LEARNING STYLES OF ELT STUDENTS AND THE RELATIONSHIP WITH THEIR ACADEMIC SUCCESS AND LEARNING STYLES

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ABSTRACT

The present study aims to document ELT students' learning style, the relationship between ELT students' learning styles and academic success. The number of students participated in the study was 118; 1st, 2nd, 3rd, 4th year ELT students from İnönü University and Süleyman Demirel University. A 52-item Turkish Learning Style Survey adapted by Cesur (2008) from Cohen, Oxford and Chi's (2001) Learning Style Survey was used to reveal the students' learning styles. For the academic success the students' cumulative grade point averages were taken into consideration. Turkish ELT students prefer visual, introvert, sequential, synthesizing, deductive and reflective learning styles. However, females and males differ in perceptual style preferences. While females rated higher averages in visual, introvert, sequential, synthesizing, analytical, inductive, deductive, reactional and reflective styles; males rated higher only in terms of extrovert and random. Both genders rated almost the same in terms of audial style. The findings suggest that there is a statistically significant difference between girls' and boys' academic achievement (girls being more successful), and girls' rating higher grades in nine of the learning styles and boys' rating higher grades only in two of the styles account for, albeit to a limited extent, the difference between their academic achievements.

Keywords: learning styles, gender, academic success, ELT students

İNGİLİZ DİLİ EĞİTİMİ ÖĞRENCİLERİNİN ÖĞRENME STİLLERİ VE ÖĞRENME STİLLERİNİN AKADEMİK BAŞARIYA OLAN ETKİSİ

ÖZET

Bireysel farkları düşündüğümüzde kişilik ve sonrasında kişilik özellikleri kavramlar aklımıza gelmektedir. Haslam (2007) ve Dörnyei (2005)' ye göre kişilik özelliklerini tanımlama çalışmalarını ilk olarak Gordon Allport ve Henry Odbert 1936'da 550.000 civarında kelime içeren geniş bir sözlüğü tarayarak, insan davranışlarını birbirinden ayıran terimleri inceleyerek yapmıştır. Bu çalışmada 17,953 tanımlayıcı kelime bulmuşlar ve bunların her birinin bireysel-farklılık değişkeni olduğunu tartışmışlardır. Daha sonra fiziksel özellikleri anlatan kelimeler ve bilişsel yeteneklerle ilgili kelimeler çıkarıldığında kelime sayısı 4.500 kelimeye düşmüştür. Daha sonrasında Raymond Cattell 1943'de bu listeyi kendi düşüncesine uygun olarak 16 faktöre düşürmüştür.

Kişilik özellikleri, öğrenme stilleri ile oldukça yakın bir şekilde ilişkilidir. Bireysel farklılıklar ve dil öğreniminde önde gelen isimlerden birisi olan Peter Skehan öğrenme stillerinin, bireysel farklılıkların önemli bir öğesi olduğunu belirtmiştir (Skehan, 1991).

Bugüne kadar öğrenme stilleri üzerinde yapılan pek çok çalışmada stil ve akademik başarı arasındaki ilişki incelenmiştir. Joy ve Kolb (2009), öğrenme stilleri araştırmalarına yeni bir boyut getirerek kültür ve öğrenme stilleri arasındaki ilişkiyi incelemişlerdir. Çalışmanın sonucunda ise, tercihlerdeki değişkenlerin önemli bir kısmının kültür, cinsiyet, eğitim seviyesi ve uzmanlaşma alanlarıyla ilgili olduğunu bulmuşlardır.

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Bu çalışmanın amacı iki yönlüdür. Birincisi, öğrenme stillerinin cinsiyetle olan ilişkisini bulmak; ikinci olarak da akademik başarının öğrenme stilleri ve cinsiyet tarafından tahmin edilebilirliğini sınamaktır. Bu sebeple, daha iyi dil öğrenme ve İngilizce alanındaki öğrencilerin akademik başarılarında hangi öğrenme stilinin etkili olduğu tartışılabilecektir.

Stil çalışmaları aynı amaca ulaşmanın farklı yolları olduğunu varsaymaktadır ve bu da kendi tercih ettiği stille çalışma fırsatı bulan bireylerin, diğer farklı stilleri tercih edenlerle aynı derecede başarılı olacağı anlamına gelmektedir. Bu nedenle, öğrencilerin öğrenme şekilleri ile onların bilişsel stilleri arasında bir denklik olduğu zaman öğrendikleri varsayılmıştır (Crozier, 1997). Fakat McKenna (1990) bu türden araştırmaları incelediğinde bunu destekleyecek çok az sonuca ulaşmıştır. Dolayısıyla, öğretimin öğrencilerin öğrenme stillerine göre düzenlenemeyeceğini söyleyebiliriz.

Bu çalışmada İngiliz Dili Eğitimi Anabilim Dalı öğrencilerinin öğrenme stilleri, onların öğrenme stilleri ve akademik başarıları arasındaki ilişki incelenmiştir. Çalışmada İnönü ve Süleyman Demirel Üniversitesi İngiliz Dili Eğitimi Bölümünde okuyan 118 öğrenci yer almıştır. Katılımcıların öğrenme stillerini ortaya çıkarmak için Cesur (2008) tarafından adapte edilen 52 maddelik "Öğrenme Stilleri Anketi" kullanılmıştır.

Çalışma sonuçlarında İngiliz Dili Eğitimi öğrencilerinin görsel, içe kapanık, sıralı, sentezleyici, tümdengelim ve yansıtmacı öğrenmeyi tercih ettikleri anlaşılmıştır. Fakat bu eğilim katılımcı öğrencilerin %80'ini oluşturan kız öğrencilerin cevaplarıyla ortaya çıkmıştır. Kız ve erkeklerin tercihleri ayrı ayrı analiz edildiğinde ise kız öğrenciler görsel, içedönük, sıralı, sentezleyici, analitik, tümevarım, tümdengelim, tepkisel ve yansıtmacı stilleri tercih ederken, erkek öğrenciler daha çok dışadönük ve rastgele (yaratıcı, düşüncede sıraya bağlı gitmeyen) öğrenme stilleri tercih etmişlerdir. Öğrencilerin akademik başarıları incelendiğinde ise kız öğrencilerin aldıkları notların anlamlı bir şekilde daha yüksek olduğu sonucu ortaya çıkmıştır.

Anahtar Kelimeler: öğrenme stilleri, cinsiyet, akademik başarı, İngiliz Dili Eğitimi

INTRODUCTION

When we wonder about the history of personality psychology, human nature or learner characteristics, we see on the side Dumont (2010) who argues that Western understanding of human nature owes a lot to the Greeks who developed a brilliant civilization in Athens prior to the to the cultural and military hegemony of Rome in the Mediterranean basin and on the other side, as more related with our topic, Dörnyei (2005), who claims that the study of individual differences was originated by Sir Francis Galton at the end of the 19th century. Upon discussing the various definitions of personality as employed by lay people and the definition personality in the field psychology, Haslam (2007) suggests that 'personality is a particularly important domain of individual differences' (p. 9) and has a long tradition in second language studies.

When we think of individual differences we are drawn into the definition of personality and then to trait personality, which is sometimes considered as the best unit for describing personality. According to Haslam (2007) and Dörnyei (2005) the first steps to define personality traits style came from Gordon Allport and Henry Odbert in 1936. They did this by patiently combing through a large dictionary, containing about 550,000 entries, for terms that referred to ways in which one person's behaviour could be distinguished from another's. By this means they obtained 17,953 descriptive words and argued that each of these potentially suggested an individual-difference variable. Removing terms referring to physical characteristics, cognitive abilities and transient moods following a closer review, however, this vast list is reduced 4,500 words. Later in 1943 Raymond Cattell reduced this list to 16 factors which he sorted according to his own personal judgment (Haslam, 2007).

Personality traits are closely related and expressed in learning styles. Peter Skehan, one of the pioneering figures in individual differences and language learning, also considered learning styles as an essential component of IDs in language learning (Skehan, 1991).

While the most favoured definition learning styles involves their being relatively stable preferences, there are some researchers who tend to disfavour such definitions. Regarding the permanence of learning styles, however, Richardson (2008) cites several studies in his manuscript and concludes that there are several studies which found little evidence of changes in students' conceptions or mental models of learning from one academic year to the next or even over entire degree programmes

In this study we have employed a 52-item Turkish Learning Style Survey adapted by Cesur (2008) from Cohen, Oxford and Chi's (2001) Learning Style Survey was used to reveal the students' learning style. Cesur (2008) assessed reliability of the 110 items from related with 11 different activities and narrowed down the style inventory to 52 questions related with 6 different activities. Each of those 6 activities of dimensions measures preferences in two bipolar dimensions.

Related Research

As Isemonger and Watanabe (2007) have revealed literature in the area of learning styles is significant and a variety of foci have emerged such as cross-cultural issues and learning

styles; learning-style effectiveness; instrumentation, gender and learning styles and the pedagogy of learning styles.
Investigating the effects of role of sex and intelligence in the relationship between field dependence-independence and second language acquisition Tinajero and Paramo (1998) examined the performance of the participants classified as either field-dependent or field-independent according to scores obtained from the embedded Figures Test and The Portable Rod and Frame Test. According to the results of their study there were no statistically significant differences between field dependent students and field independent student. However, when field dependence-independence was measured by scores on the EFT, field-independent girls performed better than field-dependent girls, but this outcome was not observed for boys.

Cesur (2008) also examined the interaction between learning styles and achievement in foreign language. He measured the academic success in foreign language, through a test developed by him. The results demonstrated Turkish university preparatory students prefer auditory, introvert, random-intuitive, synthesizing, deductive and reflective learning styles. Focusing on the relation between grade level and learning style, Chen (2009) investigated the language learning styles and strategies of Taiwanese English as foreign language learners. According to the results of that study "there are statistically significant relationships between grade level and perceptual learning style preferences. Group learners and kinaesthetic learners accounted for the majority of the seventh and eighth graders in this study. Group learners and auditory learners accounted for the majority of the ninth graders in this study" (p. 307).

While our focus is language learners, we should remind the reader that learning styles have been studied by scholar from various fields and by the participation of various learners. Colucciello (2009) directed her attention towards the relationships between critical thinking dispositions and learning styles of baccalaureate nursing students and found low critical thinking self-confidence mean scores for both participant groups.

As we have seen so far, most of the studies on learning styles learners focus on the interaction between style and academic achievement. However, Joy and Kolb (2009) brought a new perspective to learning styles studies and they investigated the interaction between culture and learning styles. They found that a significant portion of the variance in the preference for abstract conceptualization was explained by culture, gender, level of education and area of specialization.

The aim of this study is twofold. First, it is set to explore the relationship of learning style with gender. Second, it will examine the predictability of academic achievement by learning styles and gender. Thus, it will be possible to discuss which learning styles are influential for better language learning and achievement among students majoring in English.

We would like to remind the audience of one of the most basic argument of style studies and the contradiction of that argument. Style studies assumes that there are different ways of achieving the same goal, and this implies that individuals who have the opportunity to study using their preferred style will do as well as other individuals using their preferred style.

Therefore it is hypothesized that students perform best when there is a match between the form of instruction and the students' cognitive styles (Crozier, 1997). However, McKenna (1990; cited in Crozier, 1997) has reviewed studies that have addressed this question and finds

little support for such a hypothesis. Therefore, we could argue that instruction could not be tailored according to the students' preferred styles.

Research Questions

Investigating the learning preferences of Turkish ELT students, differences between the sexes in terms of those preferences, and the impact of learning styles on achievement, in this study we have tried to find answers to the following research questions:

- Is there a relationship between learning styles and gender?
- Is there a relationship between academic success and learning style?
- Is there a relationship between gender, learning style and academic success?

METHODOLOGY

Participants

The participants were from two universities in different cities of Turkey: Suleyman Demirel University (Isparta) and Inonu University (Malatya). However, all the participants were majoring in ELT departments of the two universities. 88 students (75 girls and 13 boys) from Inonu University and 30 students (22 girls, 8 boys) from Suleyman Demirel University participated in the study. The participants' academic success was not measured by the researchers; for the academic success the students' cumulative grade point averages were taken into consideration. Turkish ELT students prefer visual, introvert, sequential, synthesizing, deductive and reflective learning styles. However, females and males differ in perceptual style preferences.

Data Collection Instrument

In this study Learning Style Survey was used to determine the learning styles of the participants. The participants were also asked to write their cumulative grade point averages on the questionnaire form so that the researcher could evaluate the interaction between gender, academic success and learning style. In this study since we investigated the learning style of university students as Cesur did, we administered the same survey for which Cesur (2008) conducted the reliability and validity measures in his dissertation. The questionnaire is made up six dimensions, each of which has two sub dimensions including a total of 52 items.

Results and Discussion

This section presents the results and the discussion of the findings in this research. To begin with, we will display the t-test result of boys' and girls' cumulative grade point averages. Then, we will analyze our findings by displaying the data in tabular forms and then a following discussion.

Table 1. Cumulative Grade Point Average (CGPA) Difference between Genders

	Gender	**N**	**Mean**	**Std. Deviation**	**t**	**P**
CGPA	Male	20	2.59	.654	-3.164	.002
	Female	96	2.96	.422		

Since two of the participants did not provide their cumulative grade points average (CGPA), we compared the grades of 20 boys' and 96 girls' grades. As seen in Table 1, the mean of the girls' academic grade is 2.96 and boys' is 2.59. The t-test result of the comparison of both means yielded a significant result (p=0.002).

In the second step of our analysis we will continue with discussing the results of each gender's mean rate on the six dimensions of the Learning Style Inventory (LSI).

Table 2. Group Statistics of LSI Categories

Main Categories of LSQ	Gender	N	Mean	Sd	St. Error Mean
How do I use my physical senses?	Male	20	2.55	.51	.11
	Female	99	2.67	.41	.04
How do I put myself in learning situations?	Mal	20	2.76	.68	.15
	Female	99	2.63	.54	.05
How do I handle the possibilities?	Male	20	2.72	.58	.13
	Female	99	2.80	.50	.05
How do I process information?	Male	20	2.55	.66	.14
	Female	99	2.72	.52	.05
How do I cope with language rules?	Male	20	2.60	.72	.16
	Female	98	2.80	.81	.08
How do I manage the time for reacting?	Male	20	2.72	.59	.13
	Female	98	2.85	.49	.05

In the first category of LSI, "How do I use my physical senses?" it can be seen that the mean of female students (x= 2.67) than the male students (x= 2.55). The second category "How do I put myself in learning situations?" shows that male students score (x= 2.76) than the females (x= 2.63). In the third category "How do I handle the possibilities?", mean score of girls (x= 2.80) is higher than the boys (x= 2.72).

The next mean score of girls (x= 2.72) is also higher than the boys (x= 2.55) in the fourth category "How do I process information?". In the fifth category "How do I cope with language rules?", the girls means (x=2.80) is again higher than the boys (x= 2.60). The last category "How do I manage the time for reacting" shows that the female students' mean (x= 2.85) is higher than the male students' mean (x= 2.72). The mean points for 2.00-2.99 indicate that they do it "sometimes".

Following the discussion of each gender's mean scores on the six dimensions, we will analyze the group's responses regarding the twelve sub dimensions.

Table 3. Group Statistics of LSI Subcategories

Gender		**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Visual	Male	20	2.50	.69	.15
	Female	99	2.79	.47	.04
Audial	Male	20	2.57	.56	.12
	Female	99	2.58	.55	.05
Extrovert	Male	20	2.68	.77	.17
	Female	99	2.41	.72	.07
Introvert	Male	20	2.90	.81	.18
	Female	99	3.01	.60	.06
Random	Male	20	2.82	.59	.13
	Female	99	2.75	.58	.05
Sequential	Male	20	2.56	.81	.18
	Female	99	2.86	.59	.05
Synthesizing	Male	20	2.61	.70	.15
	Female	99	2.80	.66	.06
Analytical	Male	20	2.50	.84	.18
	Female	99	2.64	.54	.05
Induction	Male	20	2.65	.89	.19
	Female	98	2.72	.76	.07
Deduction	Male	19	2.61	.78	.18
	Female	98	2.82	.94	.09
Reactional	Male	20	2.63	.79	.17
	Female	98	2.67	.65	.06
Reflective	Male	20	2.81	.70	.15
	Female	98	3.04	.65	.05

According to Table 3, the first subcategory shows that female students' visual learning point (x= 2.79) is higher than the male students' point (x= 2.50). Audial category, on the other hand, mean of both females (x= 2.58) and males (x= 2.57) are almost the same. That is, the boys seem to be more audial learners whereas the girls are more visual learners.

The third subcategory means indicate that boys (x= 2.68) seem to be more extrovert than the girls (x= 2.41), but in the next subcategory, both groups show an increase in their means; the boys' mean is 2.90 and the girls' mean is 3.01. This change shows that both the girls and the boys find themselves to be introvert learners. The following category means show that the boys have (x= 2.82) more random learning styles than the girls (x= 2.75). Conversely, the mean score of next subcategory indicate that the girls have a more sequential learning style (x= 2.86) than the boys (x= 2.56).

In the next subcategory of LSI, the mean of females (x= 2.80) illustrates that they use synthesizing learning style more than boys (x= 2.61). Similarly, it can be seen that the girls use more analytical skills (x= 2.64) for learning than the boys (x= 2.50). The "induction" subcategory shows that the girls use this kind of learning (x= 2.72) more than the boys (x= 2.65). Also, the girls seem to use deduction learning style (x= 2.82) more than boys (x= 2.61). The boys (x= 2.63) and the girls (x= 2.67) seem to be close in their reactional learning styles.

However, the girls and the boys differ in their reflective learning styles. The girls use a more reflective style in their learning (x= 3.04) than the boys (x=2.81).
In the final phase of our analyses, we will discuss the mean scores of each sub category and compare the means of two subcategories of each dimension.

Table 4. Sub-Categories of Learning Style Inventory

Main Categories of LSQ	Sub-Categories	N	Mean	Sd	t	p
How do I use my physical senses?	Visual	99	2.74	3.08	-14.47	.000
	Audial	99	2.58	4.56		
How do I put myself in learning	Extrovert	117	2.48	3.63	10.23	.000
	Introvert	117	2.99	1.92		
How do I handle the possibilities?	Random	111	2.77	3.44	17.43	.000
	Sequential	111	2.81	2.61		
How do I process information?	Synthesizing	118	2.79	2.61	2.72	.007
	Analytical	118	2.63	2.36		
How do I cope with language rules?	Induction	116	2.71	1.56	-11.96	.000
	Deduction	116	2.78	2.77		
How do I manage the time for reacting?	Reactional	118	2.66	2.04	-4.21	.000
	Reflective	118	3.00	1.99		

When we analyze main categories of LSQ in Table 4, the students' scores for "visual and audial" learning styles of the first dimension "How do I use my physical senses?" are 2.74 and 2.58. Meanwhile, they prefer visual style more than the audial one, and this result shows that there is a statistically significant difference (p= .000) between visual and the audial learning style of the students. The mean score between 2.00 and 2.99 indicates that the students prefer this style "sometimes"

In the second dimension "How do I put myself in learning situations?" the student scores have been found to be 2.48 for extrovert and 2.99 for introvert. This result shows that the students find themselves more introvert at a statistically significant level (p= .000).

Third dimension of the questionnaire "How do I handle the possibilities?" also shows a statistically significant difference (p= .000) between the sub-category scores of the students, casual (x= 2.77) and sequential (x= 2.81). This difference shows that the students prefer a sequential style for handling the possibilities.

Fourth main category "How do I process information?" on the other hand does not indicate a statistically significant difference (p= .007). The students preferred synthesizing (x= 2.79) more than analytical style (x= 2.63).

The next main category "How do I cope with language rules?" shows a statistically significant difference (p= .000) between the sub-categories, induction (x= 2.71) and deduction (x= 2.78). That is, the students preferred a more deductive way than the inductive one for dealing with language rules. The last category "How do I manage the time for reacting?" similarly indicate a statistical difference (p= .000) between its sub-categories, reactional (x= 2.66) and reflective (x= 3.00). This results shows that students preferred a reflective way for managing the time

for reacting. The mean score between 3.00 and 3.99 indicates that the students prefer this style "often".
When we remember the three research questions of this study, the findings might provide answer as follows. Regarding with the first question which tries to find out the relation between learning style and gender, we could say that learning styles preferences change according the gender of the learner. The participants in this study were similar in their learning styles preferences only in terms of audial style.

Regarding the second and third questions we could argue that learning style influences academic achievement. The girls are more successful than boys and the differences between the girls' and boys' learning style could imply the influence of learning style on academic achievement.

CONCLUSION

Previous research on learning styles has focussed on different student groups or different age groups. Our study, however, has a narrower focus in that it only investigated the learning styles of ELT students from two different universities in Turkey.

In this study we examined ELT students' learning style, the relationship between ELT students' learning styles and academic success. According to the findings, Turkish ELT students prefer visual, introvert, sequential, synthesizing, deductive and reflective learning styles. However, this overall tendency is determined largely by the responses of the female students who constituted more than 80% of the participants groups.

When we compare the responses of each group we see that while females rated higher averages in visual, introvert, sequential, synthesizing, analytical, inductive, deductive, reactional and reflective styles; males rated higher only in terms of extrovert and random. Both genders rated almost the same in terms of audial style. Since this study investigated the results of the two groups of students we believe further research might be necessary to gain more insight into whether learning styles preferences of Turkish ELT students reveal differences between genders and to what extent those preferences affect academic achievement.

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