

## **The Role of Self-Efficacy and Educational Beliefs in Democratic Values: The Case of Turkish Pre-Service Teachers**

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The purpose of this study is to examine the role of self-efficacy and educational beliefs in relation to democratic values, while focusing on Turkish pre-service teachers. 382 pre-service teachers from a public university in Turkey have voluntarily participated in this study and responded to a series of research instruments provided by the Educational Belief, Teacher Sense of Self-Efficacy and Democratic Values Scales. The results revealed that higher self-efficacy belief is positively associated with higher democratic values among pre-service teachers who endorse contemporary philosophical approaches to education.

*Keywords:* higher education, democracy, philosophy of education, teacher education

### **Introduction**

In recent years, there is a growing concern that there has been a gradual decline in the quality of democracy around the world (Skaaning, 2020; Mechkova, Lührmann, & Lindberg, 2017). Democracy should not be considered as just a political system, it also refers to a way of life managed by the belief that all people are equal and can work together, despite political, racial, religious or class differences (Dewey, 1940; 2007). From this perspective, the emergence and survival of a democratic society is only possible with the presence of citizens who have internalized democratic values, and this is the responsibility of educational institutions. Accordingly, in a democratic society, it is expected to have an education system that consists of educational environments in which democracy is experienced by all the participants, teachers who manages the classroom and educational processes in line with democratic values, and students who supposedly develop and realize democratic values in their actions. Considering the central role of teachers in education, it is also important to emphasize that they have influences not only on students' academic knowledge and skills but also on their attitudes and ways of human interactions in social settings. If an educational environment is organized and run by democratic values, it becomes possible to develop democratic minded individuals. For this reason, a teacher who intends to create a democratic classroom environment needs to give priority to democratic values in the way the teacher manages the classroom. Democratic values such as freedom, equality, respect and justice are to be embraced and put into practice by teachers in an educational democratic environment (Büyükdüvenci, 1990; Çelik, 2016; Kesici,

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2008; Kıncal & Işık, 2003; Parker, Barnhardt, Pascarella, & McCowin, 2016; Shechtman, 2002; Selvi, 2006). Therefore, it is important to examine the democratic values of pre-service teachers themselves and the factors affecting them, as they have the potential to influence their future practices. Regarding this current study, focusing on democratic educational environments and teacher characteristics, it is assumed that there may be a reliable relationship between pre-service teachers' self-efficacy beliefs, their attitudes toward democratic values and the philosophical approach to education that they embrace. In this regard, this study aims to contribute to the existing literature by analyzing the relationship between pre-service teachers' democratic attitudes, their perceptions of self-efficacy and their beliefs about and tendencies toward educational philosophies.

## Literature Review

### Teachers' Educational Beliefs

Teachers are centrally important for an education system to be put effectively into practice in accordance with the underlying philosophy of education that frames its aims, contents, processes as well as the way how it conceptualizes the school, teacher, student and educated person. As Smith (1962) highlights, to be a qualified teacher one needs to be capable of making philosophical analyses as well as being able to interpret philosophical approaches to education. Developing a teaching philosophy may not be an easy task, however, it can be regarded as a must for an effective teacher (Ozmon & Craver, 1981). Teachers may embrace different philosophical approaches to education. Doubtless, without democratic minded teachers who reflect democratic values in their actions, it is less likely to educate democratic minded students. Therefore, educating capable teachers is a must for a society and its education system in order to advance its democratic social order. In other words, a democratic education system needs teachers that are capable of acquiring the fundamental philosophy of the education system and acknowledge its aims and purposes as well as the ways how it operates with respect to classrooms, schools and the society. Previous studies on prospective and pre-service teachers' educational beliefs and philosophical approaches showed that there is a general tendency toward more democratic and student-centered approaches to education in line with progressive and existential educational approaches (e.g., Çalışkan, 2013; Kanatlı & Schreglman, 2014; Weshah, 2013). Campbell and Horowitz (2016), for example, found that completion of college positively affects students' democratic attitudes, such as support for civil liberties and beliefs about gender egalitarianism. In addition, as Simmie and Edling (2018) provides, democracy oriented education policies encourage teachers to implement classroom practices that are more related to progressive and reconstructionist educational philosophies. Moreover, as shown by Telese (1996), as teachers become familiar and engaged with more student-centered educational practices, their philosophical perspective and educational beliefs become more progressive. Furthermore, as pre-service teachers' field experiences broaden their beliefs about

teaching philosophy show changes from essentialism to progressivism (Weshah, 2013).

### **Teacher Self-Efficacy**

Self-efficacy, defined as “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances” Bandura (1986 p. 391) is grounded in social-cognitive theory. Social cognitive theory emphasizes the decisive role of personal evaluations about capabilities on emotions, thoughts, and actions. Therefore, efficacy beliefs play crucial role in human functioning by providing a foundation for motivation and success (Bandura, 1997). Bandura (2012) conceptualizes self-efficacy as a multidimensional structure that includes wide variety task-specific efficacy beliefs. Accordingly, teacher self-efficacy is framed as “a teacher’s belief in his or her ability to complete the steps required to accomplish a particular teaching task in a given context” (Jamil, Downer, & Pianta, 2012). A capable teacher, as stressed here, is supposed to teach effectively while expressing democratic values in his/her actions confidently, such as being tolerant, informative, respectful and encouraging. In other words, a capable teacher in a democratic environment is expected to have high self-efficacy beliefs.

It is primarily because, an individual can develop a more general self-efficacy belief based on his/her self-efficacy beliefs developed in different subjects and can assess his/her efficacy in another subject accordingly (Zimmerman, 2000). In this sense, a qualified teacher capable of making philosophical analyses and interpreting philosophical approaches to education, as mentioned, must have intellectual skills that allow him/her to analyze, understand and realize what a democratic philosophy of education requires him/her to put into practice in educational environments. Also, those skills must lead him/her to help children to do better both in academically and morally, because other than being a static or unchangeable personal trait, self-efficacy is a multidimensional, improvable, generalizable and transferable set of beliefs (Bandura, 1997, 2006). Similarly, even among individuals who have similar levels of professional skills, belief in one’s self-efficacy plays an important role in one’s success that differentiates him/her from others (Bandura, 1997; Driscoll, 2000). In fact, when individuals believe that they can reach desired outcomes, they become more intrinsically motivated and put more effort to reach the outcomes (Bandura, 1997; Siwatu, 2007). It is also important in the sense that a teacher with a higher self-efficacy belief can not only set higher educational goals both for himself/herself and students, but also work harder to achieve those goals regardless of any obstacles (Ross, 1994). Accordingly, teachers’ self-efficacy beliefs play important roles in students’ educational achievements (Brownell & Pajares, 1996; Gavora, 2010; Guo et al., 2009; Mojavezi & Tamiz, 2012). For example, self-efficacy is strongly associated with productive teaching (Abu-Tineh, Khasawneh & Khalailah, 2011) and teachers’ high self-efficacy beliefs contribute to students’ motivation and academic achievements (Cheung, Richler, Palmeri, & Gauthier, 2008). Also, Ilgaz, Bülül and Çuhadar (2013) found that there is a positive relation between pre-service teachers’ perception on personal endeavors and educational beliefs associated with contemporary approaches to education. A

capable teacher as framed here, therefore, should also have higher self-efficacy beliefs.

Overall, it is argued that a capable teacher in a democratic society is to (1) have high self-efficacy, (2) adopts a philosophical approach to education more compatible with democratic values other than alternatives and (3) shows positive attitudes toward democratic values. In this regard, this study examines the relationship between these three aspects of teacher candidates and provides, in accordance with the results, a discussion on and some suggestions for the teacher training programs. It may be important to note that some studies have been conducted on these aspects separately or one with another aspect while focusing on different variables (e.g., Aydın & Boz, 2010; Black, 2015; Çalışkan 2013; Kanatlı, & Schreglman, 2014; Smothers, Colson, & Keown, 2020). However, and different from previous studies, this current study bears an importance since it takes all these three aspects (self-efficacy beliefs, democratic values, and educational beliefs derived from philosophical approaches to education) altogether into consideration and provides an analysis on them.

### **The Purpose of Study**

With increasing empirical attention in teacher training programs, teacher self-efficacy and educational belief has been documented as a critical factor on the formation of democratic classroom environment (e.g., Aydın & Boz, 2010; Ilgaz, Bülbül & Çuhadar, 2013; Mojavezi & Tamiz, 2012). Previous studies indicate that teachers with higher self-efficacy beliefs are more successful to build warm, close, and democratic teaching and learning settings so to increase students' academic achievement (e.g., Bandura, 1997; Siwatu, 2007; Topkaya & Yavuz, 2011). Accordingly, it may be argued that training highly efficacious teachers may lead to successful classroom management skills, low student disruptive behaviors, and positive attitudes toward democratic values (Abu-Tineh, Khasawneh & Khalaileh, 2011; Cheung, Richler, Palmeri, & Gauthier, 2008; Kelly, 2002). Therefore, there is a need to document and understand the role of teachers' self-efficacy and educational beliefs in the development of democratic values. In this sense, the hypotheses of the current research can be stated as follows:

- H1. There are significant difference between democratic value groups as defined below (i.e., low, moderate, high) in terms of pre-service teachers' sense of self-efficacy and educational beliefs.
- H2. There are significant relationships between pre-service teachers' sense of self-efficacy beliefs, democratic values, and educational beliefs.
- H3. Pre-service teachers' sense of self-efficacy and educational beliefs are significant predictors in their democratic values.

## **Methodology**

### **Participants and Sampling**

The sample consisted of 382 pre-service teachers (70.9% female, 29.1% male), who are enrolled in teacher education programs (i.e., Preschool, Mathematics, Science and Physical Education programs) at a large public university in Turkey. The study used the convenience sampling method to gather participants (Teddlie & Tashakkori, 2009). In other words, the researchers used a non-probability sampling technique where participants were selected because of their convenient accessibility. However, Karadeniz Technical University has the largest teacher training programs in the region. Therefore, this university has very diverse student population. In this sense, the participants' age ranged from 19 to 26 ( $M=22.03$ ,  $Sd=4.73$ ). Also, their years of teaching experience demonstrated that 43.4 % had between 5 and 7 weeks of experience, 36.5% had 8 and 24 weeks of experience, and 20.1 % had more than 24 weeks of experience.

### **Procedures**

Before conducting the study, the researchers contacted the university and permission was granted for the current research. Then, pre-service teachers were informed about the purpose of the study, duration of participation, potential risk and benefits, and recruitment procedures. Once the participants consented to allowing the researchers to collect the data via paper and pencil surveys, the researchers gave the survey package to the volunteers. Pre-service teachers completed the study measures in their scheduled class period and returned the forms to the researchers.

### **Instruments**

The participants responded to a series of items in the research tools. The Democratic Values Scale (DVS) was designed to measure the degree of teacher candidates' democratic values on issues related to educational life (Selvi, 2006). The instrument is a 24-item measure that comprises three subscales related to democratic values (educational rights, solidarity, freedom). The educational rights subscale consisted of nine items (e.g., "The ways of accessing knowledge should be taught to students"). The solidarity subscale contained nine items all characterized by solidarity (e.g., "The teacher should cooperate with students while solving problems"). Finally, the freedom subscale consisted of six items (e.g., "Students should have examinations whenever they feel they are ready"). The scale uses a 5-point Likert-type rating format that ranges from "definitely does not agree" (1) to "definitely agree" (5). Internal consistency reliabilities for the Democratic Values Scale total score is 0.87. For the subscales, 0.84 for the Educational Rights, 0.82 for the Solidarity, and 0.70 for the freedom. Inter-item correlation coefficients were acceptable.

The Educational Belief Scale (EBS) was developed by Yılmaz, Altinkurt, and Çokluk (2011) and designed to measure the prospective teachers' educational beliefs. The scale consists of five-factors (perennialism, essentialism, progressivism, reconstructionism, existentialism) and 40 items (8, 5, 13, 7, and 7 items under the factors respectively). Items include, for example, "Education should be student centered", "School is to be life itself, rather than a place where the young is prepared for life", and "Education should be in accordance with universal and unchanging truth". The scale uses a 5-point Likert-type rating format that ranges from "definitely does not agree" (1) to "definitely agree" (5). By the use of the scale, participants' educational beliefs are associated with the educational philosophies framed by the five factors on which more information is provided in the discussion section. Internal consistency reliabilities for the subscales were ranged 0.70 to 0.91. The computed internal consistency coefficients of the scale are acceptable.

The last scale focusing on self-efficacy assesses teachers' judgment of capabilities to bring about desired outcomes of student engagement and learning, even among the students who be problematic or unmotivated (Tschannen-Moran & Hoy, 2001). The adapted Turkish version of Teacher Sense of Self-Efficacy Scale (TSSSES) was developed by Çapa, Çakıroğlu, and Sarıkaya (2005). This measure contains three subscales: (1) efficacy for instructional strategies (e.g., To what extent can you use a variety of assessment strategies?), (2) efficacy for classroom management (e.g., how much can you do to control disruptive behavior in the classroom?), and (3) efficacy for student engagement (e.g., how much can you do to help your students value learning?). Total score ranges from 24 to 216. High scores mean that the teachers are highly confident to bring about desired outcomes of student engagement and learning. Items are rated on a response scale from 1 (nothing) to 9 (a great deal). Internal consistencies for these subscales ranged from 0.78 and 0.93. The adapted Turkish version of Teacher Sense of Self-Efficacy scales is most extensively validated with pre-service teacher samples (e.g., Cerit, 2010; Çocuk, Alıcı, & Çakır, 2015; Özder, 2011). Validity studies showed that there is a predictable and significant correlation between the scale and concurrent measures of teachers' classroom management skills, their context knowledge, and student academic achievements (Cerit, 2010; Çocuk, Alıcı, & Çakır, 2015; Özder, 2011).

### **Data Analysis**

Descriptive statistics such as frequencies, means, and standard deviations were computed. To examine whether the pre-service teachers' educational and their sense of self-efficacy beliefs differ significantly for each democratic value groups, ANOVA was conducted. To examine the relationship between the study variables, Pearson product-moment correlation coefficients for the dimensions of educational beliefs and teacher sense of self-efficacy beliefs were examined along with the pre-service teachers' democratic value scores. Next, the researchers also conducted multiple regression to test the predictive role of teacher self-efficacy belief and educational beliefs in the participants' democratic value scores.

## Results

Hypothesis 1: There are significant differences between democratic values groups (i.e., low, moderate, high) in terms of pre-service teachers' sense of self-efficacy and educational beliefs

Prior to examining the connections between the dimensions of teacher candidates' democratic values, their self-efficacy, and educational beliefs, data were checked for outliers. No threat was found. As presented Table 1, the ANOVA results supported the hypothesis 1. The findings showed that there were significant differences in educational beliefs and teacher self-efficacy belief between democratic value groups (i.e., low, moderate, high).

Specifically, the current findings showed that high democratic value group ( $M=148.46$ ,  $Sd=26.25$ ) is statistically and significantly different from moderate ( $M=125.66$ ,  $Sd=27.36$ ) and low ( $M=124.75$ ,  $Sd=29.35$ ) groups in terms of teacher self-efficacy belief scores, ( $F_{(2, 377)}=19.61$ ,  $p<0.01$ ). For educational beliefs, the study results showed that progressivism ( $F_{(2, 377)}= 59.68$ ,  $p<0.01$ ), existentialism ( $F_{(2, 377)}=57.99$ ,  $p<0.01$ ), reconstructionism ( $F_{(2, 377)}=21.82$ ,  $p<0.01$ ), perennialism ( $F_{(2, 377)}=18.23$ ,  $p<0.01$ ), and essentialism ( $F_{(2,377)}=4.63$ ,  $p<0.01$ ) were statistically and significantly varied by each democratic value group. Furthermore, the source of group differences was examined further through Tukey Post-Hoc test and indicated that high democratic belief group had largest mean scores as compared to low and moderate ones, however, there was not statistically significant difference between low and moderate groups for educational beliefs and teacher self-efficacy scores.

*Table 1.* ANOVA Results for the Pre-Service Teachers' Self-Efficacy (TSE) and Educational Beliefs by Democratic Value

		<b>M</b>	<b>Sd</b>	<b>F</b>	<b>p</b>
TSE (total)	Low	124.75	29.35	19.61	0.00
	Moderate	125.66	27.36		
	High	148.46	26.25		
Progressivism	Low	3.19	1.62	59.68	0.00
	Moderate	3.60	0.65		
	High	4.32	0.45		
Existentialism	Low	3.21	1.71	57.99	0.00
	Moderate	3.60	0.68		
	High	4.53	0.62		
Reconstructionism	Low	3.11	1.44	21.82	0.00
	Moderate	3.54	0.65		
	High	4.13	0.69		
Perennialism	Low	2.69	1.27	18.23	0.00
	Moderate	3.57	0.95		
	High	3.99	0.55		
Essentialism	Low	2.40	1.15	4.63	0.01
	Moderate	3.31	0.76		
	High	2.91	1.02		

Hypothesis 2: There are significant relationship between the pre-service teachers' democratic values, sense of self-efficacy, and educational beliefs

As demonstrated in Table 2, results of Pearson correlation indicated that there was a significant positive association between democratic values and teacher self-efficacy belief total score ( $r=0.34$ ,  $p<0.01$ ). Specifically, student management ( $r=0.33$ ,  $p<0.01$ ), instructional strategies ( $r=0.33$ ,  $p<0.01$ ) classroom management ( $r=0.30$ ,  $p<0.01$ ), are significantly and positively related to democratic values. In addition, the democratic value is positively and significantly associated with progressivism ( $r=0.57$ ,  $p<0.01$ ), existentialism ( $r=0.52$ ,  $p<0.01$ ), and reconstructionism ( $r=0.40$ ,  $p<0.01$ ). However, democratic value is negatively and significantly correlated with perennialism ( $r=-0.33$ ,  $p<0.01$ ) and essentialism ( $r=-0.14$ ,  $p<0.05$ ). Teacher self-efficacy belief is positively and significantly linked with progressivism ( $r=0.27$ ,  $p<0.01$ ), existentialism ( $r=0.28$ ,  $p<0.01$ ), and reconstructionism ( $r=0.28$ ,  $p<0.01$ ). Although teacher self-efficacy belief and perennialism is negatively and significantly associated with each other ( $r=-0.26$ ,  $p<0.01$ ), there is negative, but not significant relation between teacher self-efficacy and essentialism ( $r=-0.03$ ,  $p>0.05$ ). Therefore, the hypothesis 2 was supported.

Table 2. Pearson Correlation Results Between the Study Variables (N=382)

	1	2	3	4	5	6	7	8	9	10
1.Democratic Value	-									
2.TSE Total	0.34**	-								
3.Student Engagement	0.33**	0.94**	-							
4.Instructional Strategies	0.33**	0.95**	0.84**	-						
5.Classroom Management	0.30**	0.94**	0.82**	0.84**	-					
6.Progressivism	0.57**	0.27**	0.26**	0.26**	0.23**	-				
7.Existentialism	0.52**	0.28**	0.29**	0.25**	0.24**	0.74**	-			
8.Reconstructionism	0.40**	0.28**	0.26**	0.28**	0.24**	0.57**	0.49**	-		
9.Perennialism	-	-	0.22**	0.28**	0.22**	0.57**	0.49**	0.58**	-	
10.Essentialism	-0.14*	-0.03	-0.03	0.07	0.06**	-0.04	-0.16**	0.24**	0.29**	-

$p<0.05$ \*  $p<0.01$ \*\*

Hypothesis 3: Teachers' sense of self-efficacy and educational beliefs are significant predictors in their democratic values

As detailed in Table 3, results of multiple linear regression indicated that there was a collective significant effect between teacher self-efficacy belief ( $M=144.8$ ,  $Sd=27.7$ ), progressivism ( $M=4.2$ ,  $Sd=0.57$ ), existentialism ( $M=4.4$ ,  $Sd=73$ ), reconstructionism ( $M=4.03$ ,  $Sd=0.73$ ), perennialism ( $M=3.91$ ,  $Sd=0.66$ ), essentialism ( $M=2.96$ ,  $Sd=0.99$ ), and democratic belief ( $M=97.84$ ,  $Sd=13.1$ ), ( $F_{(6, 381)}=41.81$ ,  $p<0.01$ ,  $r^2=0.40$ ). The individual predictors were examined further and indicated that teacher self-efficacy ( $\beta=0.18$ ,  $p<0.01$ ), progressivism ( $\beta=0.36$ ,  $p<0.01$ ), existentialism ( $\beta=0.13$ ,  $p<0.05$ ), reconstructionism ( $\beta=0.12$ ,  $p<0.05$ ), and essentialism ( $\beta=-0.14$ ,  $p<0.01$ ) were statistically significant predictors in the model, except perennialism ( $\beta=-0.01$ ,  $p>0.05$ ). In other words, all directions for



the predictors are in expected way and the most impactful predictor was progressivism, as proposed in the hypothesis 3.

*Table 3. Multiple Regression Results*

Variables	B	$\beta$	SE	t	p
TSE TOTAL	0.09	0.02	0.18	4.24	0.00
Progressivism	8.35	1.51	0.36	5.53	0.00
Existentialism	2.36	1.13	0.13	2.08	0.04
Reconstructionism	2.16	0.99	0.12	2.19	0.03
Perennialism	-0.27	1.11	-0.01	-0.24	0.81
Essentialism	-1.81	0.61	-0.14	-2.96	0.00
R <sup>2</sup>	0.40				
F <sub>(6, 375)</sub>	41.81				

DV=Democratic Values; IDV=Teacher Sense of Self-Efficacy Belief and Educational Beliefs

p<0.05

## Discussion

This study, as stressed above, while limiting its scope within the context of teacher training system in Turkey, expected that higher self-efficacy may significantly be associated with democratic values of teachers who tend to endorse philosophical approaches to education that are derived from or related to democratic theory. Speaking of philosophical approaches to education, educational beliefs of teachers were examined through five common approaches. Essentialism and perennialism represent traditional approaches derived fundamentally from idealism and realism, while the others characterize modern approaches that take their roots from contemporary philosophies including pragmatism and existentialism. Basically, perennialism adopts the perspective that the great ideas and theories are originated from unchangeable truths and they are applicable in any era regardless of social conditions. In this sense, this educational approach argues for developing students' rational skills that enable them to acquire universal truths and principles, by following an unchangeable curriculum and using great books of the human history under strict control of teachers. Essentialism, in this regard, also stresses the role of teachers in gaining knowledge. For this approach, teachers are supposed to instill essential knowledge and skills into student through a core curriculum. Although an essentialist approach may allow changes in the curriculum, the both are conservative approaches that argue for instilling some common knowledge into students without appealing to their own intellectual capacities and for exercising harsh discipline and making them respectful for authority. In contrast, the other three are more student centered approaches that take students active learners rather than passive receivers. For example, progressive approach takes students as active learners who appeal to their own intellectual capacities and construct knowledge through their own experiences. In this regard, a progressive teacher tries to guide students in order for them to acquire knowledge by their hands-on life experiences, rather than trying to be a figure of authority. It also provides cooperative learning environments in which students are encouraged to develop social skills suitable for a democratic life. In addition to

these, existential approach mainly focuses on developing more responsible and free members of a society, while reconstructionist approach highlights the importance of social change through educated individuals. In short, traditional approaches operate under a strict sense of authority, the contemporary ones embrace and promote democratic principles in education as well as in the wider society.

Accordingly, this study assumed that educational beliefs associated with contemporary philosophical approaches to education may have a significant relation to democratic values. On the one hand, as supported by the results, the participants showed highest tendency to existentialism. Progressivism takes the second place and reconstructionism comes as the third. The lowest two approaches endorsed among the participants appear to be perennialism and essentialism, the latter is being the lowest. These results, in addition, show similarities with the results of previous studies. For example, some previous studies also showed that existentialism is the most preferable approach while essentialism is the least (Altinkurt, Yılmaz, & Oğuz, 2012; Çelik, & Orçan, 2016; Ilgaz, Bülbül, & Çuhadar, 2013). On the other hand, the study revealed that democratic values are positively and significantly associated with existentialism, progressivism and reconstructionism, while being negatively and significantly correlated with perennialism and essentialism. In other words, as expected, the participants endorsing democratic contemporary educational approaches have high democratic values regarding educational rights, solidarity and freedom. These results can be interpreted as in accordance with the results provided by some previous studies. For example, Yazıcı (2011), Akın & Özdemir (2009) and Oğuz (2009) showed that prospective teachers hold in general high democratic values. As they become more familiar with student-centered educational approaches and broaden their field experiences, pre-service teachers' educational beliefs are shaped more by progressive educational philosophy (Telese, 1996; Weshah, 2013). Considering these with the finding that contemporary democratic educational approaches are more embraced by teacher candidates than traditional approaches (Çelik & Orçan, 2016; Simmie & Edling, 2018), the results provided in this current study appear to have furthered the research done in these aspects of teacher education.

In addition, the study shows that there is a positive and significant relation between teacher self-efficacy and preferences of educational approaches. As the results support, higher teacher self-efficacy is positively and significantly associated with existential, progressive and reconstructionist educational approaches. In other words, pre-service teachers who endorse educational beliefs associated with existentialism, progressivism and reconstructionism have higher self-efficacy beliefs. In contrast, teacher self-efficacy is negatively linked with traditional educational approaches. Pre-service teachers who hold educational beliefs derived from perennialism and essentialism have lower self-efficacy beliefs. In addition, some previous studies have examined prospective teachers' self-efficacy (e.g., Savran & Çakıroğlu, 2001; Ülper & Bağcı, 2012). Similar results to those revealed in this current study have also been supported by some previous studies, suggesting that there is a positive relation between contemporary educational approaches and teacher self-efficacy (Ilgaz, Bülbül, & Çuhadar, 2013). In a similar vein, a previous

study showed that there is a positive correlation between teachers' efficacy beliefs and constructivist, rather than didactic, instruction strategy (Nie et al., 2013). It is also important to note that teachers with high level of self-efficacy are expected to work harder to contribute to their students' academic achievement and social development (Guo et al., 2012; Pendergast, Garvis, & Keogh, 2011). Therefore, it is possible to expected that prospective teachers who embrace contemporary student centered educational approaches may have higher self-efficacy beliefs regarding instructional strategies, classroom management and student engagement, as suggested in this study.

Moreover, this study also suggests that there is a significant association between democratic values and teacher self-efficacy. High self-efficacy beliefs regarding instructional strategies, student engagement and classroom management are significantly and positively related to democratic values. In other words, pre-service teachers who have higher self-efficacy beliefs, also have higher democratic values. Previous studies have reported positive relations between teacher self-efficacy and democratic. For example, while a study conducted by Topkaya and Yavuz (2011) revealed that pre-service English language teachers have a high level of democratic values, in another study Almog and Shechtman (2007) found that although there is a gap between teachers' hypothetical knowledge and what they put into practice in classroom, there is a positive relation between teachers' democratic beliefs and self-efficacy. As also shown previously, teachers that have higher efficacy beliefs are open to new ideas and supportive of students' autonomy (Brouwers & Tomic, 2003; Gavora, 2010). Therefore, it appears to be that higher teacher self-efficacy and higher democratic values taken together may have a strong relation to philosophical approaches to education, particularly those that derives from contemporary democratic theories. In fact, a major result of this study is that teacher candidates' self-efficacy beliefs appear to be an indicator of their democratic values and educational approaches they embrace. In other words, higher teacher self-efficacy is positively associated with higher democratic values and one of the three philosophical approaches to education: existentialism, progressivism and reconstructionism.

### **Conclusion**

In conclusion, democracy is an issue related to values and culture as well as to social institutions. If foundational democratic values are not reflected through how social institutions operate, then that society may not fully realize a democratic order. Creating democratic minded citizens requires acquiring and realizing democratic values through education, which signifies the importance of both educating new generations and training qualified teachers. Besides, if a society applies only procedural aspects of democracy, then democratic values may not become parts of the culture in that society. In this regard, some societal problems may be observed in the Turkish society. According to Büyükdüvenci (1990), for example, while showing some progress in the procedural aspects of democracy, Turkish society still needs to progress in the way the society internalizes

democratic values. Of course, democratization processes in Turkish society in general and education in particular are discussible. For some, full democratization is to start with the families and schools in a society. Regarding Turkey, in this sense, since neither of them have become democratically administered institutions yet, realizing democratic values in the classroom becomes less likely and as a result teacher candidates' democratic attitudes may not even change during their higher education years, after years of educational experiences in such environments (Kılıç, 2010). This study reveals the importance of structuring teacher training programs in a way that will strengthen pre-service teachers' self-efficacy beliefs and enable them to adopt their educational beliefs rooted in educational philosophy and to internalize democratic values reflected in their professional practices. However, considering that democratization process is still in progress in Turkey, it seems crucial to provide more studies that aim to contribute to understand the needs of the education system to become more democratic and provide discussions for the problem of training democratic minded educators. In this regard, this study also appears to bear an important potential for dealing with this problem and for encouraging further studies. After all, creating and sustaining a democratic society is essentially an educational matter (Dewey, 2007).

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