



MOTIVATION AND COGNITIVE STRATEGIES OF TURKISH AND IRANIAN LEARNERS OF ENGLISH¹

TÜRK VE İRANLI ÖĞRENCİLERİN GÜDÜLENME TÜRLERİ VE BİLİŞSEL STRATEJİLERİ ARASINDAKİ İLİŞKİ

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ABSTRACT: To investigate the relationship between motivation and cognitive strategies with special reference to the differences between Turkish and Iranian students of English (n=898), Deci and Ryan's (1985) self-determination theory, and Oxford's (1990) strategy inventory for language learning were adapted. The results showed Turkish and Iranian students were both intrinsically and extrinsically motivated. Iranian students' motivation level was more than Turkish students and Turkish students mostly used receiving and sending strategy, whereas Iranian students mostly used the cognitive strategy of creating structures for input and output. Motivation and four regulations in extrinsic motivation were positively correlated and there was an ordered pattern between motivation types and regulations. The more students were internally motivated the more they used cognitive strategies. Moreover, amotivation was negatively correlated to all types of cognitive strategies. In addition, there were significant gender differences within integrated regulation, external regulation, amotivation, and use of analyzing and reasoning strategy.

Keywords: Self-determination theory, motivation type, intrinsic motivation, extrinsic motivation, cognitive strategies

ÖZ: Türk ve İranlı öğrencilerinin (n=898) güdülenme ve bilişsel öğrenme stratejileri arasındaki ilişkiyi incelemek için. Deci ve Ryan (1985)'a ait kendi-kendine karar verme teorisi ve Oxford (1990)'un dil öğrenimi strateji envanterinin öğrencilerin güdülenme ve bilişsel stratejilerini belirlemek için uyarlanması yapılmıştır. Türk ve İranlı öğrencilerin hem içsel hem de dışsal olarak güdülendikleri görülmüştür. İranlı öğrencilerin güdülenme düzeyleri Türk öğrencilere göre daha yüksek çıkmıştır. Türk öğrenciler daha çok alma ve gönderme stratejilerini kullanırken, İranlı öğrencilerin ise daha çok girdi ve çıktı için gerekli olan bilişsel stratejilerden yapı oluşturmayı kullanmışlardır. Güdülenme ve dışsal güdülenmeye ait dört düzenleme arasında olumlu bir ilişki söz konusu olup güdülenme türleri ve düzenleme türleri arasında sıralı bir örneklem görülmüştür. Öğrenciler ne kadar çok içsel olarak güdülenmişler, o kadar çok bilişsel stratejileri kullanmaktadır. Güdülenmemenin bilişsel stratejilerin tamamı ile olumsuz yönde ilişkili olduğu görülmektedir. Cinsiyet açısından bütüncül düzenleme, dış düzenleme, güdülenmeme, ve analiz ve fikir yürütme stratejileri arasında önemli farklılıklar görülmüştür.

Anahtar Sözcükler: Kendi kendine karar verme teorisi, güdülenme türü, içsel güdülenme, dışsal güdülenme, bilişsel stratejiler

1. INTRODUCTION

There is a growing interest in the focus of learner-centered education very recently. As a result of cognitive and social-constructivist revolution, learner as an active organism became important in the process of learning and learning context. As is indicated by language (Oxford 1990) and Wenden (1991) a great attention is attached to the learning strategies and the factors that influence the EFL process. Dörnyei (1998) states that if there be enough motivation, it will provide learners the primary stimuli for initiating second language learning and become the driving force for learners to be persistent in their learning process to complete their long-term goals. On the premise of that learners are active organisms in their own learning and they use different learning strategies. If motivation acts as primary stimuli for initiating second language learning, how an organism's motivation affects learning strategies; thus, learners' appropriate use of language learning strategies is believed to have a great contribution to the success of second language learning (Ziahosseini and Salehi, 2008; Sadighi and Zarafshan, 2006). In this context Bickhard (2002) expected that there should be a

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high significant relationship between motivation and cognitive learning strategies. Therefore, the ultimate purpose of our study is to investigate this relationship.

Motivation, from a behavioral perspective, is seen quite the anticipation of reward; in cognitive terms, it places much more emphasis on the individuals' decisions; and from social-constructive view, it places even more attention on social context as well as individual personal choice and differences Brown (2007). He believes that "motivation is something that can, like self-esteem, be global, situational, or task-oriented" (2007:170). To him the concept of motivation in some ways belong to all three schools of thought, behaviorism, cognitivism, and constructivism; the fulfillment of needs is rewarding, requires choices, and in many cases must be interpreted in social context. At this point, Deci and Ryan's (1985) classified motivation into two main categories as extrinsic and intrinsic.

Intrinsic Motivation: People with intrinsic motivation are active organisms with inherent and deeply evolved tendencies toward psychological growth and development (Ryan, 1995).

Extrinsic motivation: The organism is doing an activity for a desired consequence such as tangible rewards. Internalization and Integration are two certain conditions that provide an organism a specific situation to have a shift from an existing case to a better one. (Ryan and Deci, 2000).

On the other hand there are other important considerations at this point. *External regulation* corresponds to external motivation and appears when a behavior is regulated by external contingencies (Deci and Ryan, 1985), whereas *Introjected regulation* takes place upon the individual's internalization of the reasons for his actions though he internalizes only external contingencies. *Identified regulation* consists of controlling one's behavior in a self-determined manner and the person values the behavioral goal or regulation and accepts the action as personally valuable. *Integrated regulation* is more close to intrinsic motivation. Whenever identified regulations are completely assimilated to the self, it is the time that integration happens. In other words, they brought into congruence with ones' other values and believes. The external regulation in this type of motivation is fully internalized to self-regulating, and the result is self-determined extrinsic motivation (Deci & Ryan, 2000; Ryan & Deci, 2002). *Amotivation* as described by Deci and Ryan (2000) is a lack of intention to do a behavior, non-evaluation of that behavior and feeling of incompetence. Amotivated learners have no intention to do an activity and feel helplessness so there is no level of self-determination. It occurs when individuals perceive no relations between their action and the outcome of what they are doing.

As to the other point of this study, Oxford (1990) states that cognitive strategies (CS) provide specific opportunities for language learners to manage their learning process. She introduces *analyzing, note-taking, summarizing, highlighting, receiving and sending messages, practicing structures* and *sounds* formally as examples of cognitive strategies. Cognitive strategies are a category of direct strategies which are directly involved in the target language learning. From this point of view that motivation and cognitive strategies are from one underlying mental process, it is expected that there should be a high significant relationship between these two variables. In this article we study the relationship between motivation types and cognitive learning strategies with special reference to the differences between Iranian and Turkish learners' of English on the basis of Deci and Ryan's (1985) motivation model in self-determination theory and R. Oxford's (1990) cognitive strategy inventory for language learning. More precisely, the study attempts to answer the following research questions (1) What Cognitive Learning Strategies do Iranian or Turkish EFL University students use more frequently? (2) What are the types of Motivation among the Iranian and Turkish EFL University students? and (c) What kinds of relations are there between Motivation and Cognitive Learning Strategies?

2. METHOD

2.1. Participants

The participants consisted of 898 undergraduate students from Turkey and Iran. They were all English Language Teaching (ELT) students from five universities: Azerbayejan; Tabriz; and Shabester Azad Islamic Universities in Iran and Hacettepe and Gazi Universities in Turkey. They were freshmen, sophomores, juniors, and seniors. They were asked to respond to the questionnaire on the Language Learning Motivation Types (LLMTs) adapted from Deci and Ryan's (1985) motivational scale and language learning strategy adapted from Oxford (1990) Cognitive Strategy Inventory for Language Learning (CSILL).

2.2. Instruments

In this study, a questionnaire divided into three sections: background information, motivation type and cognitive learning strategies was administered. The first section with 83 items referred to learners' motivation types and amotivation. The participants were asked to indicate their opinion about each statement with a five-point Likert scale (1=Strongly disagree to 5=Strongly agree). The second part with 30 items referred to learners' cognitive strategies use. This section was also designed in 5-Likert-type format. The participants were asked to read each statement and circle one of the numbers ranges from 1= Never or almost never true of me to 5= Always or almost always true of me. The third section referred to participants' background information including their gender, grader, proficiency in English, hours of study and use of English outside the class. The results of the reliability analysis were .876 for motivation types; .899 for intrinsic motivation; .776 for integrated motivation; .801 for identified regulation; .739 for introjected regulation; .717 for external regulation; .808 for amotivation; .821 for cognitive strategies; .755 for practicing; .650 for analyzing and reasoning; .587 for creating structures; and .580 for receiving and sending (Mean of inter-term correlation was between 0.2 for the last three).

3. RESULTS

To analyze the findings of the study the following tables for each case were adapted from Moradi's M.A. study (2011).

Spearman rank correlation coefficient was computed to investigate the relationship between MTs. The purpose was, according to Deci and Ryan SDT theory, to find an ordered pattern between each type of motivation, i.e., the relationship between intrinsic motivation and integrated regulation would be closer than the relationship between intrinsic and identified regulation. Intrinsic motivation, integrated, identified, introjected at significant level 0.001, and confidence levels 99% were highly correlated (Table 1). The correlations were significant. Meanwhile, it was found that a low correlation existed between intrinsic and external regulation ($p>0.05$). Amotivation was negatively correlated with intrinsic motivation, integrated regulation, and identifies regulation; and positively correlated with introjected and external regulation.

Table 1: Results of Spearman Correlation Test for Relationship between Motivation Types

Variables	Intro.R.	AM	Iden.R.	Inte.R.	IM	Ex.R.	EM
Intro.R							
AM	.260*						
Iden.R.	.411*	-.167*					
Inte.R.	.369*	-.179*	.520*				
IM	.352*	-.274*	.548*	.581*			
Ex.R.	.597*	.475*	.179*	.148*	.102**		
EM	.801*	.160*	.682*	.659*	.509*	.686*	

*correlation was significant at $p = 0.000$ ($P<0.001$) **correlation was significant at $p = 0.002$ ($P<0.05$)

We studied the overall participants' MTs. As it was observed in Table 2, the mean of intrinsic motivation (IM) (M=67.86) was more than extrinsic motivation (EM) (M=58.54). Accordingly, the mean score of identified regulation (Iden.R.; M=75.04) was even more than intrinsic motivation and three other kinds of regulations in extrinsic motivation. Comparing the means of orientations we saw that the participants of the study were more autonomous learners rather than control learners. Moreover, amotivation level among the participants was very low (Table 2).

Table 2: Descriptive Statistics for Motivation Types in General

Variable	Mean	Standard deviation
IM	67.86	11.40
EM	58.54	9.39
Inte.R.	67.39	10.68
Iden.R.	75.04	11.76
Intro.R.	50.44	11.51
Ex.R.	41.30	16.04
AM	28	13.96
Auto. Orientation	70.10	9.70
Cont. Orientation	45.87	12.49

Next we studied motivation types among the students separately between Iranian students and Turkish students. The results of the study were also the same as the overall participants' motivation types. Iranian and Turkish students were both intrinsically and extrinsically (identified) motivated (Table 3 and Table 4).

Table 3: Results of Kruskal-Wallis Test for MTs in Iran and Turkey

Country	Motivation Type	Mean	Median	Range	χ^2	Sig.	P
Iran	IM	437.25	71.87	57.29	329.62	.000	p<0.001
Turkey	IM	1575.45	67.708	82.29	1415.91	.000	p<0.001

Table 4: Results of Kruskal-Wallis Test for Intrinsic Motivation and Kinds of Regulations in Iran and Turkey

Country	Motivation Type	Mean	Median	Range	χ^2	Sig.	P
Iran	Identified	891.46	75	61.11	635.55	.000	P<0.001
Turkey	Identified	3358.02	75	75	2762.56	.000	P<0.001

Then Mann-Whitney U test was run to compare Iranian and Turkish students' MTs. The results showed that Iranian students' motivation level in intrinsic motivation, integrated regulation, introjected regulation, external regulation and amotivation was more than Turkish students. There was no significant difference between Iranian and Turkish students' identified regulation (Table 5), but significant differences were observed in the rest aspects.

Table 5: Results of Mann-Whitney U Test for comparing MTs, Regulations and Orientations between Iran and Turkey

Motivation Types (MTs)	Country	Mean	Median	Range	U	Sig.	P
Intrinsic (IM)	Iran	495.81	75	100	59368	.001	P<0.01
	Turkey	436.23	75	75			
Extrinsic (EM)	Iran	486.26	59.94	53.39	62447	.023	P<0.05
	Turkey	438.97	57.08	62.17			
Integrated	Iran	487.69	68.75	64.58	62161.50	.018	P<0.05

(Inte.R.)	Turkey	438.56	66.66	66.67			
Identified	Iran	429.31	75	61.11			
(Iden.R.)	Turkey	455.29	75	75	65762	.210	P>0.05
Introjected	Iran	481.55	50	67.31			
(Intro.R.)	Turkey	440.32	48.07	90.38	63390	.047	P<0.05
External	Iran	499.75	46.42	35.71			
(Ex.R.)	Turkey	435.10	48.07	92.86	59751	.002	P<0.01
Amotivation	Iran	544.47	29.41	95.59			
(AM)	Turkey	422.29	22.05	76.47	50806	.000	P<0.001
Autonomous	Iran	481.80	73.37	60.07			
(Auto.	Turkey	440.24	69.907	73.61	63339.50	.046	P<0.05
Orien)							
Control	Iran	494.02	46.49	62.23			
(Cont.	Turkey	436.74	42.85	70.74	60895.50	.006	P<0.01
Orien.)							

Following Kruskal-Wallis Test was carried out to investigate cognitive strategy use between Iranian and Turkish students. The results of the study revealed that Iranian and Turkish students mostly used all types of CS, but the most frequently used strategy among Iranian students was CSS and among Turkish students it was RSS (Table 6).

Table 6: Results of Kruskal-Wallis Test for CSLL in Turkey and Iran

Country	CUS	Mean	Median	Range	χ^2	Sig.	P
Turkey	Receiving	1757.13	75	1757.13	430.38	.000	$P < 0.001$
Iran	CSS	3358.02	75	75	84.71	.000	$P < 0.001$

Mann-Whitney U Test was computed to compare the types CSU among Turkish and Iranian students. The results in Table 7 revealed that Turkish students in comparison to Iranian students used more RSS and PS.

Table 7: Results of Mann-Whitney U Test for Comparing CSLL between Iran and Turkey

Cognitive Strategy	Country	Mean	Median	Range	U	Con. Level	Sig.	P
PSU	Iran	362.40	64.06	51.56	52380.50	99%	.000	P<0.01
	Turkey	474.46	68.75	76.56				
ARSU	Iran	426.63	60.93	62.50	65225.50	95%	.115	P>0.05
	Turkey	456.05	62.50	68.75				
CSSU	Iran	449.26	75	75	69751	95%	.988	P>0.05
	Turkey	449.57	75	81.25				
RSSU	Iran	397.34	75	100	59368	97%	.001	P<0.01
	Turkey	464.45	75	75				

Spearman correlation test was used to investigate the relationship between motivation types and cognitive strategies among overall participants. On the basis of the information of Table 8, it was observed that there were significant correlations between intrinsic motivation and extrinsic motivation, integrated regulation, identified regulation, and introjected regulation and cognitive strategies (PS, ARS, CSS, and RSS). Intrinsic motivation, extrinsic motivation, integrated regulation, identified regulation and introjected regulation positively correlated with cognitive strategies. External regulation ($r = -0.072$, $p = 0.031$, $P < 0.05$) was only negatively correlated with PSU. Amotivation was also negatively correlated with PSU, CSSU, and RSSU.

Table 8: Results of Spearman Correlation Test for MTs and CSU among All Participants

	PSU	ARSU	CSSU	RSSU
IM	.398*	.184*	.322*	.232*
EM	.207*	.150*	.199*	.120*
Inte.R.	.326*	.127*	.101*	.187*
Iden.R.	.114*	.109*	.319*	.198*
Intro. R.	.307**	.174**	.238**	.147*
Ex. R.	-0.072***	.054^	-0.040^	.55^
AM	-0.397*	-0.013^	-0.140*	-0.092**

* Significant – confidence level 99% (P < 0.001)

***Significant – confidence level 95% (P < 0.05)

^ None-Significant – confidence level 95% (P > 0.05) ** Significant – confidence level 97% (P < 0.01)

The results of the study showed that intrinsically motivated students used more cognitive strategies than extrinsically motivated students. Participants with integrated regulation used more PS and ARS than identified regulated students; accordingly, identified regulated students used more CSS and RSS than integrated students. Surprisingly, introjected students used even more cognitive strategies of all types than either integrated or identified regulated students. In general autonomous students used the most amounts of CS from all types. External regulation had negative (contrary) correlation with PSU (practicing strategy use) and CSSU (creating structures strategy use), and non-significant correlation with ARSU and RSSU. External regulated students used the least amount of strategies. The results of the study also revealed that the more amotivation increased, the more use of cognitive strategies decreased.

Spearman correlation coefficient test was run to see the relationship between motivation types and cognitive strategies among Iranian students. The results of the study, on the basis of information represented in Table 9, revealed that intrinsic motivation with ($r=.374$; $.217$; $.554$; and $.286$); integrated regulation with ($r=.138$; $.148$; and $.371$); identified regulation with ($r=.174$, $.396$, $.158$); introjected regulation with ($r=.207$, $.142$, $.211$, and $.350$); and external regulation with ($r=.136$, $.137$) were significantly correlated with CS. The intensity of correlation coefficients between intrinsic motivation and types of CS were more than others. This revealed that the more students were intrinsically motivated the more they used CS from all types. The most common cognitive strategy among Iranian intrinsic motivated and integrated regulated, and identified regulated learners were CSS ($r=.554$, $r=.395$, $r=.371$). The results of the study showed that Iranian introjected students used PS and RSS more than identified and integrated learners. Identified learners used more CSS than introjected learners. Amotivation was negatively correlated with ARS and CSS. In addition, correlations between integrated regulation and RSS; identified regulation and ARS; external regulation and CSS and RSS; and amotivation and PS, and RSS were not significant.

Table 9: Results of Spearman Correlation Test for MTs and CS among Iranian Students

	PS	ARS	CSS	RSS
Intrinsic Motivation	.374*	.217*	.554*	.286*
Extrinsic Motivation	.260*	.184**	.323*	.262*
Inte.R.	.138^	.148***	.371*	.133^
Iden.R.	.174***	.023^	.396*	.158***
Intro.R.	.207**	.142***	.211**	.350*
Ex.R.	.136*	.137*	.55^	.84^
Amotivation	-.076^	-.301*	-.150***	.052^

* Significant – confidence level 99% (P < 0.001) ** Significant – confidence level 97% (P < 0.01) ***Significant – confidence level 95% (P < 0.05) ^ None-Significant – confidence level 95% (P > 0.05)

On the basis of the information represented in Table 10 it was found that among Turkish students, intrinsic motivation, extrinsic motivation and three kinds of regulations (integrated,

identified and introjected) were positively correlated with CS; whereas, external regulation and amotivation were negatively correlated with CS. The correlations with intrinsic motivation ($r=.447$; $r=.197$; $r=.208$; $r=.194$) were more intensive than all other correlations. The correlations with integrated regulation and identified regulation were more intensive than introjected and external regulations. Introjected regulation was poorly correlated to PS, ARS, and RSS. External regulation was even negatively correlated with CS. Amotivation was more negatively correlated with all types of CS.

Table 10: Results of Spearman Correlation Test for MTs and CS among Turkish Students

	PS	ARS	CSS	RSS
Intrinsic Motivation	.447*	.197*	.208*	.194*
Extrinsic Motivation	.228*	.125**	.146*	.191*
Inte.R.	.370*	.198*	.175*	.161*
Iden.R.	.383*	.161*	.286*	.257*
Intro.R.	.113**	.085***	.060^	.158*
Ex.R.	-.115**	.038^	-.67^	-.007^
Amotivation	-.432*	-.126*	-.131**	-.94***

* Significant – confidence level 99% ($P < 0.001$) ** Significant – confidence level 97% ($P < 0.01$)

*** Significant – confidence level 95% ($P < 0.05$) ^Non-Significant – confidence level 95% ($P > 0.05$)

Mann-Whitney U Test was computed to investigate the effect of gender on motivation types. As is seen in Table 11, there were significant differences among male and female participants in the cases that they were integrated regulated, external regulated and amotivated. Among the students who were integrated regulated, the mean of scores for female students were more than male students; among external and amotivated students' number of male students was more than female students.

Table 11: Results of Mann-Whitney U Test for Motivation Types and Gender

MTs	Gender	Mean	Median	Range	U	Sig.	P
IM	Male	455.76	69.79	69.79	59993	.729	> 0.05
	Female	448.07	67.708	67.708			
EM	Male	450.11	57.57	61.11	60936	.973	> 0.05
	Female	449.36	57.38	56.19			
Inte.R.	Male	369.82	62.50	58.33	47732.50	.000	< 0.001
	Female	467.70	68.75	66.67			
Iden.R.	Male	421.71	75	66.67	56397	.123	> 0.05
	Female	455.85	75	75			
Intro.R.	Male	430.31	50	78.85	60729	.918	> 0.05
	Female	453.88	48.07	76.92			
Ex. R.	Male	516.82	42.85	78.57	49795.50	.000	< 0.001
	Female	434.12	35.71	92.86			
AM	Male	489.76	26.47	77.94	54314.50	.026	< 0.05
	Female	440.30	25	100			

4. DISCUSSION AND CONCLUSION

In this study we investigated motivation types among students. The results revealed that the mean of intrinsic motivation (67.86) among the students was more than extrinsic motivation (58.54). Comparing the means of kinds of regulations in extrinsic motivation with the mean of intrinsic motivation it was observed that identified regulation received the highest of mean (75.04). This revealed that the participants of the study were both intrinsically and extrinsically (identified regulated) motivated. Students reported that they had strong desire, interest or enthusiasm for English learning and they were more autonomous oriented rather than control oriented. In addition, studying students' MTs in each country separately we

resulted in the same motivation types. However, it was found that Iranian students' motivation level in comparison to Turkish students, except identified regulation, was very high. There was not a significant difference between Iranian students' and Turkish students' identified regulation. Amotivation level, among the participants, in comparison to the types of motivation and kinds of regulation in extrinsic motivation was very low ($M=28.00$), and the level of amotivation between Iranian students, in addition, was more than Turkish. Another significant finding was that motivation types and kinds of regulations in extrinsic motivation were positively correlated. Amotivation was positively correlated to external and introjected regulations but negatively correlated to intrinsic motivation, integrated regulation and identified regulation. All the correlations were significant at $p=0.000$ and confidence level 99%. In congruent with Deci and Ryan's (1985) SDT, there was an ordered pattern between both MTs and kinds of regulations. The high intensive correlations were between learners with autonomous orientation. It was also reported that intrinsic motivation was positively correlated with integrated regulation, identified regulation, introjected regulation and external regulation. As we moved in a range from external regulation ($r=102$, $p<0.001$) to introjected regulation ($r=.352$, $p<0.001$), to identified regulation ($r=548$, $p<0.001$), to integrated regulation ($r=581$, $p<0.001$), to intrinsic motivation, we observed highly significant direct correlation. Put differently, to the extent that we moved from external regulation towards intrinsic motivation the participants' level of internal motivation increased and as we got away from intrinsic motivation towards external regulation the participants lost motivation level. The ordered pattern between MTs and kinds of regulations was in congruent with what Deci and Ryan (1985) stated in their SDT. The results confirmed the notion that although the types of motivation often views as opposite, it was still for learners to learn a foreign language both for intrinsic and extrinsic reasons.

Amotivation was negatively correlated to intrinsic motivation, integrated regulation, and identified regulation. Moreover, as we moved in range from identified regulation ($r= -.167$, $p<0.001$) to integrated regulation ($r= -.179$, $p<0.001$), to intrinsic motivation ($r= -.274$, $p<0.001$) we found that the degree of amotivation decreased to its least amount. The results confirmed the fact that, according to Deci and Ryan's (1985) SDT, to the extent that learners get close to intrinsic motivation, they get self-confident and lose their amotivation level.

In the study, the participants used mostly all types of cognitive strategies, but the most frequently used strategy types among the participants were creating structures strategy (CSS) ($M=73.21$) and receiving and sending strategy (RSS) ($M=74.93$). The results of the study revealed that in general Turkish students used more CS than Iranian students. The observed difference between Iranian and Turkish students' use of PS, and RSS was more significant ($P<0.01$). Put differently, Turkish students in comparison to Iranian students used more PS and RSS. However, there were not significant differences between Iranian and Turkish students' use of ARS, and CSS ($P>0.05$). It was also found that motivation types (intrinsic and extrinsic) and three kinds of regulations (integrated, identified, and introjected) were intensively correlated to all CS. There were direct significant correlation coefficients between the variables so that by increasing motivation level, students' CSU also intensively increased. External regulation negatively correlated to PSU, and its correlation with ARSU, CSSU, and RSSU was not so significant. Amotivation had a contrary correlation coefficient with PSU, CSSU, and RSSU, but non-significant correlation with ARSU.

There was a positive increasing range from identified regulation ($r=.114$, $r=.109$, $r=.319$, and $r=.198$), to integrated regulation ($r=.326$, $r=.127$, $r=.101$, and $r=.187$), and to intrinsic motivation ($r=.398$, $r=.184$, $r=.322$, and $r=.232$), especially with the use of PS and ARS. That is, the more students' level of motivation got closed to intrinsic motivation the more they used PS and ARS, and vice versa.

The correlation coefficients between external regulation and types of CSU were too weak. It revealed that students with this type of regulation, in comparison to introjected learners, used the least amount of effort to learn. As Wei Zhaomin (2006) states they only look for final results; therefore, learning process is not important for them. The results showed that external regulation was contrary correlated to PSU and the correlation coefficient ($r=-.072$) was significant ($P<0.05$). That is, the more students were external regulated the least they used PS.

In comparison to control oriented learners, amotivated learners were even weaker. In congruent with Deci and Ryan' (1985) SDT, amotivated learners had no interest or desire to sustain their effort to learn. The results of the study revealed that amotivation had contrary significant correlations with three types of CSU: (PS($r=-.397$), CSS($r=-.140$), and RSS($r=-.092$)). The more the students were amotivated the least they used CS. Moreover, the correlation coefficient between amotivation and ARSU was not significant ($r=-.013$, $P>0.05$).

Both Iranian and Turkish intrinsically motivated students used CS from all types positively. That is, by increasing learners' intrinsic motivation their use of CS also intensively increased. However, Iranian intrinsic motivated students, in general, used more CS than Turkish students, whereas the intensity of correlation coefficient for Iranian intrinsic motivated students with PS, ARS, CSS and RSS was ($r=.379$; $r=.217$; $r=.554$; and $r=.297$), for Turkish intrinsic motivated students it was ($r=.447$; $r=.197$; $r=.208$; and $r=.191$). In congruent with Deci and Ryan (2000) and Oxford (1990), the results of the study showed that the more students were internally motivated the more they used their effort to learn. Iranian students were more intrinsically motivated than Turkish students; accordingly, used more cognitive strategies than Turkish students.

According to Deci and Ryan's (2000) SDT, extrinsic motivation involves four regulations. Integrated and identified regulations are in the group of autonomous orientation; whereas, introjected and external regulations are in the group of control orientation. Integrated and identified students were proposed to use more CS. Accordingly, it was observed that Turkish integrated and identified students in congruent with Deci and Ryan (2000) and Oxford (1990) more intensively used CS than introjected and external regulated students; even Turkish external regulated students, in general, were negatively correlated with types of CS. Iranian introjected and external students, however, positively used cognitive strategies; even introjected regulated students' use of PS and RSS was more than identified and integrated students. But in general, the results of the study showed that autonomous oriented learners, either with Iranian or Turkish students, used more CS than control oriented learners. The more they were autonomous oriented the more they used cognitive strategies; in contrast, the more they were control oriented, the less they used CS.

It was observed that integrated regulation, either with Iranian students or Turkish students, was positively correlated to all types of CS; however, Turkish students, in general, used more CS than Iranian students. Iranian integrated students mostly used CSS ($r=.371$), whereas Turkish students mostly used PS ($r=.370$).

It was also found that Iranian introjected students used cognitive strategies more intensively than Turkish students. As it was mentioned, the intensity of correlations between Iranian introjected regulation and CSU was even more than the intensity of correlation coefficients between Iranian integrated regulation, and identified regulation and CSU, especially with PS and RSS. It might be because of the fact that introjected students do more challenges to pretend they are the best. Although, they could not get the importance of their behavior but they studied for more prestige and more importantly to control their stress and shyness. In comparison to Iranian introjected students, Turkish introjected students used less CS than both integrated and identified Turkish students.

Iranian external students' use of CS positively increased; in contrast, Turkish students' use of CS, especially PS negatively decreased. It was also worth noting that although Iranian external students' use of CS was positive but their use of CS was less than integrated and identified regulated students.

Amotivation had a negative effect on the learners' use of cognitive strategies. In congruent with Deci and Ryan's (2000) and Oxford (1990) it was found that the more students were demotivated the less they used cognitive strategies.

According to what mentioned above, it was found that either with Iranian students or Turkish students autonomous oriented learners, in general, used more CS than control oriented students. The more students were autonomous oriented the more they used CS. In addition, the more students were de-motivated the less they used CS. Intrinsic motivation, integrated regulation, identified regulation, and introjected regulation were positively correlated with CS. Iranian external regulation was positively correlated with CS, whereas Turkish external regulation was negatively correlated with CS.

It was also found that gender had significant effects on integrated regulation, external regulation, and amotivation. The results of the study revealed that female students were mostly integratedly regulated, whereas male students were mostly externally regulated or amotivated.

It was observed that Iranian and Turkish students were both intrinsically and extrinsically (identified) regulated students. Iranian students' motivation level except in identified regulation was more than Turkish students. There was an ordered pattern between intrinsic motivation and the four kinds of regulations in extrinsic motivation, which revealed that there was an increasing range from different kinds of regulations towards intrinsic motivation.

Lastly, teachers, in Iran and in Turkey, need to provide their students appropriate situation for more internalization and integration. This may help them to be more intrinsic motivated students. The results of the study revealed that intrinsic motivated students used cognitive strategies of all types more intensively than students with extrinsic motivation and four kinds of regulations and supported the fact that cognitive strategies are more time-consuming and need lots of effort to be used. As a result, more internally motivated students used more cognitive strategies. The more students were autonomous oriented, the more they used cognitive strategies; in contrast, the more students were control oriented, the less they used the strategies.

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Genişletilmiş Özet

Yabancı dil eğitimini etkileyen unsurlar arasında güdülenme ve bu unsurla bağlantılı olarak bilişsel stratejilerin önemi yadsınamaz bir gerçektir. Aktif ve yapıcı özelliğe sahip olan güdü, genelde "harekete geçiren" ifadesi ile açıklanmaktadır, ancak bu ifade güdülenmenin tek bir yönünü göstermektedir. Aslında güdülenmenin bir diğer yönü olan "hareketi devam ettirici" özelliği de bulunmaktadır. Diğer yandan güdü bilişsel yeterliliği ve davranışları ayarladığı gibi hedeflerini var olduğu ortamdaki bağlamsal özelliklere göre yönlendirir ve sınırlarını çizer. Bu çalışmanın konusunu oluşturan güdü çeşitleri arasında içsel güdülenme ve dışsal güdülenme olarak toplam olarak iki çeşit ele alınmıştır. İçsel güdülenme, bireylerin herhangi bir ödül beklentisi olmaksızın kendi içinden gelerek harekete geçmesi olarak tanımlanabilir. Dışsal güdülenme ise içsel güdülenmenin aksine bireylerin bir ödül ya da olumlu dönüt alacağı beklentisiyle harekete geçmesi olarak tanımlanabilir. Yukarıda tanımları yapılan güdülenme türlerinin hangisinin davranış için harekete geçmede daha etkili olduğudur. Brown (2007)'a göre yapılan araştırmalar içsel güdülenmenin yani kişinin kendi isteğiyle, beklentisi olmadan harekete geçmesinin davranışın devamlılığı için daha etkili olduğunu göstermektedir; fakat kimi zaman yaşamda karşılaşılan problemler, düzensizlikler bireyi - içsel anlamda güdülenme düzeyi çok düşük olmasına rağmen - dışsal olarak güdelemekte ve davranışa yönlendirmektedir.

Bütün bu bilgilerin ışığından hareketle güdülenmenin en çok etkilediği alan eğitim bilimleridir. Dolayısıyla, bu çalışmanın konusunu oluşturan yabancı dil eğitimi de eğitim bilimleri şemsiyesinin bir parçası olduğundan bu etkiden uzak kalması asla düşünülemez. Yabancı dil eğitiminde davranış değişikliği yani öğrenmenin gerçekleşmesi aşamasında öğretim sürecinin daha verimli ve etkili kılma çabalarına ışık tutması bakımından mevcut çalışmanın önemi de yadsınamaz. Öğrenci başarısını tetiklediğine inandığımız bu iki unsurun yokluğu öğrenci başarısızlığına giden yolda göz ardı edilmemesi gereken konulardır. Tabii ki

öğretim sürecinde öğrenci başarısızlığının olası nedenleri araştırılmalı ve çözümler bulunmalıdır. Öğrenci başarısızlığı üzerinde yapılan araştırmalar neden olarak pek çok bulguya ulaşmakla beraber varılan sonuçlar öğrenci başarısızlığında güdü eksikliğinin çok önemli bir rol oynadığını göstermektedir (<http://www.ingilish.com/db1.htm>).

Güdülenmenin üzerinde etkisi görülen bilişsel yetinin de öğrenci başarısı üzerinde önemli ölçüde rol oynadığı alanımızın bir başka araştırma konusunu oluşturmaktadır. Şu bilinen bir gerçek ki, bireylerin başarıları büyük ölçüde kendi öğrenme yetilerinin farkındalığı ve kendi öğrenmelerini yönlendirmeleri ile mümkündür. Bu bağlamda öğrenme stratejisi, bireyin kendi kendine öğrenmesini kolaylaştıran teknikler arasında yer almaktadır. Bilgiyi işe koymak ve kalıcı biçimde öğrenmeyi sağlamak yabancı dil öğretmenlerinin birinci vazifesi olmalıdır. Bu noktada bireylerin (öğrencinin) öğretilen yeni bilgiyi seçme, düzenleme ve bütünleştirmek için gerekli olan davranışları geliştirmesi ve olgunlaştırması gerekir. Bu bağlamda farklı öğrenme stratejilerinden söz etmek mümkündür. Bunlar; (1) tekrarlama stratejileri, (2) karmaşık öğrenme durumları için tekrarlama stratejileri, (3) anlamlandırma stratejileri, (4) karmaşık öğrenme durumları için anlamlandırma stratejileri, (5) örgütlenme stratejileri, (6) karmaşık öğrenme durumları için örgütlenme stratejileri, (7) kavramayı izleme stratejileri, (8) duyuşsal ve güdüsel stratejileri ve (9) bilişsel stratejilerdir.

Çalışmamızın ikinci ayağını oluşturan bilişsel stratejiler ise dört stratejiden oluşmaktadır. Bunlar; (a) yineleme stratejileri: temel etkinlik, zihinsel yinelemeler yapma ve ezberleyerek öğrenme. Olduğu gibi hatırlanması istenen bilgilerin öğrenilmesinde kullanma, (b) açıklama stratejileri: yeni öğrenilenlerle önceki bilgilerini bütünleştirerek uzun süreli bellekte bilgiyi kodlamada öğrenenlere yardım etme. Yorumlama, özetleme, benzetim yaratma ve not alma vb., (c) düzenleme stratejileri: uygun bilgiyi seçme ve öğrenilecek bilgiyi, bilgiler arası bağlantıları kurarak yapılandırma. Kümelendirme ya da sınıflandırma, ana hatları çıkarma (outlining), ana fikri belirleme vb., ve (d) eleştirel düşünme stratejileri: Önceki bilgileri yeni durumlara uygulamada problem çözme, karar verme ve eleştirel değerlendirme yapmadır.

Yukarıda yabancı dil öğreniminde başarıyı etkileyen güdü ve bilişsel stratejilerin önemi verilmiştir. Buradan hareketle konuya ilişkin olarak yapılan bu çalışmanın amacı özellikle Türk ve İranlı öğrencilerinin güdülenme ve bilişsel öğrenme stratejileri arasındaki ilişkiyi incelemektir. Çalışmaya Türkiye ve İran'dan toplam 898 öğrenci katılmıştır. Deci ve Ryan (1985)'a ait kendi-kendine karar verme teorisi ve Oxford (1990)'un dil öğrenimi odaklı strateji envanteri'nden oluşan ölçme araçlarının öğrencilerin güdülenme ve bilişsel strateji türlerini belirlemek üzere uyarlanması yapılmıştır. Çalışmanın sonuçlarını yorumlamada Mann-Whitney U test, Kruskal-Wallis test ve Spearman Sıralama Korrelasyon Katsayısı testleri kullanılmıştır. Çalışmanın sonuçları Türk ve İranlı öğrencilerin hem içsel hem de dışsal olarak güdülendiklerini ortaya koymuştur. İranlı öğrencilerin güdülenme düzeyleri Türk öğrencilere göre daha yüksek çıkmıştır. Türk öğrenciler daha çok alma ve gönderme stratejilerini kullanmakta iken tam aksine İranlı öğrencilerin ise daha çok girdi ve çıktı için gerekli olan bilişsel stratejilerden yapı oluşturma stratejisini kullandıkları gözlemlenmiştir. Güdülenme ve dışsal güdülenmeye ait dört tür düzenleme arasında olumlu bir ilişki vardır ve güdülenme türleri ve düzenleme türleri arasında sıralı bir örneklem görülmüştür. Çalışmada güdülenme türlerinin bilişsel stratejilerle arasında yoğun bir ilişki olduğu tespit edilmiştir. Öğrenciler ne kadar çok içsel olarak güdülenirler, o kadar çok bilişsel stratejileri kullanmaktadır. Güdülenmemenin bilişsel stratejilerin tamamı ile olumsuz yönde ilişkili olduğu görülmektedir. Buna ek olarak cinsiyet açısından bütüncül düzenleme, dış düzenleme, güdülenmeme ve analiz ve fikir yürütme stratejileri arasında önemli farklılıklar görülmüştür.