

The Relation between the History Teacher Candidates' Learning Styles and Metacognitive Levels

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ABSTRACT In this study it is aimed to determine learning styles and the metacognitive levels of the History teacher candidates, and examine the relation between these two variations. The study was carried out with 163 pre-service teachers having education in History teaching at the faculty of Education at a state university in Turkey. Data were collected through using "Learning Style Scale" and "Metacognitive Activity Inventory". Correlation Analysis Technique was used for analyzing the data. In the study, it was found out that there was a positive relation between metacognitive levels of the teacher candidates and independent, collaborative, dependent and participant learning styles and a negative relation between avoidant learning styles.

INTRODUCTION

History learning requires searching, evaluating the reasons of the events from a number of historical sources, and commenting on the events according to one's cognitive component. Therefore, students face challenges while identifying strategies to pursue their own progress, determine their learning goals and reach those goals (Spoehr and Spoehr 1994; Greene et al. 2010). This is why both history students and teachers need information and skills which will help reach the required goals in an effective and productive way in controlling learning process.

The ways individuals prefer to detect and use the knowledge vary (Chabalengula et al. 2012). While some individuals need to concentrate on data and events, others can take in theoretical and mathematical models more. These differences determine the learning styles of the students. Thus, it is required that learning styles of the students be taken into consideration while designing leaning environment (Kilic and Karadeniz 2004). According to Dunn and Dunn (1993), a learning style is a way of learning which differs from one individual to another, contains facing new information and taking it into memory (Dunn and Dunn 1993). In the studies related to educa-

tion, there are many works showing that teaching in which learning styles are regarded has a lot of positive advantages in terms of learning (Markovic and Jovanovic 2012; Kolb and Kolb 2005; Busato et al. 2000; Carver et al. 1999; Lu et al. 2003; Vermunt 1996).

Recently, another of the issues focused on in education process has been through which ways the individuals acquire information and whether they are aware of ways of "learning to learn". Considering that teachers should act as guides in teaching process, it is vital that students be taught of learning ways so as to acquire information in order (Cakiroglu 2007). If a teacher knows strong and weak points of the students and reacts accordingly, memorability and success can increase and this may provide a basis for skills of "learning to learn" (Coffield et al. 2004). In education studies, awareness of the students on their learning and controlling their learning process can be defined through metacognition.

Several works in literature show that metacognition supports learning (Baird 1986; Biggs 1988; Vollmeyer and Rheinberg 1999; Simon and Bjork 2001; Gregory et al. 2006; Logan et al. 2012; Saribas et al. 2013). During the last three decades metacognition has become important for cognitive development (Gokalp and Kirbulut 2013). According to Flavell (1985), metacognition is a notion which determines individuals' planning their learning, maintaining their learning process in terms of this plan and getting aware of acquisition. Metacognition helps students transfer monitoring learning responsibility from teacher

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to students as well as influencing their sense of self and motivation positively (Paris and Winograd 1990). As the students having metacognition can control their learning process, they have capacity to choose and apply methods which would carry them into success under new circumstances they have faced, and to evaluate their learning during those applications (Drmrod 1990).

Different studies analyzing learning styles of teacher candidates and their metacognitive levels have been carried out in Turkey and impacts of those on attitude and academic success towards various courses have been established.

While determining learning styles of teacher candidates, different scales of learning styles were employed. Bilgin and Bahar (2002) using Learning Style Scale belonging to Grasha and Riechmann examined effect of learning styles of teacher candidates on attitude towards science in their study on teacher candidates having education in different branches at primary school education. Uzuntiryaki et al. (2003) checked the influence of learning styles of students on their success in chemistry and attitude towards chemistry, and found out that learning styles of the students have impact on their success and attitude. Bilgin and Bahar (2008) examined the relation between learning and teaching styles of classroom teachers. Tuysuz and Tatar (2008) analyzed effect of learning styles of teacher candidates on their attitude and success towards chemistry in the study held on classroom teacher candidates. At the end of the study, they found out that learning styles of teacher candidates had influence on their success and attitude towards chemistry. Tatar et al. (2008) examined the relation between learning styles of chemistry teacher candidates and their academic success. It was stated that there is a positive correlation between academic success and learning styles of the participants. Karakuyu and Tortop (2010) analyzed the impact of learning styles of classroom teacher candidates on their success and attitude towards physics. The study showed that learning styles influenced teacher candidates' success in physics and their attitude towards the course. Cayci and Unal (2007) having used Kolb Learning Inventory examined their concept learning levels according to their learning styles classroom teacher candidates had. Bahar et al. (2009) analyzed the impact of teacher candi-

dates' learning styles on their academic success. Demir (2006), Kaf Hasirci (2006), Karademir and Tezel (2010) and Can (2011) determined teacher candidates' learning styles who studied at Department of Primary Education by using Kolb Learning Inventory while Mutlu (2008) worked with the ones studying at different programs in faculty of education. On the other hand, Babadogan (2009) identified learning styles of students at department of English Language Teaching by employing Dunn and Dunn Learning Style Inventory. In addition, Yenice and Saracoglu (2009) intended to find out the relation between learning styles of classroom teacher candidates and those of science teacher candidates through Gregorc Learning Style Inventory. In this study, it was discovered that there was not a meaningful relation between learning styles of classroom teacher candidates and those of science teacher candidates.

In Turkey, it is possible to mention the studies carried on metacognition as in the following: the one for determining metacognitive levels of teacher candidates by Tuysuz et al. (2008). It was realized that as class levels of the students studying in primary education increased, their metacognitive levels also got high and there were no differences among their metacognitive levels in terms of their gender. Akturk and Sahin (2011) checked the studies on metacognitive effects on computer teaching.

Baltaci and Akpınar (2011) analyzed the impact of web based teaching on metacognitive awareness levels and found that they had no impacts. Ozsoy et al. (2009) examined the relation between metacognitive levels of 5th grade students. It was recognized that there was a meaningful relation between metacognition of successful students and their study habits and attitudes, whereas there were no relations between metacognition of mean and under achievers and their study habits and attitudes. Cakiroglu (2007) explained what metacognition was, its extents and its development in children and their metacognitive skills. Melanlioglu (2012) tried to determine how metacognitive strategies could be employed on assessment and evaluation of listening skill. Candan (2005) dealt with the relation between history teaching and metacognition which is one of basic principles and leads thinking activities in history teaching.

Taking metacognition as theoretical notion, Ozsoy (2008) made suggestions in terms of edu-

cation by taking development levels of the students into consideration. Furthermore, Yavuz and Memis (2009) examined sense of self-efficacy of teacher candidates and their metacognition awareness in terms of preferring teaching profession in a meaningful way in metacognitive awareness of teacher candidates.

Kaya and Firat (2011) analyzed metacognitive skill levels of primary education students. While there is a meaningful difference between their metacognitive grades and schools, genders, education levels of their mothers and fathers and academic success, a meaningful difference did not appear between class levels. Kiremitci (2011) checked the relation between metacognitive awareness of physical education teacher candidates and their problem solving skills, and found that their metacognitive awareness levels had impact on problem solving skills of physical education teacher candidates.

Bagceci et al. (2011) determined that metacognitive awareness levels of primary education students had positive influence on their academic successes. Tok et al. (2010) made research on the impact of metacognitive awareness and learning strategies on the success of students in distant education class and metacognitive awareness and learning awareness had a dominant role in their achievement. Ozsoy (2006) observed the role of problem solving skills of students and their metacognitive skills in improving their problem solving successes.

Demir and Ozmen (2011) analyzed metacognitive levels of university students in terms of different varieties. Yurdakul and Demirel (2011) made research on the contribution of constructive learning approach to the metacognitive awareness and showed that application of constructivist program design was more effective than traditional approach in developing metacognitive awareness of the students.

The principle "learning to learn" is also prioritized in History teaching program stressing individual difference of the students in order to provide development of notion, information, value and (MEB 2007). Learning styles, indicating the ways individuals follow while learning and varying in each individual and metacognitive competence, insuring their learning to learn; in other words, determining the dimension of learning awareness, are obvious to be two key factors supporting each other and completing learning process.

From this point of view, in this study, identification of learning styles and metacognitive levels of the History teacher candidates and examination of relation of these two variations are aimed. Therefore, within this study;

- ♦ What are the learning styles of candidates?
- ♦ How are metacognitive levels of History teacher candidates?
- ♦ What kind of relation between learning styles and metacognitive levels do History teacher candidates have?
- ♦ Is there a statistically meaningful difference among learning styles depending on gender of History teacher candidates?
- ♦ Is there a statistically meaningful difference in learning styles according to class levels History teacher candidates have?
- ♦ Is there a statistically meaningful difference in their metacognitive levels due to gender of History teacher candidates?
- ♦ Is there a statistically meaningful difference in their metacognitive levels according to class levels History teacher candidates have?

In the study, it is aimed to find answers of this questions. Studies effective factors in education are expected to give awareness to teachers, researchers and the ones shaping education policy in specifying and applying learning strategies necessary for a more active learning, and to bear a welding quality.

METHODOLOGY

A major purpose of correlational research used in this study is to clarify and identify relationships among students' metacognitive level and learning styles.

Sample

This study was carried out on 163 teacher candidates studying in History teaching program in Faculty of Education, Ahmet Kelesoglu, at Necmettin Erbakan University during fall term in 2011-2012 academic year. Sample of the study was determined by using sample on purpose from in coincident sampling techniques.

Data Collection Instrument

In order to collect data, "Metacognition Activity Inventory", Grasha and "Learning Style Scale" were employed.

Metacognition Activity Scale

In this study, it was used so as to define meta-cognition skill levels of History teacher candidates. "Metacognition Activity Inventory" originally developed by Cooper et al. (2008) and adapted to Turkish by Tuysuz et al. (2008) was used. In this study, Cronbach was taken as reliability coefficient and α -internal coefficient of consistence as 0.732. Scale was composed of 27 items.

Learning Style Scale

In the study, Learning Style Scale originally developed by Grasha and Reichmann (1982) and adapted to Turkish by Uzuntiryaki et al. (2003) was employed.

Grasha and Reichmann defined 6 different learning styles such as "Independent, Avoidant, Collaborative, Dependent, Competitive and Participant". Cronbach alpha was considered as reliability indicator in the study and internal reliability coefficients as 0.68.

Analysis of Data

Analysis of data gained in the study was made using statistical program named as SPSS/PC. Frequency analysis, independent gender variety of groups' t-test, variance on class levels were done.

RESULTS

Arithmetical mean depending on metacognition and each learning styles of History teacher candidates attending the study and standard deviation values are given in Table 1.

Arithmetic mean related to metacognition of History teacher candidates was assessed as

Table 1: Arithmetical mean and standard deviation values for metacognition and learning styles

Variance	N	Mean	Std. deviation
Metacognition	163	99.32	13.25
Learning Style			
Independent	163	3.61	0.53
Avoidant	163	2.92	0.47
Collaborative	163	3.71	0.63
Dependent	163	3.67	0.50
Competitive	163	3.19	0.61
Participant	163	3.49	0.56

99.32. While arithmetic mean of independent learning style was taken as 3.61, for avoidant as 2.92, for collaborative as 3.71, for dependent as 3.67, for competitive as 3.19 and for participant as 3.49.

Grasha and Reichmann (1982) determined 3 different levels such as low, middle and high for each learning style. Arithmetic mean values were calculated regarding items found in scales for each learning styles. These values are displayed in Table 2.

Table 2: Average limit values for each learning style of Grasha and Reichmann

	Low	Middle	High
Independent	[1.0-2.7]	[2.8-3.8]	[3.9-5.0]
Avoidant	[1.0-1.8]	[1.9-3.1]	[3.2-5.0]
Collaborative	[1.0-2.7]	[2.8-3.4]	[3.5-5.0]
Dependent	[1.0-2.9]	[3.0-4.0]	[4.1-5.0]
Competitive	[1.0-1.7]	[1.8-2.8]	[2.9-5.0]
Participant	[1.0-3.0]	[3.1-4.1]	[4.2-5.0]

Analysis of data gained through applying it to teacher candidates is presented in Table 3. While levels of collaborative and competitive learning styles of History teacher candidates were considered as high in the study, it was realized that levels of avoidant, participant, dependent and independent learning styles of History teacher candidates were found middle. This result shows that teacher candidates are susceptible to activities made in groups and are in cooperation with other members taking part in learning environment.

Table 3: Analysis results of learning style scale

	N	X	Level
Independent	163	3.61	Middle
Avoidant	163	2.92	Middle
Collaborative	163	3.71	High
Dependent	163	3.67	Middle
Competitive	163	3.19	High
Participant	163	3.49	Middle

Arithmetic mean was assessed for each student in order to identify learning styles of History teachers having attended in the study. Learning style with the highest arithmetic mean was defined as the learning style participants had. Frequency distribution related to learning style History teacher candidates taking part in the study is given in Table 4.

History teacher candidates have 28.2 % independent, 3.7 % avoidant, 39.9 % collabora-

Table 4: Frequency analysis results on learning style history teacher candidates had

	<i>F</i>	<i>%</i>
Independent	46	28.2
Avoidant	6	3.7
Collaborative	65	39.9
Dependent	27	16.6
Competitive	6	3.7
Participant	13	8
Total	163	100

tive, 16.6 % dependent, 3.7 % competitive and 8 % participant learning style.

Totally, dependent groups' t-test was done so as to determine whether there is a statistically meaningful difference between learning styles of History teacher candidates related to gender and findings are presented in Table 5.

A meaningful difference for female teacher candidates in collaborative and dependent learning styles in the analysis made on the gender of History teacher candidates was realized.

Variance analysis (One Way ANOVA) was carried to decide whether there is a statistically meaningful difference in value gaining levels defined in the scale according to class levels History Teacher candidates and findings gained are presented in Table 6.

A statistically meaningful difference was detected between the classes for dependent and competitive learning styles in the analysis according to class levels History teacher candidates. Difference control analysis was made using Tukey test so as to determine the source of this meaningful difference and findings gained are presented in Table 7.

Table 5: Independent t-test analysis results of learning style scale gender variation

		<i>N</i>	<i>X</i>	<i>S</i>	<i>t</i>	<i>p</i>
<i>Independent</i>	Male	89	35.96	5.94	-0.456	0.649
	Female	74	36.35	4.54		
<i>Avoidant</i>	Male	89	29.42	4.80	0.524	0.601
	Female	74	29.02	4.70		
<i>Collaborative</i>	Male	89	36.18	6.47	-2.300	0.023
	Female	74	38.37	5.51		
<i>Dependent</i>	Male	89	35.81	4.28	-2.810	0.006
	Female	74	37.97	5.46		
<i>Competitive</i>	Male	89	31.42	6.40	-1.302	0.195
	Female	74	32.66	5.58		
<i>Participant</i>	Male	89	34.56	5.65	-1.014	0.312
	Female	74	35.45	5.47		

Table 6: Variation analysis results on class levels

		<i>Sum of squares</i>	<i>Df</i>	<i>Mean of squares</i>	<i>F</i>	<i>p</i>
<i>Independent</i>	Between groups	289.982	4	72.496	2.645	0.036
	Inside group	4303.752	157	27.412		
	Total	4593.735	161			
<i>Avoidant</i>	Between groups	46.229	4	11.557	0.506	0.731
	Inside group	3585.382	157	22.837		
	Total	3631.611	161			
<i>Collaborative</i>	Between groups	87.428	4	21.857	0.575	0.681
	Inside group	5971.017	157	38.032		
	Total	6058.444	161			
<i>Dependent</i>	Between groups	186.463	4	46.616	1.935	0.107
	Inside group	3783.216	157	24.097		
	Total	3969.679	161			
<i>Competitive</i>	Between groups	440.306	4	110.077	3.161	0.016
	Inside group	5467.669	157	34.826		
	Total	5907.975	161			
<i>Participant</i>	Between groups	280.913	4	70.228	2.336	0.058
	Inside group	4718.989	157	30.057		
	Total	4999.901	161			

Table 7: Difference control analysis results of Tukey test on class levels

	(I)	(J)	Difference (I-J)	p
Independent	5	1	3.127	0.047
Competitive	2	4	4.601	0.045

A statistically meaningful difference was found in favor of 5th grade between 5th and 1st classes for independent learning styles in the analysis according to class levels History teacher candidates studied while in favor of 2nd grade between 2nd and 4th classes for competitive learning styles.

Considering total points, independent groups' t-Test was done in order to determine whether there was a statistically meaningful difference between metacognition levels depending on genders of History teacher candidates and findings are given in Table 8.

Table 8: Independent t-test analysis results of metacognitive activity inventory gender variation

	N	X	SS	t	p
Male	89	97.53	11.81	-1.591	0.114
Female	74	100.69	13.26		

A statistically meaningful difference was not detected between metacognitive levels related to genders of History teacher (p>0.05).

Taking total points into consideration, variance analysis was carried to determine whether

Table 10: Tukey analysis results of metacognitive activity inventory class variation

(I) class	(J) class	Mean difference (I-J)	Std. error	p
1	2	10.399	3.178	.011
	3	9.358	3.062	.022
	5	10.083	2.971	.008

there is a statistically meaningful difference between metacognitive levels on class levels History teacher candidates studied and findings are presented in Table 9.

A statistically meaningful difference was found between metacognitive levels on class levels History teacher candidates studied (p<0.05). Difference control analysis was made using Tukey test to define the source of this difference and findings are given in Table 10.

A statistically meaningful difference was found in favor of History teacher candidates studying 1st grade between History teacher candidates at 1st class and those at 2nd, 3rd and 5th classes.

In the study, the relation between metacognitive levels and learning styles of History teacher candidates was assessed employing Pearson correlation and findings are presented in Table 11.

A meaningful relation was detected between metacognitive levels of History teacher candidates and their independent, collaborative, dependent and participant learning styles as 0.01

Table 9: Anova analysis results of metacognitive activity inventory class variations

	Sum of squares	df	Mean square	F	p
Between groups	2824.139	4	706.035	4.914	.001
Within groups	22701.640	158	143.681		
Total	25525.779	162			

P<.05

Table 11: Pearson correlation analysis results

	Avoidant	Collaborative	Dependent	Competitive	Participant	Metacognition
Independent	.002	.239**	.286**	.097	.402**	.380**
Avoidant		-.261**	.084	-.024	-.401**	-.197*
Collaborative			.381**	.249**	.538**	.259**
Dependent				.215**	.351**	.314**
Competitive					.363**	.090
Participant						.460**

** . Correlation is significant at the 0.01 level.*. Correlation is significant at the 0.05 level.

positively while 0.05 negatively between their metacognitive level and avoidant learning style. Besides, a meaningful relation as 0.01 negatively between avoidant learning styles of History teacher candidates and their collaborative and participant learning styles. In addition, a meaningful relation as 0.01 positively was found between collaborative learning style and dependent, competitive and participant ones; and between dependent learning style and competitive and participant learning style.

DISCUSSION

In the study, while Collaborative and Competitive learning levels of History teacher candidates were detected as high, Avoidant, Participant, Dependent and Independent learning levels were found middle. This result resembles the results of studies made by Bilgin and Bahar (2008), Tatar et al. (2008), Tuysuz and Tatar (2008). Bilgin and Bahar (2008) found competitive and collaborative learning style levels of teachers as high in the studies they carried out. Likewise, Tatar et al. (2008) detected that learning style levels of Chemistry teacher candidates are high in competitive and collaborative; middle in avoidant, participant, dependent and independent in their studies. Tuysuz and Tatar (2008) found while competitive and collaborative learning levels were high, other styles were detected as middle in the study made on 186 class-teacher candidates. In the study they carried out on 168 class teacher candidates, Karakuyu and Tortop (2010) realized that avoidant and dependent learning styles are high, competitive, dependent and collaborative learning styles were middle and participant learning style was low through the learning style scale they applied.

Frequency analysis was held so as to determine which learning style of History teacher candidates were more dominant, and 28.2% of History teacher candidates were recognized to have independent learning style, 3.7% avoidant, 39.9% collaborative, 16.6% dependent, 3.7% competitive and 8% participant. In the study they made on 186 class teacher candidates, Tuysuz and Tatar (2008) found out that 16.1% of 186 teacher candidates had independent learning style, 4.3% avoidant learning style, 39.2% collaborative learning style, 25.3% dependent learning style, 5.4% competitive learning style and 9.7% participant learning style. Tatar et al. (2008) found out that 19.6% of 112 Chemistry teacher candidates had independent learning styles, 9.8% avoidant learn-

ing style, 31.3% collaborative learning style, 6.3% dependent learning style, 14.3% competitive learning style and 18.8% participant learning style. Karakuyu and Tortop (2010) 17.7% of 168 class teacher candidates had independent learning style, 4.7% avoidant learning style, 36.8% collaborative learning style, 23.6% dependent learning style, 7.5% competitive learning style and 6.7% participant learning style.

In the analysis made according to class levels History teacher candidates studied, a statistically meaningful difference was detected between classes for independent and competitive learning styles. In the analysis made according to class levels History teacher candidates studied, a statistically meaningful difference was found between 5th and 1st grades in favor of 5th class, between 2nd and 4th grades in favor of 2nd class. It can be thought to result from the fact that 1st class students just finished high school and 5th grade students were accustomed more. Hence, students having independent learning style give importance to teachers guiding but not the ones traditionally teaching. While Karademir and Tezel (2010) using different learning style inventory type concluded that learning styles differ according to class levels, Kaf Hasirci (2006) showed that learning styles did not differ in the class level.

Teachers should be aware of which learning style students have. Therefore, learning styles had better be defined by applying learning style inventory to all classes at the beginning of academic year, appropriate teaching methods for these teaching styles should be developed and course materials prepared according to different learning styles have to be supplied to teachers (Tatar and Tatar 2007). Defining learning styles should provide that academic success of individuals has turned as more successful and individuals may design their private education experience (Peker 2003). It is crucial that individuals recognize their individual differences adapting to contemporary necessities and providing social development (Karakuyu and Tortop 2010).

A statistically meaningful difference could not be found between metacognitive levels of History teacher candidates according to their gender. Tuysuz et al. (2008) showed that there were no statistically meaningful differences between grade average of male and female students gained in metacognitive activity scale in their study. Kaya and Firat (2011) found a meaningful difference in favor of males in terms of their gender in metacognitive skill of 5th and 6th grade stu-

dents at primary education. What is more, it was defined that the students whose academic successes were high had more metacognitive skills.

As of class levels History teacher candidates studied, a statistically meaningful difference was detected between their metacognitive levels. A meaningful difference was found in favor of teacher candidates studying at 1st class between teacher candidates at 1st grade and the ones at 2nd, 3rd and 5th classes. Tuysuz et al. (2008) realized that the more class levels of teacher candidates studying at class teaching program increased, the more their metacognitive levels got high. Furthermore, a meaningful difference was detected between grade average 2nd, 3rd and 4th grade students gained from metacognitive activity scale.

Teachers need to create an environment making primarily learning process easy and so have to change them into individuals having a great role in their learning by avoiding avoidant learning in order to form a permanent metacognitive learning. Teachers have to use methods and techniques enabling metacognitive awareness and metacognitive strategies use of the students so that students could control their learning process (Akturk and Sahin 2011). Basic metacognitive strategies are classified into 3 groups as relating new information with the existing one, choosing, planning and monitoring thinking strategies, assessing thinking process. Metacognitive strategies aims that students could do their homework actualize goals related to process and content, employ problem solving and researching activities. All these cognitive approaches can be used in proof and notion based learning in teaching History (Candan 2005). There is a dominant impact of metacognitive awareness levels on problem solving design of individuals (Flavel 1976; Kiremitci 2011).

A meaningful relation was detected between metacognitive levels of History teacher candidates and independent, collaborative, dependent and participant learning styles as 0.01 positively, between those and avoidant learning style as 0.05 negatively. A meaningful relation was found between avoidant learning style of teacher candidates and collaborative and participant learning styles as 0.01 negatively. A meaningful relation was identified collaborative learning style and dependent, competitive and participant ones and between competitive learning style and participant learning style as 0.01 positively.

Ozsoy et al. (2010) mentioned that teacher training programs in Turkey were not sufficient

in developing metacognitive levels, development and support of those skills should be provided more, and this will be useful for professional and individual development for teacher candidates. It is known that teachers with high metacognitive levels will be more efficient in increasing metacognitive levels of students (Kiremitci 2011), students with high metacognitive levels will be more effective in terms of academic success (Bagceci et al. 2011) having metacognitive skill contributes to increase in cognitive reliance of students by decreasing corrosion in education process (Sigler and Tallen-Runnels 2006). Students have learning necessities for developing their self control and keep lively so as to maintain their academic development better. Teachers should be well aware of this fact and design education environment according to this (Saban and Saban 2008).

CONCLUSION

The results of this study show that History teacher candidates are inclined to team-work and group-work and cooperate with other members in the learning environment. Teacher candidates prefer to be continuously active in learning activities. When characteristics of individuals having collaborative learning are considered, they are known to need external motivation in order to obtain learning on purpose and reach success. Therefore, it can be said that female students prefer cooperation more. An individual having dependent learning style may expect their teacher to identify homework, detail and direction as well as preferring a learning environment constructed to contain exam, specific skills and homework directed by their teacher. Thus, female students can be said to prefer dependent work more.

RECOMMENDATIONS

Specialized courses should be placed in faculty of Education and in service training need to be given to history teachers working actively so that History teacher candidates could lead teaching appropriate for learning styles. Students can give shape to their future lives positively as their learning styles are determined.

Learning styles should be known for more successful academic success of individuals. So it is requested that individuals be aware of their learning styles. Teachers need to create an envi-

ronment making primarily learning process easy and so have to change them into individuals having a great role in their learning by avoiding avoidant learning in order to form a permanent metacognitive learning. Teachers have to use methods and techniques enabling metacognitive awareness and metacognitive strategies use of the students so that students could control their learning process

NOTE

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