learners in the classroom in order to be able to overcome problems that may arise and provide dilemma for both teachers and students as well.

1. Literature review

Interest in Learning Styles in SLA: Various studies have been conducted to determine good characteristics of language learners to be able to enhance students' academic success and also to enhance the quality of teaching in the classrooms since 1970s. Therefore, learning style has considerably taken interest since identifying and discussing the styles used by good language learners were considered as utterly beneficial in elucidating 'how they learn' and unsurprisingly, this interest has extended in the field of SLA. Regarding to this interest, Behabadi & Behfrouz (2013) claim that knowledge of the characteristics of a good language learner can guide learners in assisting them to enhance their language learning efficiency and providing the language teachers a vehicle to help the poor L2 learners to enhance their success. Thus, the significance of identifying preferred learning styles and preferred teaching styles have been proclaimed by many researchers. To allude to this significance, Claxton & Ralson (1978: 36) assert that the research findings on learning styles provide substantial benefits to teachers, counsellors, and the students themselves in terms of finding better ways for students to learn. Moreover, they claim that matching learning styles with teaching styles promotes learning as well as facilitates positive interpersonal relations, whereas identifying and defining excessive number of learning styles can become an enormous mission.

Many points of views about learning styles take place in the literature. For instance, Reid (1995) gives credence to learning style as "an individual's natural, habitual, and preferred way(s) of absorbing, processing, and retaining new information and skills". Similar to what Reid asserts, Willing (1993: 9) alludes that learning style refers to "any individual learner's natural, habitual, and preferred ways of learning". According to Cornett learning style is "a consistent pattern of behaviour but with a certain range of individual variability". Moreover, Hunter (1979: 27) advocates that learning style "describes a student in terms of those educational conditions under which he is most likely to learn. Learning style describes how a student learns, not what he has learned" Erginer (2014). claims that learning style is a conceptual structure that is based on the preference of individual's learning. According to the researcher learning style is like a tool for achieving our goals and that tool is changeable in accordance to individuals' preferences. Therefore, it is suggested that the teachers have an important role in identifying learning styles and trying to match them with an appropriate teaching style in order to facilitate learning.

As individuals' preferred learning styles are utterly important and they have a

significant role in learning foreign language, teaching styles are crucial, too. Therefore, researchers have focussed on teaching styles for improving learning since they are closely interrelated: consequently, according to above given reasons there are excessive number of views towards teaching styles and they become an enormous task for enhancing learning. Regarding to those fruitful evidences teachers should not be inclined to teach in ways that are consistent with their own learning styles. Hence, it is obvious that this situation causes a handicap for some students whose preferred learning styles do not correspond to their teacher's teaching style: consequently, according to these researchers, the teachers can overcome this problem by using a variety of techniques for delivering instruction. It means that teachers can apply a variety of teaching styles, multi-sensory teaching aids, learning centres where all students can benefit for learning material in a variety of ways and students can be taught to use other learning styles and so forth. When all teachers keep in their minds the above tips, they can maximize learning, provide all students with the chance to use their own perceptual learning preferences as well as provide the opportunity to those students to be more successful in foreign language learning.

2. Correlational studies based on perceptual learning styles and students' academic success

There are various studies that are germane to perceptual learning styles and teaching styles as well as a match between the two in relation to course grades and final exam results. Many researchers have proclaimed the significance of identifying both preferred learning styles and preferred teaching styles. In promoting their ambition, they have tried to determine whether teachers' preferred teaching styles and students' preferred learning styles exist or not; to determine if there is a match between learning styles and teaching styles; to determine if there is a relationship between an academic achievement and a match between learning styles and teaching styles as well as to determine there is a relationship between teachers' evaluation and a match between learning styles and teaching styles. However, researchers differed in their findings. For instance, the findings of Raines (1978); Spires (1983); Zippert (1985); Charkins, O'Toole and Wetzel (1985); Van Vuren (1992); Miglietti (1994); Klavas (1994); Braio (1995); Drysddale, Ross & Schulz (2001); Angela & Rochford (2007); Jhaish (2010); Komarraju, Karau, Schmeck & Avdic (2011) and so on supported matching learning and teaching style in order to facilitate learning, however, the findings of Scerba (1979), Hunter (1979), Battle (1982), Guinta (1984), Reid (1987), Campell (1989), Lyons (1991), Wallace (2002), Isemonger & Sheppard (2003), Tight (2010), Naseriah & Sarab (2013), Palabiyik (2014) and so on revealed that there was no significant difference in achievement when there was a match between teaching and learning styles; however, the majority of researchers reported the match between two enhanced student achievement, as indicated by course grade and exam scores, when there was a match between students' preferred learning styles and instructors' preferred teaching styles. Thus, these studies added the importance of

matching teaching style with learning style to the growing body of research as it affects student achievement.

Regarding to the results of the studies above, it is ultimately crucial to understand and identify each student's learning style in order to be able to make him/her more focused on an attentive and successful learner. As Gilakjani (2012) mentions providing positive correlation between teaching and learning styles will aid in improving students' overall success, enhancing both motivation and efficiency, and creating a positive attitude towards language learning. Consequently, many effective ideas have been proposed by various researchers and theorists to be able to address the students' needs. One way to positively affect the students' attitudes towards learning English is matching learners' learning styles with instructor's teaching style. Moreover, by the help of matching the two, it is possible to reinforce and enhance students' academic achievement tremendously regarding to the fruitful evidences that has been provided above.

3. Reading comprehension

Reading skill is one of the most important skill to be mastered efficiently for succeeding in the academic field. Lacking in reading skill results in not understanding, comprehending and not succeeding in other courses in their fields; therefore, it can cause in truancy, underpaid jobs and illiteracy in the next generation (Daggett, 2003; Kutner, Greenberg, Jin, Boyle, Hsu, & Dunleavy, 2007; Alharbi, 2015). Thus, there is an ultimately need to consider the ways in assisting students to enhance level of success in reading skill. However, there is no conclusive study to indicate that one particular variable is much more important than the others in enhancing students' reading comprehension in learning environment.

Reading Comprehension much like verbal communication that requires the ability to think critically about the author's message; therefore, the exchanging ideas and developing new ideas can persist concurrently. In other words, reading comprehension is a complicated task as having knowledge based on vocabulary and grammar of the target language is not enough in succeeding. Readers are required to have the ability of analysing, synthesizing, and evaluating in reading (Nimmo, 2008; Namjoo, & Marzban, 2014). Thus, in reading comprehension activities the readers seem to be passive, whereas their brains are required to be active as they are busy in understanding the message that has been intended to be transferred to the readers by analysing, synthesizing, and evaluating. Same accordingly, reading can be regarded as knowledge acquisition in many domains; therefore, the ability to construct correct and comprehensive representations of the texts has crucial implication for academic achievement, occupational success, and physical well-being (Freed, Stephan & Long, 2017). It needs the ability to understand the meaning of individual words for comprehending the given written texts (Duke & Carlisle, 2011; Verhoeven & Perfetti, 2008; Schiefele, Stutz & Schaffner, 2016).

Thus, reading is a complex skill as it is required to take into consider and understand individuals' differences that cause variation in reading skill especially among university

students. Therefore, by the help of considering variations that results in having different preferences among individuals, teachers can become more effective in designing much more effective reading instructions. According to Meyer et al. (1984) reading can be accepted as an interaction among three variables namely as; reader variable such as verbal ability and word knowledge, text variable like text structure and task variable like telling all you remember from the things you read or solving a problem by the help information you read.

4. Impact of learning styles on reading comprehension

The number of studies has been conducted based on clarifying the impacts of learning styles and students' achievement, however, the investigation on the reading skill and learning style remains very limit. Although there are various ways of teaching reading skill, the students generally struggle with being successful in reading and resulting in getting poor grades in IELTS reading tests.

A study on the correlation between learning styles and success in reading skill and math (Braio, 1995) proved that level of achievement has increased in accordance of developing the curricula to learners' learning styles. Another study by Spires (1983) ascertained that when learning preferences including sensory preferences and preferences regarding action, seating, temperature, light, sound, and strategies were employed step by step, the participants' level of achievement in reading skill significantly increased. Regarding to the study of Nganwa & Mwamwenda (1991) students' success is significantly affected by the environmental factors. It was proved that success in reading comprehension increases when the comfortable environment is designed in accordance to students' preferences. When comparing sensory learning styles and success in reading comprehension, the findings (Williams, 2010) indicated that there was a correlation between kinaesthetic, auditory, and visual learning styles and reading comprehension levels. Therefore, considering students' preferences including environmental factors or learning styles determines students' achievement directly or indirectly.

Although it seems to be all information is provided to the learners to answer, it is the most complex skill to master. Regardless their learning style, there would be various factors that may create dilemma in not succeeding in reading test. In clarifying this idea, Ramrathan & Mzimela (2016) claim that most learners commence schooling without having any exposure to reading; therefore, this lack of exposure results in various challenges to both teachers and learners. According to Joubert, Bester & Meyer (2008:81), teaching reading '… is more than a mere teaching of decoding signs and symbols into sounds and words'. A review of literature suggests that number of studies on the correlation between perceptual learning styles and reading comprehension is limited (Nganwa & Mwamwenda, 1991; Shea, 1983; Erginer, 2014). Therefore, by the help of this study it is hoped that the present study will provide contribution by filling a gap in understanding learning styles of different nationalities and being able to assist them for enhancing their achievement in reading tests.

5. Methodology

Purpose of the study: The purpose of the study is to examine the relationship between perceptual learning styles and reading comprehension success in sample of ENG 101. It is one of the compulsory courses that the students are required to take during their first semester at university. This course aims at developing students' reading and writing skills. Lacking in reading skills can result in not understanding, comprehending and not succeeding in other courses in their fields. Therefore, reading skill has been mainly inspected for this study regarding having taken into consideration students' perceptual learning style preferences in order to provide enlightenment to the future studies towards betterment of this field and to ameliorate students' success in the academic arena as well.

Research question: This study was designed to seek answer for the following question:

1. Is there any relationship between learners' perceptual learning style and learners' English performances in the IELTS reading test?

Sub-questions

Regarding the above mentioned research question the study tries to find answers to the following sub-questions.

- Are there any significant differences between students' major learning styles and their successes in IELTS reading test?
- Are there any significant differences between students' negligible learning styles and their successes in IELTS reading test?
- Are there any significant differences between different age groups and the IELTS Reading Test Scores?
- Are there any significant differences between male and female students in Reading Test Scores?
- Are there any significant differences among students from different countries in Reading Test Scores?

Research design: The survey method was applied for the investigation of the issues of interest as it was the most appropriate research design regarding to the intended goal; therefore, a survey questionnaire was developed on the basis of determining the participants' basic demographic information including age, gender and nationality, and the major-minor and negligible learning styles. 5-point Likert Scale was used in order to indicate their preferences for each statement of the questionnaire. After completing the questionnaire, the participants were required to take IELTS reading test to be able determine whether there is a significant relationship existed between their preferred perceptual learning style and success in the reading test. Therefore, a quantitative and qualitative descriptive methodology was applied in this evaluation study.

Participants: Participants were 154 undergraduates from international law and psychology programs, at Cyprus International University during first semester, 2017-2018. Cluster random sampling was applied in the selection of participants and they were all in their first year at university. The participants were made up of 80 males and

74 females ranging ages between 18-20 from Turkey, Cyprus, Nigeria, Palestine, Jordan and Syria. These participants were required to take ENG 101 as a compulsory course by attending 4-lecture hours during their first semester.

6. Instruments and procedures

Two measuring instruments were employed throughout the study. The first was the Perceptual Learning Style Preference Questionnaire (PLSPQ) developed by Reid (1987) which consists of five statements on each of the six learning style preference to be measured as named as visual, auditory, kinesthetic, tactile, group learning and individual learning. The first four categories constitute the perceptual learning style and the remaining two make up the social category. The participants in the study were first asked to complete the the questionnaire, so they responded on the basis of a five point Likert scale, ranging from "strongly agree to "strongly disagree. According to Reid the validation of the questionnaire was done by the split half method. The second instrument was an IELTS Reading Test (A neuroscientist reveals how to think differently) consisting of fourteen questions based on the passage and six more questions were added to the test (2 questions were added based on identifying topic of the paragraph and 4 questions for identifying topic sentences). Therefore, the reading test consists of one reading comprehension passage and twenty multiple-choice questions. They had 50 minutes to read the passage and answer the questions. Based on the results, the researcher investigated the relationship between learning styles and reading comprehension of students.

7. Measuring validity/reliability of IELTS reading test

Two measuring instruments were conducted throughout the study namely as IELTS Reading Test and Perceptual Learning Style Preference Questionnaire (PLSPQ) which was developed by Reid (1987). Reliability of the reading test (the IELTS reading passage) was checked on a group of 32 students through test-retest correlation and the results revealed that students' pre-test scores and post-test scores were significantly correlated ($r(48)=.931, p<.01$).

Table 1

Test-Retest Correlations between Pre Test and Post Test Scores

	Pre Test Score	Post Test Score
Pre Test Score	1	.931**
Post Test Score	.931**	1

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

8. Results and discussion

This section encompasses the findings and discussions related to the research question and sub-questions. The results of the study were analyzed into two sections. The first one included an analysis based on the correlation between participants' perceptual learning style preferences and their success in IELTS reading test. The second one consisted of an analysis based on planer view of participants' individual differences considering age, gender and country.

Q1) Are there any significant differences between students' major learning styles and their successes in IELTS reading test?

Table 2

Descriptive Information About Reading Test Scores of Major Learning Styles

	N	Mean	Std. Deviation	Std. Error
Visual	18	46.67	15.049	3.547
Tactile	18	51.39	10.955	2.582
Auditory	21	46.43	12.056	2.631
Group	21	42.38	11.360	2.479
Kinesthetic	57	54.12	18.203	2.411
Individual	19	54.21	16.182	3.712
Total	154	50.29	15.689	1.264

Table 3

Analysis of Variance (ANOVA) for Reading Test Scores of Major Learning Styles

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3014.179	5	602.836	2.575	.029
Within Groups	34647.671	148	234.106		
Total	37661.851	153			

The results indicate that there are statistically significant differences between reading test scores of different learning styles (*F(5,153)=2.575, p=.029)*). Levene test is also applied to the data for checking homogeneity of variances and the results indicate that there are statistically significant differences between variances of different major learning styles (*F(5,148)=4.272, p=.001*). Consequently, the findings show that variances of groups are not homogenous and post-hoc analysis is conducted for unequal variances situation. Further post-hoc analysis is performed with Dunnett's T3 Test since variances are not equal.

Table 4

Dunnett's T3 Test Results on Multiple Comparisons of Major Learning Styles

(I) Major Learning Style	(J) Major Learning Style	Mean Difference (I-J)	Std. Error	Sig.
Visual	Tactile	-4.722	4.387	.989
Visual	Auditory	.238	4.416	1.000
Visual	Group	4.286	4.327	.995
Visual	Kinesthetic	-7.456	4.289	.718
Visual	Individual	-7.544	5.134	.884
Tactile	Auditory	4.960	3.686	.936
Tactile	Group	9.008	3.579	.206
Tactile	Kinesthetic	-2.734	3.533	1.000
Tactile	Individual	-2.822	4.522	1.000
Auditory	Group	4.048	3.615	.985
Auditory	Kinesthetic	-7.694	3.569	.399
Auditory	Individual	-7.782	4.550	.738
Group	Kinesthetic	-11.742*	3.458	.018
Group	Individual	-11.830	4.464	.159
Kinesthetic	Individual	-.088	4.427	1.000

*. The mean difference is significant at the 0.05 level.

All the learning style groups are compared and the only difference is found between Group learners (*M=42.38, SD=11.360*) and Kinesthetic learners (*M=54.12, SD=18.203*). The mean of Group learners' test score is significantly lower than the mean of kinesthetic learners' test scores (*MD=-11.742, p=.018*). This shows that the success of kinesthetic learners in IELTS reading test is significantly higher than group learners' success.

Q2) Are there any significant differences between students' negligible learning styles and their successes in IELTS reading test?

Table 5

Descriptive Information About Reading Test Scores of Negligible Learning Styles

	N	Mean	Std. Deviation	Std. Error
Visual	21	55.24	18.061	3.941
Tactile	15	49.00	6.325	1.633
Auditory	7	55.00	25.658	9.698
Group	72	50.07	15.977	1.883

Kinesthetic	7	42.86	12.199	4.611
Individual	32	48.75	14.424	2.550
Total	154	50.29	15.689	1.264

Negligible Learning Styles of students are also compared in Reading Test achievement. Negligible auditory learners (*M=55.00, SD=25.658*) and negligible visual learners (*M=55.24, SD=18.061*) have the highest test mean scores from the other learners. Negligible group learners (*M=50.07, SD=15.977*) and negligible tactile learners (*M=49.00, SD=6.325*) and negligible individual learners (*M=48.75, SD=14.424*) have similar in mean scores and are ranged to the second highest test mean scores. The lowest score belongs to negligible kinesthetic learners (*M=42.86, SD=12.199*). Thus, there are differences among IELTS Reading Test mean scores of negligible learning style groups but further variance analysis is needed in order to clarify if there is a significant relationship among groups.

Table 6

Analysis of Variance (ANOVA) for Reading Test Scores of Negligible Learning Styles

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1160.531	5	232.106	.941	.456
Within Groups	36501.319	148	246.631		
Total	37661.851	153			

As shown in Table 6, the results indicate that meaningful difference is not depicted between reading test scores of different negligible learning styles (*F(5,153)=.941, p=.456)*). This shows that the success of the students in the IELTS reading test is similar among negligible learning styles of students; therefore, negligible learning style is not a significant factor in the success of IELTS reading test.

Q3) Are there any significant differences between different age groups and the IELTS reading test scores?

Table 7

Descriptive Information About Reading Test Scores of Different Age Groups

	N	Mean	Std. Deviation	Std. Error
17-19	64	50.94	15.833	1.979
20-22	62	49.11	16.608	2.109
23 and above	28	51.43	13.462	2.544
Total	154	50.29	15.689	1.264

The table above shows that there are three different age groups among students who took the IELTS Reading Test. Mean score for students aged between 17 and 19 is 50.94 (*M=50.94, SD=15.833*), mean score for students aged between 20 and 22 is 49.11 (*M=49.11, SD=16.608*) and mean score for students aged between 23 and above is 51.43 (*M=51.43, SD=13.462*). In order to find out if there is a significant difference between reading test mean scores of different age groups, analysis of variance (ANOVA) test was applied. The results indicate that there is no significant difference between reading test scores of different age groups (*F(2,153)=.300, p=.741)*). This shows that success in the IELTS reading test of students at three different age groups are same and age cannot be a factor in reading achievement of students.

Q4) Are there any significant differences between male and female students in reading test scores?

Table 8

Descriptive Information About Reading Test Scores from Different Genders

Gender	N	Mean	Std. Deviation	Std. Error Mean
Male	97	49.48	15.453	1.569
Female	57	51.67	16.128	2.136

As shown in Table 8, mean score for male students is 49.48 (*M=49.48, SD=15.453*) and mean score for female students is 51.67 (*M=51.67, SD=16.128*). In order to find out if there is a meaningful relationship between reading test scores of male and female students, Independent samples T-Test was applied. The study does not depict a meaningful difference between reading test scores of female students and male students (*t(152)=.833, p=.406, d=.01)*). It shows that the success in IELTS reading test of students between male and female students are similar and gender cannot be a prominent factor in reading achievement of students.

Q5) Are there any significant differences among students from different countries in reading test scores?

Table 9

Descriptive information about reading test scores of different age groups

	N	Mean	Std. Deviation	Std. Error
Turkey	25	48.80	13.251	2.650
Cyprus	12	42.08	19.593	5.656
Nigeria	88	53.52	15.650	1.668
Palestine	9	43.33	16.956	5.652

Jordan	13	40.00	10.607	2.942
Syria	7	57.14	7.559	2.857
Total	154	50.29	15.689	1.264

The table above shows that the participants are from six different countries - Turkey, Cyprus, Nigeria, Palestine, Jordan and Syria. Students from Syria (*M=57.14, SD=7.559*) get the highest mean scores. Second highest mean score belongs to the students from Nigeria (M=53.52, SD=15.650). Third mean score is from Turkey (M=48.80, SD=13.251). Lowest mean scores belongs to Palestine (M=43.33, SD=16.956) and Cyprus (M=42.08, SD=19.593). Therefore, the analysis proves that there are differences among Reading Test mean scores of students from different countries, however, further variance analysis is required for determining whether there is a significant difference between each group.

Table10
Analysis of Variance (ANOVA) for Reading Test Scores of Students from Different Countries

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3924.122	5	784.824	3.443	.006
Within Groups	33737.728	148	227.958		
Total	37661.851	153			

In order to find out if there is a significant relationship among reading test mean scores of students from different countries, analysis of variance (ANOVA) test was applied. The results indicate that there is a significant relationship among reading test scores of students from different countries (*F(5,153)=3.443, p=.006)*). Therefore, it shows that reading successes of students significantly differ among some of the students from different countries but further post-hoc analysis should be conducted in order to compare the level of the differences between groups. Levene test was also applied to the data for checking homogeneity of variances and the results indicate that there is not any meaningful relationship among variances of different major learning styles (*F(5,148)=2.214, p=.056*). This shows that variances of groups can be accepted as homogenous and post-hoc analysis should be conducted for equal variances situation. Further post-hoc analysis was performed regarding to Bonferroni Test since variances can be accepted as equal.

Table 11

Bonferroni test results on multiple comparisons of students from different countries

(I) Country	(J) Country	Mean Difference (I-J)	Std. Error	Sig.
Turkey	Cyprus	6,717	5,302	1,000
Turkey	Nigeria	-4,723	3,422	1,000
Turkey	Palestine	5,467	5,869	1,000
Turkey	Jordan	8,800	5,163	1,000
Turkey	Syria	-8,343	6,456	1,000
Cyprus	Nigeria	-11,439	4,646	,224
Cyprus	Palestine	-1,250	6,658	1,000
Cyprus	Jordan	2,083	6,044	1,000
Cyprus	Syria	-15,060	7,181	,565
Nigeria	Palestine	10,189	5,284	,836
Nigeria	Jordan	13,523*	4,486	,045
Nigeria	Syria	-3,620	5,929	1,000
Palestine	Jordan	3,333	6,547	1,000
Palestine	Syria	-13,810	7,609	1,000
Jordan	Syria	-17,143	7,078	,250

*. The mean difference is significant at the 0.05 level.

The table above indicates that the students from all country groups are compared and the only difference is found between students from Nigeria (*M=53.52, SD=15.650*) and the students from Jordan (*M=40.00, SD=10.607*). Nigerian learners test score mean is significantly higher than Jordanian learners test score mean (*MD=13.523, p=.045*). This shows that the success of Nigerian students in IELTS reading test is significantly higher than the students from Jordan.

Conclusions and suggestions

As a conclusion, various scholars in the field of second language learning accept the impact of individual learner differences like learning styles on the success of second language learning. In order to put emphasis on the importance of learning style to language learning, the researcher strongly supports by saying that the knowledge is like water. If you do not know how to learn and how to keep it, it evaporates. In the light of this idea, it may be more fruitful to correlate learning styles with their learners' preferences in language learning, however, it does not refer to distinguishing the gifted ones from the untalented ones. With the respect to learning style preferences, individuals can also achieve success even their major preferred learning style has not been tailored or considered with their preferences. With the aim of providing further benefit in the

field of SLA regarding how better to meet the individual education needs of L2 learners, it was examined whether there was a correlation between students' preferred perceptual learning style and success in the IELTS reading test.

Regarding to the result of the study which was mainly aimed to find out whether there was a significant relationship between the students' success in the IELTS reading test and their preferred perceptual learning styles, kinaesthetic learners significantly got higher scores regarding to other learners. It was provided fruitful evidence that the most

outstanding learning style in which affecting students' success in IELTS reading test was kinaesthetic learning style; therefore, it is required to take into account what language teachers can do in order to facilitate their students' leaning and to enhance their success in IELTS reading tests.

The second part of the study consisted of an analysis based on planer view of participants' individual differences considering age, gender and country to determine if relationships existed between students' success in the IELTS reading test and individual differences. The research results indicated there were not any significant differences between reading test scores of different age groups. It proved that success in the IELTS reading test of students at three different age groups were similar and age cannot be a factor in determining the success of reading achievement of students. Moreover, the results indicated that there were no significant differences between reading test scores of female students and male students; therefore, it revealed that the success in IELTS reading test of students between male and female students were similar and gender cannot be a prominent factor in determining the success of the students' IELTS reading achievement. However, regarding to the factor of country where the students were from Nigerian learners test score mean was significantly higher than other students.

It is considered advisable that considering students' learning styles will enhance and provide unquestionably contributions to the success in the IELTS reading test. In order to promote students' success it is required to take into account students' individual differences as they seem to a closed box. If you do not provide effective learning environment which includes and appreciates students' learning styles, the teacher can be less effective that they can be. Therefore, reading instructors are required to determine their students' preferred learning styles through learning style inventories before beginning their first reading classes and they need to organize their reading lessons regarding to their students.

Note

1 Academic Reading and Writing Skills I. It is the first English course that the university students are required to take after succeeding in a proficiency exam.

Referances

Alharbi, M.A. (2015). Reading strategies, learning styles and reading comprehension: a correlation study. *Journal of Language Teaching and Research,* 6(6), 1257-1268.

Angela, C. & Rochford, R.A. (2007). An analysis of freshmen learning styles and their relationship to academic achievement. *College Quarterly*, 10(2).

Battle, C. (1982). A Pilot study of learning instructional styles as a predictor of educational outcomes in Principles of Accounting I at Broward Community College. Unpublished doctoral dissertation, Florida Atlantic University.

Behabadi, F. & Behfrouz, B. (2013). Learning styles and characteristics of good language learners in the Iranian context (A study on IELTS participants). *International Journal on New Trends in Education and Their Implicatio*ns 4 (2), 41-49.

Braio, A. (1995). Effects of incrementally introducing learning style strategies on special education and low-achieving general education intermediate students' structural analysis and attitude test scores, *Unpublished doctoral dissertation*, New York City: St. John's University.

Carbo, M., Dunn, R., & Dunn, K. (1998). *Teaching students to read through their individual learning styles*. Englewood Cliffs, NJ: Prentice Hall.

Campbell, B. W. (1989). A study of the relationship between teachers' and students' learning styles and students' achievement in business communications. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign.

Charkins, R. J., D. M. O'Toole, & J. N. Wetzel. (1985). Linking teacher and student learning styles with student achievement and attitudes. Journal of Economic Education 16:111-120.

Claxton, C., & Ralston, Y. (1978). *Learning styles: Their impact on teaching and administration.* AAHE-ERIC/ Higher Education Research Report No. 10 Washington, DC: American Association for the study of higher Education*,* 1-77.

Drysdale, M. T. B., Ross, J. L. & Schulz, R. A. (2001). Cognitive styles and academic performance in 19 first-year university courses: Successful students versus students at risk. *Journal of Education for Students Placed at Risk,* 6(3), 271-289.

Duke, N.K. & Carlisle, J. (2011). The development of comprehension. In M. L. Kamil, P. D. Pearson, E. B. Moje, & P. Afflerbach (Eds.), Handbook of reading research. 4, 199-228. New York: Routledge.

Erginer, E. (2014). A Study of the correlation between primary school students' reading comprehension performance and the learning styles based on memory modeling. *Journal of Education and Science*, 39(173), 66-81.

Freed, E. M., Stephan, T. & Long, D. L. (2017). Comprehension in proficient readers: The nature of individual variation. *Journal of Memory and Language*. 97, 135-153.

Gilakjani A.P. (2012). Visual, Auditory, kinaesthetic learning styles and their impacts on English language teaching. *Journal of Studies in Education* 2(1), 104-113.

Guinta, S. F. (1984). Administrative considerations concerning learning style, its relationship to teaching style, and the influence of instructor/student congruence on high schoolers' achievement and educators' perceived stress (Doctoral dissertation, St. John's University). Dissertation Abstracts International, 45, 32A.

Hunter, W. E. (1979). Relationships between learning styles, grades, and student rating of instruction. Columbia: Department of Higher and Adult Education. (ERIC Document Reproduction Service No. ED181974).

Isemonger, I., & Sheppard, C. (2003). Learning Styles. *RELC Journal* 34(2), 195-222.

Jhaish, M.A. (2010). The relationship among learning styles, language learning strategies, and the academic achievement among the English majors at Al-Aqsa University (Unpublished master's thesis). The Islamic University.

Joubert I., Bester, E., & Meyer M., (2008). Literacy in the foundation phase, Van Schaik, Pretoria.

Komarraju, M., Karau, S. J., Schmeck R. R., & Avdic A. (2011). The big five personality traits, learning styles, and academic achievement. *Personality and Individual Differences,* 51, 472-477.

Lyons, J. A. (1991). Relationships among teaching style, learning styles, and adult learning in microcomputer word processing course. Unpublished master's thesis, Washington State University.

Meyer B.J. & Freedle R.O. (1984). The effects of different discourse types on recall. *American Educational Research Journal* (21): 121.

Miglietti, C. L. (1994). The relationship of teaching styles, expectations of classroom environments, and learning styles of adult students at a two-year college. Unpublished doctoral dissertation, Bowling Green State University, Ohio.

Namjoo, A. & Marzban, A. (2014). A new look at comprehension in EFL/ESL Reading Classes. *Social and Behavioural Sciences,* 3749-3753

Naseriah, F. & Anani Sarab, M. R. (2013). Perceptual learning style preferences among Iranian graduate students. *System,* 41, 122-133.

Nganwa-Bagumah, M. & Mwamwenda, T.S. (1991). Effects on reading comprehension tests of matching and mismatching students' design preferences. Perceptual and Motor Skills, 72(3), 947-951.

Nimmo, A. N. (2008). Effectiveness of skills – versus metacognitive strategy based approaches on reading comprehension of college developmental students. Miami, Florida, Florida International University.

Palabıyık, Y.P. (2014). Perceptual learning style preferences among Turkish junior high school students. *Journal of Education and Future* 6, 59-70.

Raines, R. H. (1978). *A comparative analysis of learning styles and teaching styles of mathematics students and instructors*. Unpublished doctoral dissertation, Nova University, Ft. Lauderdale, FL.

Ramrathan, L. & Mzimelaj, J. (2016). Teaching reading in a multi-grade class: Teachers' adaptive skills and teacher agency in teaching across grade R and grade 1. *South African Journal of Childhood Education* 6(2), a448, http://dx.doi.org/10.4102/sajce.v6i.448

Reid, J. M. (1987). The learning style preferences of ESL students. *Tesol Quarterly*, 21(1), 87-111.

Reid, J. M. (Ed.). (1995). *Learning styles in the ESL/EFL classroom*. USA: Heinle and Heinle Pulishers.

Scerba, J. R. (1979). Compatibility of teaching strategies and learning styles as a determinant of academic success. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, California. (ERIC Document Reproduction Service No. Ed171752).

Schiefele, U., Stutz, F. & Schaffner, E. (2016) Longitudinal relations between reading motivation and reading comprehension in the early elementary grades. *Learning and Individual Differences* 51, 49-58.

Shea, T.C. (1983). An investigation of the relationship among preferences for the learning style element of design, selected instructional environments, and reading achievement with ninth-grade students to improve administrative determinations concerning effective educational facilities, *Unpublished Doctoral Dissertation*, New York City: St. John's University.

Spires, R.D. (1983). The effect of teacher in-service about learning styles on students'' mathematics and reading achievement, Unpublished Doctoral Dissertation, Bowling Green, Ohio: Bowling Green State University.

Tight, D.G. (2010). Perceptual learning style matching and L2 vocabulary acquisition, *Language Learning: A Journal of Research in Language Studies*, 60(4), 792-833.

Van Vuren, S. K. (1992). The effect of matching learning style and instruction with academic achievement of students receiving an interactive learning experience in chemistry. Unpublished doctoral dissertation, Indiana State University.

Verhoeven, L., & Perfetti, C. A. (2008). Advances in text comprehension: Model, process and development. *Applied Cognitive Psychology*, 22, 293-301. http://dx.doi.org/10.1002/acp/1417.

Williams, J. (2010). Reading Comprehension, learning styles, and seventh grade students, *Unpublished Doctoral Dissertation*, Lynchburg: Liberty University.

Willing, K. (1993). *Learning styles in adult migrant education*. Research Series Australia: Sydney NSW 2109.

Zippert, C. P. (1985). The effectiveness of adjusting teaching strategies to assessed learning styles of adult students. Doctoral dissertation. University of Alabama

Electronik sources:

Daggett, W. (2003). Achieving reading proficiency for all. Retrieved April 16th, 2015 from http://www.leadered.com.pdf/Reading%20White%20Paper.pdf.

Hapci Ciftlikli, S. (2017). Adults as lifelong language learners. *Journal of Educational and Instructional Studies in the World.* 7(2), 93-100.

https://www.ielts-mentor.com/.../643-ielts-academic-reading-sample-50-a-neuroscienti...

Klavas, A. (1994). In Greensboro, North Carolina: Learning style program boosts achievement and test scores. *The Clearing House, 67*(3), 149-151. Retrieved from http://www.jstor.org/stable/30188776.

Kutner, M., Greenberg, E., Jin, Y., Boyle, B., Hsu, Y., & Dunleavy, E. (2007). Literacy in everyday life: Results from the 2003 National Assessment of Adult Literacy. Retrieved July 28th 2015 from http://nces.ed.gov/Pubs2007/2007480.pdf.

Wallace, G. (2002). *A study of the relationship between integrative studies freshmen learning styles and their instructors' learning styles represented by students' course achievement.* http://www.ncc.gmu.edu/faculty_resources/adina_abstract.pdf.