

*Full Length Research Paper*

# Motivation to learn Turkish in foreign students with different thinking styles in terms of functional and formal aspects

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Received 11 February, 2018; Accepted 27 March, 2018

The aim of this study was to determine the level of motivation to learn Turkish among foreign students with different thinking styles in terms of the functional and formal aspects of these thinking styles. The survey model was used in the study. The participants in the study were 51 foreign students (33 female, 18 male) who were studying at the TÖMER (Türkçe Öğretim Merkezi [Center of Turkish Language Teaching]) at Gaziantep University in the 2016-2017 academic year and who were selected by the convenience sampling technique. The Thinking Styles Inventory and Turkish-Oriented Motivation Scale were used to obtain the data. The data collected were analysed by descriptive and relational analysis techniques and presented with averages, standard deviations, analysis of variance (Chi Square) and the Mann Whitney U-test. According to the findings obtained, the motivation of the foreign students with different thinking styles to learn Turkish was at a moderate level. It was determined that the following motivating factors were predominant in the motivational sub-dimensions: among legislative and anarchic thinkers, the sub-dimension of research; among executive and monarchic thinkers, the sub-dimension of performance; among legislative and hierarchic thinkers, the sub-dimension of communication; among executive and hierarchic thinkers, the sub-dimension of cooperation; and among judicial and monarchic thinkers, the sub-dimension of individual success.

**Key words:** Thinking styles, teaching Turkish as a foreign language, motivation.

## INTRODUCTION

### Thinking styles

Every individual's way of perceiving the world, their goals, their communication with people, their approaches to problems and the solutions they come up with are different. The differences that individuals have, has led

them to see reality from different perspectives, to acquire information in different ways, to make judgements on the basis of different findings and to express the results in different forms.

Thought, one of the basic and distinctive features of human beings, is a complex process shaped by individual

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differences. The different situations, events and phenomena that an individual encounters force them to constantly think anew. The way in which an individual manifests an attitude and style of thinking in different situations helps them to develop their own forms and ways of thinking.

As individuals bring their different thinking processes to bear on the external world, they demonstrate different methods and strategies that are unique to them. 'Thinking style' indicates the way that an individual prefers to apply cognitive processes such as intelligence, ability, reasoning, problem-solving (Grigorenko and Sternberg, 1995: 205). According to Stenberg (1994: 36), a thinking style is the way that an individual chooses to use the skills they possess. For him, a thinking style does not indicate the extent of one's ability to think, but is rather the means by which one's ability is demonstrated. A style is the habitual way of revealing one's ability, whereas the ability itself is the capacity to act or do something (Zhang, 2002).

Individuals do not have a single, constant thinking style. One's preferred style may change in the face of changing situations. The style of thinking needed may also change from time to time according to individual flexibility and preference (Sternberg, 1994: 38). However, each person's style follows a specific profile. People have a 'style profile' based on their favourite style of thinking. The style profile is related to what form of thinking each person uses. For this reason, each person differs from every other individual in terms of style profile (Duru, 2004). A 'thinking style profile' is the style that a person typically applies in similar situations, from which they gain experience, and which facilitates problem-solving.

The notion of thinking styles is derived from the theory of mental autonomy; they can be measured, and, as structures that influence thought, they are related to learning approaches, personality types and self-esteem (Zhang, 2000). The typical styles can be measured by scales in appropriate environmental and laboratory conditions.

Thinking styles can vary depending on age and changing circumstances. A person can change the thinking style they use when in a given situation, at later ages or in other situations. In this sense, a thinking style is dynamic, not static. The habitual thinking style of an individual may be different after a few years have passed (Dinçer, 2009). However, the preferred thinking style is used more effectively as age increases (Zhang and Sternberg, 2005).

Thinking styles are acquired in a social context and in this respect they are part of an individual's process of socialization (Grigorenko and Sternberg, 1997). Individuals observe their surroundings and learn new things from the people they take as models. A behaviour that is learned through observation can become part of the preferred thinking style. The thinking styles of people they observe can affect the observers. Hence, the ways

in which thinking processes are expressed can be part of an individual's socialization. Thinking styles have a social significance in a sense and can change and develop under the influence of the environmental factors that people live in (Buluş, 2005).

### Language learning motivation

Motivation, which is one of the most important basic concepts in education, encompasses affective characteristics such as interest, attitude, value, belief and self-efficacy, all of which affect learning. In general, motivation, which involves ideas of demand, desire, goal, purpose, need and impulse, can be defined as a process that is initiated as a result of a physiological or psychological necessity, and which then activates and sustains a purposeful behaviour or an impulse (Ülker, 2001: 6).

Motivation thus indicates the totality of efforts an individual makes in beginning to move towards a goal (Mahmutoğulları, 2015: 23). It is both a propulsive and repulsive force, pushing a person down one path of action, rather than another. In this sense, motivation is the general name of a process that signifies continuity.

Motivation is a drive which supports a student's learning of new knowledge and skills and helps them to feel confident as they pursue success. In aiming for success, it is what stimulates an individual to work, helps them maintain and manage their efforts, and takes account of all the conditions arising from an individual and their surroundings. In addition, motivation is not only a drive that leads to success but also a feeling that keeps a person going and helps them to avoid possible obstacles to success (Dede and Yaman, 2008).

Motivation is one of the most important concepts in learning and thinking. Students who want to learn language should set achievable and logical goals. In the language learning process, both internal and external sources of motivation are needed to attain the stated goals. Motivation is an important and dominant factor influencing one's success in learning a foreign language. According to Dörnyei (1994), motivation involves the behaviours that people choose and the patience and efforts that they expend in exhibiting these behaviours. Students with a high level of motivation are more likely to be successful than those with a low level of motivation. Motivation in language learning increases the students' desire to learn. While taking responsibility for their own learning, students willing to learn a foreign language more consciously consider the amount of effort they are putting in, the frequency of the activities they engage in, and the possible causes of the problems they encounter (Dörnyei and Skehan, 2005).

Motivation is needed to help students improve their efforts to learn a foreign language and for them to continue learning. It has been suggested that even if they

have language learning skills, they will not be able to demonstrate their full potential and reach their long-term goals if they do not have enough motivation (Dörnyei, 2003). For this reason, many researchers have focused on motivation in foreign language learning and its effect.

Ellis (1994) drew attention to the relationship between motivation and learning. He suggested that learning occurs only when a person is motivated. He also stated that foreign language teachers explain their own failures as being mostly due to the low motivation of the students. Al-Shehri (2009: 168) stated that language acquisition is not the same in all students. According to him there are three main factors that affect foreign language learning: age, personality and motivation. Masgoret and Gardner (2003) stated that motivation to learn a language is related to the communication needs of students and their attitudes towards the community that speaks the foreign language.

The question of whether students' motivation is determined by their own individual efforts or by external processes they have experienced has been influential in the classification of motivation. Theories of motivation can be classified as content theories and process theories. The content (energy) theories are related only to what initially motivates people and their needs, desires and goals. Process theories focus on the entire process of being motivated and are concerned with how motivation is formed (Spolsky, 2000).

When the literature is examined, it is seen that there is very little research on the significance, role, effect and relation of motivation in teaching/learning Turkish as a foreign language. (Arslan and Gürsoy, 2008; Biçer, 2016; Barin, 2008; Yılmaz and Buzlukluoğlu Arslan, 2014). This study was therefore needed to draw attention to this gap in the field as well as to describe the situation as related to the motivations to learn in students with different thinking styles learning Turkish.

### **Purpose of the research and the research questions**

The aim of this study was to determine the level of motivation of foreign learners with different thinking styles who were learning Turkish language in terms of the functional and formal aspects of these thinking styles. The main research questions, reflecting this aim were:

- i) What are the preferences of foreign students in terms of their dominant functional and formal thinking styles?
- ii) What is the level of foreign students' motivation to learn the Turkish language?
- iii) Do foreign students' motivations to learn the Turkish language differ in terms of the functional and formal aspects of their thinking styles?
- iv) Do the motivations of foreign learners who are learning Turkish and have different thinking styles differ in terms of the functional and formal aspects of these

thinking styles according to gender?

## **METHODS**

### **Research design**

The survey model was used in the study. The survey is used to investigate the opinions and characteristics of a large number of participants and is usually conducted with a specific number of people representing the universe (Büyüköztürk et al., 2009: 248). A cross-sectional survey model was used in this study since data were being collected once from all the participants.

### **Research group**

The data were collected from 51 foreign students (male: 18; female: 33) who were learning the Turkish language at TÖMER at Gaziantep University in the 2016-2017 academic year. They were selected by the convenience sampling technique. Students participated in the study on a voluntary basis. The participants were students attending the B1 (male: 9; female: 14), B2 (male: 6; female: 12), C1 (male: 3; female: 7) levels within the Common European Framework of Reference for Languages (CEFR).

### **Data collection**

In order to obtain the data of the study, the Thinking Styles Scale, prepared by Sternberg and Wagner (1992) and adapted to Turkish by Sünbül (2004), and the Turkish-Oriented Motivation Scale, prepared by Dede and Yaman (2008) and revised for the purpose of the study by the researcher, were used.

The data were collected with the Thinking Styles Scale, prepared by Sünbül (2004). No changes were made to the items in the scale. The reliability coefficient of the scale was calculated for all the items ( $\alpha=0.71$ ). However, analyses were only conducted of the items including the formal and functional thinking styles only. For this reason, a shortened scale was used for the new form, which contained the 35 items in these two sub-dimensions of the scale. The reliability coefficient calculated for the short scale was  $\alpha=0.72$ . The original  $\alpha$  values of the scale were: for legislative thinking style, 0.70; for executive thinking style, 0.74; for judicial thinking style, 0.78; for monarchic thinking style, 0.70; for hierarchical thinking style, 0.78; for oligarchic thinking style, 0.71; for anarchic thinking style, 0.72 (Sünbül, 2004).

The reliability coefficient of the Turkish-Oriented Motivation Scale was calculated as  $\alpha=0.78$ . The inventory revised for the purpose of the study was examined by three lecturers who were specialists in the field and the subject area was examined for the validity of the scope and appearance. A "Yes-Partially-No" form was used to determine the consistency among the views of the three experts about the scale. The ratings given were "2-1-0" in the form. The ratio of the experts' opinions was thus 68%. The items were evaluated by experts mainly on the basis of clarity, fluency, proper use of language, how the expressions regarding motivation were formulated, and in terms of understandability. In accordance with the suggestions of the experts, items which were not suitable for inclusion or decreased the appearance were removed from the scale. In addition, an internal consistency analysis was conducted for construct validity of the scale and items with a correlation value of less than 0.400 were eliminated. According to the results of factor analysis, five sub-dimensions were determined. There are thus five sub-dimensions in the Motivation scale and a total of 23 items. It is a 5-point (lowest value 1; highest value 5) Likert-type

**Table 1.** Foreign students' thinking style profiles.

Categories	Styles	N	%	X	S.D
<b>Functional thinking</b>	Legislative thinking	11	21.57	3.81	1.411
	Executive thinking	9	17.65	3.73	1.426
	Judicial thinking	6	11.76	3.87	1.325
<b>Formal thinking</b>	Monarchic thinking	7	13.73	3.80	1.329
	Hierarchic thinking	7	13.73	3.75	1.401
	Oligarchic thinking	6	11.76	3.72	1.527
	Anarchic thinking	5	9.80	3.85	1.523

scale.

#### Data analysis

The data collected were analyzed by descriptive and relational analysis techniques and presented using average rates, standard deviation and the Chi Square and Mann Whitney U-test in the SPSS 16.00 program. Non-parametric statistical techniques were used because the data were not normally distributed in terms of homogeneity.

## FINDINGS

### Foreign students' functional and formal thinking style preferences

The preferred thinking styles of the foreign students participating in the study were determined by considering the average values and standard deviations of their answers to the Thinking Styles Scale. The distribution of students according to their preferred thinking styles is shown in Table 1.

When Table 1 is examined, it was seen that the thinking styles dominated by the average and standard deviation values in the answers of the students were approximately similar. It was seen that there were more foreign students who had the profile of a legislative thinker than any others. However, when examined by category, it was seen that functional thinkers (N=26) and formal thinkers (N=25) had very similar values and were in similar situations.

### Levels of foreign students' motivation to learn Turkish

The levels of foreign students' motivation to learn Turkish were determined by considering the average and standard deviation values of the responses given by the foreign students who participated in the study to the Turkish Learning Motivation Inventory. The motivation levels of the students are shown in Table 2.

When Table 2 is examined, it was seen that the foreign

students had a moderate level of motivation to learn Turkish according to the average and standard deviation values. The situation is also the same in the sub-dimensions of motivation to learn Turkish.

### Foreign students' motivation to learn Turkish according to functional and formal aspects of different thinking style profiles

Whether foreign students' level of motivation to learn Turkish differed according to the functional and formal aspects of their different thinking styles, and their predominant motivation levels according to their preferred thinking style was determined by the Chi Square test. The findings are shown in Table 3.

When Table 3 is examined, it was seen that the students' thinking styles had a significant impact on their motivation to learn Turkish ( $\chi^2=33.28$ ;  $p(0.000) < 0.05$ ). That is, there was a significant difference between those who had a formal style of thinking and those who had a functional style of thinking, in terms of motivation to learn Turkish.

The Pearson correlation test was used to determine which sub-dimension of motivation to learn Turkish had a stronger relationship with the thinking styles of the students participating in the study. As a result of analysis, the values showing the highest scores in the sub-dimensions of motivation to learn Turkish and thinking styles are shown in Table 4.

It is accepted as a high level of correlation if the correlation coefficient is between 0.70 and 1.00, as a moderate level of correlation if the correlation coefficient is between 0.30 and 0.70, and as a low level of correlation if the correlation coefficient is between 0.00 and 0.30 (Büyüköztürk, 2009: 32). According to the correlation coefficient values in Table 4, a mid-level positive and significant relation between the functional and formal thinking styles of foreign students and their motivation to learn Turkish [ $r=0.415$ ;  $p(0.000) < 0.01$ ] was found. When the relationship between the sub-dimensions of both scales was examined, a significant positive correlation between the scales was seen. The highest

**Table 2.** The levels of foreign students' motivation to learn Turkish.

Turkish learning motivation	Mean	S.D.	Low	Medium	High
			1-2.3	2.4-3.6	3.7-5
Research motivation	2.57	1.443		✓	
Performance motivation	3.51	1.252		✓	
Communication motivation	3.15	1.505		✓	
Cooperation motivation	3.39	1.556		✓	
Individual achievement motivation	3.66	1.416		✓	
All items of the scale	3.45	1.416		✓	

**Table 3.** The results of Chi Square test.

Styles	Research motivation		Performance motivation		Communication motivation		Cooperation motivation		Individual achievement motivation		All items of the scale	
	$\chi^2$	p	$\chi^2$	p	$\chi^2$	p	$\chi^2$	p	$\chi^2$	p	$\chi^2$	p
Functional thinking	10.63	0.031	9.73	0.045	9.69	0.046	8.67	0.070	8.13	0.087	7.84	0.097
Formal thinking	15.10	0.057	15.95	0.043	14.76	0.064	14.32	0.074	14.48	0.014	14.06	0.007
All items of the scale	28.15	0.031	27.29	0.063	29.09	0.001	27.39	0.0560	30.16	0.000	33.28	0.000

p<0.05.

**Table 4.** Results of the Pearson correlation analysis (r).

Correlation	Research motivation	Performance motivation	Communication motivation	Cooperation motivation	Individual achievement motivation
Legislative thinking	0.303**	0.102	0.477**	0.121	0.119
Executive thinking	0.386**	0.412**	0.125	0.339**	0.107
Judicial thinking	0.121	0.099	0.122	0.331**	0.441**
Monarchic thinking	0.134	0.392**	0.105	0.111	0.245**
Hierarchic thinking	0.110	0.301**	0.308**	0.327**	0.400**
Oligarchic thinking	0.108	0.113	0.101	0.147	0.198
Anarchic thinking	0.119	0.321**	0.127	0.132	0.174
Between thinking styles and motivation	r=0.415 p(0.000) <0.01				

\*\*p<0.01.

correlation ratio was between the sub-dimension of communication and legislative thinking, with  $r=0.477$ . The lowest correlation ration was seen between the sub-dimension of performance and judicial thinking, with  $r=0.099$ .

#### Foreign students' motivation to learn Turkish according to gender

It was determined whether the foreign students' motivation to learn Turkish differed by gender. The findings are shown in Table 5.

When the U-test results in Table 5 are examined, it was

seen that gender made a significant difference to the motivation to learn Turkish of the foreign students participating in the study ( $U=1.748$ ;  $p_{(0.000)}<0.005$ ). According to this result, it can be said that female students' had a higher motivation to learn Turkish than their male counterparts when the average and standard deviation values are taken into consideration.

#### DISCUSSION

In this study to determine the level of motivation of foreign students to learn Turkish, conducted with regard to the functional and formal aspects of the students'

**Table 5.** Mann Whitney U- test results.

Gender	N	X	S.D.	U	df	P
Male	18	3.71	0.68	1.748	49	0.000
Female	33	3.93	0.42			

different thinking styles, the results obtained can be summarized as follows:

1) 21.57% of the foreign students who participated in the study had a functional legislative thinking style. In this regard, 17.65% of the students had an executive thinking style and 11.76% of them had a judicial thinking style. When viewed from the formal aspect, it was seen that 13.73% of the students had a monarchic thinking style, 13.73% of the students had a hierarchic thinking style, 11.76% of the students had an oligarchic thinking style and 9.80% of the students had an anarchic thinking style.

2) The average level of motivation of the foreign students learning Turkish was 3.45. When the sub-dimensions of the scale were examined, the lowest mean value was 2.57 for the sub-dimension of research, and the highest mean value was 3.66 in the sub-dimension of individual achievement. According to these findings, both in the total scale and in all sub-dimensions, it was concluded that foreign students' motivation to learn Turkish was at a moderate level.

Learning a foreign language is a difficult and complex process. It requires an intense effort to obtain information and develop the linguistic skills in the new language being learned. In beginning to learn a foreign language, it can be unclear whether a learner will use internal and external sources of motivation, to what extent they will use them, and how any learning will occur. In this respect, motivation levels of students may vary. While some students may have a very high motivation, others may have a lower motivation. As students with a higher motivation will also be more successful in learning, it will be easier for both them and their teachers to achieve learning goals. On the other hand, a foreign language class consisting of poorly motivated students will not be a productive and efficient learning environment. Thus, the level of motivation has an effect on the success of learning (Gardner, 2001; Williams and Burden, 1997; Dörnyei, 2003). This study determined that students had a moderate motivation. As the motivation of students who participated in the study increases, their success will also increase.

3. There was a significant difference between the students' thinking style profiles and their motivation to learn Turkish. In other words, students who thought differently had different levels of motivation when they were learning the Turkish language.

The fact that motivation varies according to different thinking style profiles is a situation that can be easily understood, because motivation is not a stable factor. It

can change, develop or fade away during the process. As students' experience of learning a foreign language varies according to their different preferred thinking styles, so their levels of motivation will also change. Sometimes a single preferred thinking style may be a determinant for motivation throughout the process. And sometimes thinking styles may be deployed in only one lesson and may undergo a change during the process of a learning activity, consequently changing the level of motivation.

4. A moderate and positive significant relationship was found between the motivation to learn Turkish of the students participating in the study and their thinking styles. According to the findings of Pearson correlation analysis, a positive relation was found in the sub-dimensions of motivation to learn the Turkish language.

When the literature was examined, no studies that examined thinking styles together with learning motivation could be found in Turkey. In the literature worldwide some outstanding research has been carried out. For example, Oke and Musta'Amal (2013) addressed the use of inner motivation and thinking styles as a tool to assess students. In a study by Paloş et al. (2011), thinking styles and motivation were considered as variables determining success. In another study, Navan and Shariatmadari (2015) noted that there was a positive relationship between students' motivation to achieve academic success and thinking styles, similar to the findings of this study. In another study that overlaps with the findings of this study, Nikoupoor et al. (2012) concluded that there was a moderate positive relationship between learning motivation and thinking styles. Fan and Zhang (2009) also reported that there was a relationship between motivation and thinking styles in their research. On the other hand, in contrast with this result, the findings of Fan and Zang (2009) in their study also signify a negative relationship between some lower dimensions.

5. It was determined that the relationship between sub-dimensions of motivation to learn Turkish and the thinking styles of the foreign students was at a moderate level. When the relationship between the sub-dimensions of the scales were examined according to their correlation values, significant relationships were found between legislative and anarchic thinkers and the sub-dimension of research; between the sub-dimension of performance and executive, monarchic, hierarchic, anarchic thinkers; between the sub-dimension of communication and legislative and hierarchic thinkers; between the sub-dimension of cooperation and executive, judicial and hierarchic thinkers, and between the sub-dimension of

individual achievement and judicial, monarchic, hierarchic thinkers.

6. It is one of the results of the research that there was a significant difference between genders with regard to motivation to learn Turkish. Female students were more motivated to learn Turkish than their male counterparts. In other words, female and male students have different levels of motivation while learning Turkish as a foreign language. In parallel with this result, Nikoupoor et al. (2012) also determined that there was a significant difference between gender and motivation towards academic achievement.

In another study, Öztürk and Gürbüz (2013) also compared the motivation of female and male students learning a foreign language and found that female students had a higher motivation to learn a foreign language than male students. Similarly, Gardner and Lambert (1972) investigated a group of Canadians learning French as a second language and determined that female students were more motivated than male students. In addition, Sung and Padilla (1998) examined the motivation of students learning Chinese or Korean as a foreign language and determined that girls had a higher level of motivation than boys.

This finding, which is also supported by the results of similar studies in the literature, proves that gender difference is a determining variable for motivation. It has an effect particularly in favour of girls.

There may be some additional reasons why gender is a determinant for motivation. Socio-cultural factors may be among these. For example, Kobayashi (2002) associated the reason that Japanese female students learned English and had a higher level of motivation with their perception of learning a foreign language as a means of setting themselves apart from society which marginalizes women. Thus, he indicated that women had a higher desire to learn English at school. In another study, Ryan (2009) revealed that women in Japan learned English to express themselves more freely and noted that Japanese restricted women in some aspects of life.

Another social factor that may cause differences in motivation between genders is the perception individuals have of a language. In their studies, Dörnyei et al. (2006), and Williams et al. (2002) emphasized that the reason that male students were less motivated to learn French than female students was that French was generally considered an effeminate language.

The majority of foreign students who participated in the study were Syrian immigrants. It was observed that immigrant women needed to know Turkish more than men in order to function socially in Turkey. This situation also affected their motivation to learn.

## Conclusion

When all these results are evaluated in general, it can be said that foreign students' motivation to learn Turkish

varied according to their thinking style profiles and their gender; the students' thinking styles and genders had an influence on their motivation to learning, and that the motivation to learn changes as the thinking style profile changes.

## Suggestions

Thinking styles were used as independent variables in this study. In other research new variables such as learning styles or metacognitive strategies could be used in addition to thinking styles. Learning motivation was also used as a dependent variable in this study. Attitudes, perceptions and belief scales could also be added to this variable

## CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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