




# The Effect of Prospective Teachers' Beliefs About the Necessity of Multicultural Education and Self-Efficacy Perceptions of Multicultural Education: A Path Model

Serkan ASLAN<sup>1</sup>

<sup>1</sup>Süleyman Demirel University, Educational Sciences, Isparta, Turkey  0000-0001-8515-4233

## ARTICLE INFO

### Article History

Received 25.04.2021

Received in revised form

09.11.2021

Accepted 16.12.2021

Article Type: Research

Article

## ABSTRACT

This study aims to determine whether there is a relationship between prospective teachers' beliefs about the need for multicultural education and their self-efficacy perceptions about multicultural education. Descriptive and correlational survey models were used in the research. The research sample composed of 251 prospective classroom and social sciences teachers at a state university in Turkey participated in the study. The research sample was obtained using the convenience sampling method. Data collection tools consisting of the Personal Information Form, Self-Efficacy Perceptions for Multicultural Education and Beliefs about the Necessity of Multicultural Education scales were used. Descriptive statistics, correlation analysis, multivariate variance analysis and path model were used to analyse the research data. The findings show that prospective teachers have a high level of participation in their beliefs about the self-efficacy and necessity of multicultural education. In addition, there was no significant difference between prospective teachers' beliefs about the need for multicultural education and their self-efficacy perceptions of multicultural education in terms of gender and department. A moderate positive relationship was found between prospective teachers' beliefs regarding the necessity of multicultural education and their self-efficacy perceptions toward multicultural education. The prospective teachers' beliefs about the need for multicultural education significantly predicted multicultural education self-efficacy perceptions.

© 2022IJPES. All rights reserved

Keywords:

Multicultural education, self-efficacy, necessity of multicultural education, path model.

## 1. Introduction

Through developments in technology, individuals with the different cultural backgrounds can communicate more easily and influence each other. Due to wars and natural disasters in recent years, millions of people have left their home countries and migrated to different regions, cities and countries. As a result, individuals with different cultural characteristics began to live together. This situation brought the concept of multiculturalism to the agenda. The concept of multiculturalism is a phenomenon classified according to different perspectives. While for some researchers, multiculturalism refers to race, ethnicity, class, sexual orientation, religion, age and similar criteria (Güvenç, 1994), others only deal with the context of race. For example, in the United States, multiculturalism is limited to four races: African Americans, Indian Americans, Asian Americans, and Latin Americans (Sue, Arredondo & McDavis, 1992). However, multiculturalism generally refers to societies living under a state roof; speaking various languages; and belonging to different religions, cultures, customs and traditions (Gay, 2018).

In societies where displaced individuals live together because of migration, wars, and natural disasters, problems arising from multiculturalism have started to occur. The thought that these problems can only be solved through education and multicultural education has emerged. Banks et al. (2001) defined multicultural

<sup>1</sup>Corresponding author's address: Süleyman Demirel University, Isparta/Turkey

e-mail: [serkanaslan@sdu.edu.tr](mailto:serkanaslan@sdu.edu.tr)

**Citation:** Aslan, S. (2022). The effect of prospective teachers' beliefs about the necessity of multicultural education and self-efficacy perceptions of multicultural education: A path model. *International Journal of Psychology and Educational Studies*, 9(1), 102-114. <https://dx.doi.org/10.52380/ijpes.2022.9.1.552>

education as 'an idea, an educational reform and a process that tries to create equal educational opportunities for all students from different races, ethnicities and social groups, and therefore tries to change and restructure the whole school environment.' According to Gay (1994), multicultural education is a thought and education reform movement and process aimed at changing the structure of educational institutions so that all students have equal chances in academic success.'

The importance of multicultural education is increasing daily. Multicultural education is a system that can produce solutions to various problems in today's societies (Kaya & Aydın, 2014). Banks (2010) states that this education system tries to eliminate many inequalities among different ethnic identities and social classes fairly with educational practices. The reason multicultural education is needed can be stated in three points (Kaya & Aydın, 2014, p. 39):

- Multicultural education contributes to the development of a bond of friendship among individuals with different cultural characteristics. It also ensures that human rights and democratic values are embedded in society.
- In pluralist societies, it contributes to the elimination of social disputes and the socialisation of individuals.
- It is also ensured that multinational societies combine and form a healthier and more comprehensive cultural combination.

When examining studies on multicultural education, this education is thought to increase cooperation among students, develop critical thinking skills and tolerance value, and reduce discipline problems (Aslan, 2017; Banks, 1993). These benefits, such as multicultural education, have a multicultural structure that will contribute to Turkey's implementation. Turkey, with different ethnic identity (Turks, Kurds, Arabs etc), different religions (Alevis, Sunnis, Christians, pressured etc etc), with different sexual orientations and live individuals with different socio-economic levels. From this point of Turkey it consists of a multicultural society. It is therefore increasingly important in the multicultural education in Turkey. In addition, multicultural education aims to eliminate inequalities in education and to realize social justice in education (Aslan & Aybek, 2019). In Turkey, it is known that problems are arising from ethnic, linguistic and religious differences, disability status, socio-economic level differences among individuals with different cultural characteristics. Introducing a multicultural education based on education can be remedied to resolve the problems stemming from cultural differences in education in Turkey. The leading factor in the effective organisation of the teaching environment is the teacher. Therefore, teachers who support the effective implementation of multicultural education in Turkey believe in the necessity of this education (Kervan, 2017).

Teachers who believe in the necessity of multicultural education can organize the teaching environment for such applications. Beliefs affect teachers' perspectives on the learning-teaching process, how they perceive the learning environment, their choice of methods and techniques, and their equipment and applications (Yıldırım, 2016, p. 52). Dooley (1997) provides that teachers' beliefs about teaching students from various cultures and ethnic groups reflect their theoretical knowledge in practice and affect their teaching practices (Yıldırım, 2016). Teachers' beliefs about multicultural education and their self-efficacy toward multicultural education can be said to have an impact. It can be said that it affects.

Pajares (2002) expresses self-efficacy as subjective judgments and perceptions of individuals in carrying out a certain action. Korkmaz (2009) expresses self-efficacy as a belief in how one can do what he has to do and act accordingly, cope with the difficulties he faces, and succeed. Based on multicultural education, teachers need to adjust the classroom environment by accepting that students can differ in ethnicity, class, gender, language, belief system and sexual orientation (Sinagatullin, 2003). This situation closely relates to teachers' self-efficacy perceptions of multicultural education. That teachers consider themselves sufficient to organize the teaching environment according to different cultural characteristics will contribute to the effective implementation of multicultural education. Teachers, therefore, should be informed about multicultural education and its necessity in their pre-service training. If this happens, prospective teachers will be able to organize the teaching-learning environment for multicultural education when they start working, which will improve their self-efficacy toward multicultural education.

There are few studies in Turkish multicultural literature on training requirements (Yıldırım, 2016) and self-efficacy for multicultural education (Basarır, 2012; Dolapci, 2019; Roh, 2015; Strickland, 2018). Thus, there is a gap in Turkish literature. Furthermore, no study has been found about prospective teachers' beliefs regarding the necessity of multicultural education and their self-efficacy perceptions of multicultural education. Again, such absence presents a deficiency in the literature.

Turkey Republic of ethnicity, language, religion, and multicultural contains many differences in terms of social class and other cultural aspects of society's structure (Basar, 2019). As a result of wars in neighbouring countries, such as Iraq and Syria, millions of refugees have come to Turkey in recent years. Individuals with different cultural characteristics are receiving education in Turkish schools. Multicultural education has become an important topic in Turkey because all students are required to have equal access to education and training (Ciftci-Acar & Aydin, 2014).

As stated above, the teaching–learning process should be planned according to the multicultural education in schools where individuals with different cultural characteristics study. In this way, a positive relationship can be established among individuals with different cultural characteristics, and the problems experienced among these individuals will be minimized. Teachers should believe in the necessity of multicultural education, and their self-efficacy perception should be high. In this regard, teachers should know about multicultural education during the period of service and believe in the necessity of this education. Such a perspective will positively affect their self-efficacy perceptions of multicultural education.

To increase teachers' beliefs about the necessity of multicultural education and their self-efficacy towards multicultural education, it is necessary to provide information about multicultural education during undergraduate periods. For this reason, it is necessary to determine the beliefs of prospective teachers in the necessity of multicultural education and their self-efficacy towards multicultural education. Because if the prospective teachers' beliefs in the necessity of multicultural education and their self-efficacy towards multicultural education are high, they will be able to organize the teaching environment according to cultural differences when they start working. In this case, social injustice stemming from multiculturalism in education can be eliminated. Therefore, the results of this research are very valuable.

Therefore, this study examined prospective teachers' beliefs about the necessity of multicultural education and their self-efficacy perceptions toward multicultural education. The results of the study made a move to the feedback nature of teacher training in Turkey. It is hoped that practices regarding multicultural education will be carried out in teacher training institutions, thereby improving the beliefs and self-efficacy perceptions of prospective teachers' toward the necessity of multicultural education. The research here will contribute to the literature as well in this respect.

This study aims to examine prospective teachers' self-efficacy perceptions toward multicultural education and their beliefs about the necessity of multicultural education and to determine whether there is a relationship between them. In this context, answers to the following research questions are sought:

- What are prospective teachers' perceptions of self-efficacy toward multicultural education and their belief levels regarding the necessity of multicultural education?
- Is there a significant difference between prospective teachers' self-efficacy perceptions toward multicultural education and their beliefs about the necessity of multicultural education in terms of gender?
- Is there a significant difference between the prospective teachers' self-efficacy perceptions toward multicultural education and their beliefs about the need for multicultural education in relation to the department in which they are being trained? Is there a significant relationship between prospective teachers' self-efficacy perceptions toward multicultural education and their beliefs regarding the necessity of multicultural education?
- Do prospective teachers' beliefs about the necessity of multicultural education significantly predict self-efficacy perceptions of multicultural education?

## 2. Methodology

### 2.1. Research Model

Descriptive and correlational survey models were used. The primary purpose of a descriptive survey is to accurately describe or illustrate the characteristics of a situation or phenomenon. A descriptive survey model is used to learn people's attitudes, opinions, beliefs and demographic features in education (Johnson & Christensen, 2014). A correlational survey model examines the relationship between two or more variables (Özmantar, 2019).

In the research, a descriptive survey model was used to analyse whether the prospective teachers' self-efficacy perceptions toward multicultural education and their beliefs regarding the necessity of multicultural education differ in terms of gender, education area and region. A correlational survey model was used to determine the direction between the self-efficacy perceptions of prospective teachers' toward multicultural education and their beliefs regarding the necessity of multicultural education and the level of predicting this variable.

### 2.2. Participants

The research participants were prospective elementary and social sciences teachers studying at a Turkish public university. A convenience sampling method, one of the non-probability sampling methods, was used. In this sampling method, the researcher reaches the participants quickly and easily and applies data collection tools within the framework of volunteering (Karagöz, 2017). The most important limitation of this sampling method is its low power to represent the universe.

Prospective teachers' who were easily accessible to the researcher participated. These candidates did so voluntarily. A total of 251 prospective teachers' (170 female and 81 male) participated in the study. Of the participants, 151 were studying to become classroom teachers, and 100 were studying to become social sciences teachers. Within the scope of the research, the main reason for selecting the prospective teachers studying in social sciences and elementary school teaching programs is that both programs have social sciences courses. Since the social sciences course also covers cultural differences, prospective teachers' studying in these programs have knowledge about multicultural education. For this reason, prospective teachers' in these two programs were selected as participants.

### 2.3. Data Collection Tools

Three types of data collection tools were used, as described below.

#### 2.3.1. Personal Information Form

A personal information form was created, taking into account experts' opinions and the literature studies. In the personal information form, there were questions to determine the gender of the participants and what they were studying.

#### 2.3.2. Belief Scale on the Necessity of Multicultural Education

The Belief Scale on the Necessity of Multicultural Education, developed by Yıldırım (2016), was used. While Yıldırım (2016) developed the scale, exploratory and confirmatory factor analyses were used. The scale was developed by applying it to 490 teachers.

As a result of the exploratory factor analysis, the scale consisted of two factors and nine items. The scale factors were named 'Belief in Being Individual Rights and General Belief in People'. The factor loadings of the scale ranged from .46 to .74. The dimensions of the scale explained 45.57% of the total variance. The reliability coefficient of the scale was .75.

In the confirmatory factor analysis performed while developing the scale, it was obtained that the fit indices were appropriate (Yıldırım, 2016). In this study, Cronbach's alpha coefficient was examined for the reliability coefficient of the scale and found to be .70. Based on this result, the scale was determined to be reliable.

### **2.3.3. Multicultural Education Self-Efficacy Perceptions Scale**

The Multicultural Education Self-Efficacy Perception Scale, developed by Yıldırım (2016), was used. Exploratory and confirmatory factor analyses were used while developing the scale. The scale was developed by applying it to 490 teachers.

As a result of the exploratory factor analysis, the scale was found to consist of 13 items. The scale factors were named 'Self-Efficacy to Design Activities, Self-Efficacy in the Management of Cultural Differences and Self-Efficacy to Understand Differences'. The factor loads of the scale ranged from .47 to .81. The dimensions of the scale explain 53.38% of the total variance.

Cronbach's alpha coefficient of the scale was determined .88. In the confirmatory factor analysis performed while developing the scale, it was obtained that the fit indices were appropriate (Yıldırım, 2016). In this study, the Cronbach's alpha coefficient of the scale was examined, and .86 was found. Fraenkel, Wallen and Hyun (2014) stated that the scale is exceptionally reliable if the Cronbach's alpha coefficient is higher than .70. According to this result, the scale was determined to be reliable. Both scales can be analyzed over the total score.

The scales used in the research were developed on teachers. The candidates of this study are prospective teachers. Therefore, the opinions of two faculty members working in educational sciences were asked about educational sciences and whether the scales used in the research could apply to prospective teachers. Faculty members stated that the scales could be used on prospective teachers. In this study, exploratory factor analyses of both scales were made. Results close to those of exploratory factor analyses performed by teachers, by Yıldırım (2016), were obtained. Therefore, it was observed that these scales could apply to prospective teachers.

### **2.4. Data Collection and Analysis**

The data were collected between 17 and 28 February 2020 in the spring semester of the 2019/20 academic year. While collecting the research data, the purpose of the research was explained to prospective teachers. Attention was given to the voluntary participation of prospective teachers' in the study. All ethical rules were followed while collecting the data. Data were collected at time intervals that would not affect the teacher life of the participants. While conducting the research, the necessary legal permissions were taken, and the ethical committee decision (Number: 874329561/050.99) was issued. It took 10–15 minutes for prospective teachers to fill in the data collection tools.

Before analysing the data, the univariate normality assumption was examined to determine whether it had been met. The results of the Kolmogorov Smirnov test were first reviewed. The analysis determined that the data were not normally distributed, and skewness and kurtosis coefficients were examined. The skewness coefficient of the belief scale for the necessity of multicultural education was .566, and the kurtosis coefficient of .117, the skewness coefficient of the self-efficacy perception scale for multicultural education was .293, and the kurtosis coefficient was  $-.456$ . Based on these results, it can be said that the distribution meets the univariate normality assumption (Can, 2019).

To determine whether the multivariate normality assumption was met in the study, Mahalanobis distances were examined, and extreme values were encountered. These extreme values were excluded from the research, and analyses were carried out. Since 32 scales have extreme values in the study, they were excluded from the data analysis. Data were analysed using descriptive statistics, multivariate variance analysis (MANOVA), correlation analysis and path model. Path analysis is an advanced statistical technique (Schumacker & Lomax, 2004). Path analysis is used to test the probability of a causal link between three or more variables, and path analysis is a much more powerful method than other methods to discover causality between variables (Fraenkel, Wallen & Hyun, 2014). Participation levels in the scales were evaluated as low between 0.00 and 1.66, the medium between 1.67 and 3.32, and high between 3.33 and 5.00.

### **2.5. Ethical**

In this study, all rules stated to be followed within the scope of "Higher Education Institutions Scientific Research and Publication Ethics Directive" were followed.

Ethical Review Board Name: Süleyman Demirel University Ethics Committee

Date of Ethics Evaluation Decision: 1.4.2020 Ethics Assessment Document Issue Number: 89/1

### 3. Findings

In this section, first, prospective teachers' beliefs regarding the necessity of multicultural education and the levels of participation in self-efficacy perceptions toward multicultural education are determined. Then, the prospective teachers' beliefs about the necessity of multicultural education and the self-efficacy perceptions of multicultural education – and whether there is a significant difference between gender and education and their beliefs about multicultural education – are predicted. The findings regarding the absence of predictions are presented.

Based on the first sub-question of the study, prospective teachers' beliefs about the necessity of multicultural education and their levels of participation in the self-efficacy perceptions of multicultural education are given in Table 1.

**Table 1.** Descriptive Statistics Results

Variable		<i>n</i>	<i>M</i>	<i>SD</i>	<i>Max</i>	<i>Min</i>	<i>Level</i>
Multicultural Education Necessity	Individual Right	219	4.60	.40	5.00	3.25	High
	General Right	219	4.35	.44	5.00	3.20	High
Multicultural Education Self-Efficacy	Designing an Event	219	4.09	.49	5.00	2.60	High
	Cultural Differences Management	219	4.32	.45	5.00	3.00	High
	Understanding Differences	219	4.20	.46	5.00	3.20	High

When Table 1 is analysed, it is seen that prospective teachers participated at the 'high level' in the belief sub-dimension ( $M= 4.60$ ) and in the belief that there is the general right for people ( $M= 4.35$ ) on the belief scale regarding the necessity of multicultural education. Likewise, the self-efficacy perceptions scale for multicultural education has a high level of participation in the sub-dimensions of self-efficacy ( $M= 4.09$ ), self-efficacy ( $M= 4.32$ ), and self-efficacy ( $M= 4.20$ ) to understand differences.

In the study, the results of MANOVA on whether there is a significant difference in terms of gender variable between prospective teachers' beliefs about the necessity of multicultural education and self-efficacy perceptions of multicultural education are presented in Table 2.

**Table 2.** MANOVA Results For The Gender Variable

Variable	Gender	<i>n</i>	<i>M</i>	<i>SD</i>	<i>df</i>	<i>F</i>	<i>p</i>	$\eta^2$
Multicultural Education Necessity	Women	154	4.50	.36	1-217	4.28	.04*	.01
	Men	65	4.38	.38				
Multicultural Education Self-Efficacy	Women	154	4.19	.42	1-217	.05	.81	.00
	Men	65	4.17	.38				

\* $p < .05$

In Table 2, MANOVA was conducted to examine the difference between the gender variable on prospective teachers' belief in the necessity of multicultural education and self-efficacy perceptions of multicultural education. The belief in the necessity of multicultural education and the self-efficacy perceptions of multicultural education are dependent variables, while the gender variable is an independent variable. Before MANOVA was performed, the assumptions of normality, univariate and multivariate extremes, linearity, multiple correlation problem, and homogeneity of variance-covariance matrices were checked. No serious violations were detected. There was no statistically significant difference in terms of the gender variable in the context of the combined dependent variables ( $F_{(1-217)} = 2.428$ ,  $p = .09$ ; Wilks' lambda = .978;  $\eta^2 = .02$ ). Considering the MANOVA results in Table 3, there was a significant difference between the prospective teachers' beliefs about the necessity of multicultural education in favour of female prospective teachers' ( $F_{(1-217)} = 4.28$ ,  $p < .05$ ). There was no significant difference between prospective teachers' self-efficacy perceptions toward multicultural education in terms of the gender variable ( $F_{(1-217)} = .05$ ,  $p > .05$ ).

In the study, the MANOVA results regarding whether there is a significant difference between prospective teachers' beliefs about the necessity of multicultural education and their self-efficacy perceptions toward multicultural education are presented in Table 3.

**Table 3.** MANOVA Results For The Department Variable in Which Education is Studied

Variable	Department	n	M	SD	df	F	p	$\eta^2$
Multicultural Education Necessity	Elementary Teaching	137	4.45	.37	1-217	.55	.45	.00
	Social sciences Teaching	82	4.49	.37				
Multicultural Education Self-Efficacy	Elementary Teaching	137	4.15	.41	1-217	2.58	.10	.01
	Social sciences Teaching	82	4.24	.40				

\* $p < .05$

In Table 3, MANOVA was conducted to examine the difference between the prospective teachers' belief in the necessity of multicultural education and the self-efficacy perceptions of multicultural education. The belief in the necessity of multicultural education and the self-efficacy perceptions of multicultural education are dependent variables, while the department variable in education is independent. Before MANOVA was performed, the assumptions of normality, univariate and multivariate extremes, linearity, multiple correlation problem, and homogeneity of variance-covariance matrices were checked. No serious violations were detected. There was no statistically significant difference in terms of the departmental variable studied in the context of the compound dependent variables ( $F_{(1-217)} = 1.287$ ,  $p = .27$ ; Wilks' lambda = .988;  $\eta^2 = .01$ ).

The data regarding the correlation analysis between prospective teachers' beliefs regarding the necessity of multicultural education and the self-efficacy perceptions of multicultural education are presented in Table 4.

**Table 4.** Correlation Analysis Results

Variable	M	SD	1	2	3	4	5
Multicultural Education Necessity							
Individual Right (1)	4.60	.02	1.00	.525*	.297*	.315*	.301*
General Right (2)	4.35	.03	.525*	1.00	.389*	.384*	.327*
Multicultural Education Self-Efficacy							
Designing an Event (3)	4.09	.03	.297*	.389*	1.00	.595*	.646*
Cultural Differences Management (4)	4.32	.03	.315*	.384*	.595*	1.00	.583*
Understanding Differences (5)	4.20	.03	.301*	.327*	.646*	.583*	1.00

\* $p < .05$

When Table 4 is examined, there is the sub-dimension of belief that there is an individual right and belief that there is a general right for people ( $r = .525$ ,  $p < .05$ ), self-efficacy of cultural differences ( $r = .315$ ,  $p < .05$ ) and to understand the differences. While there is a 'medium' positive correlation among the self-efficacy ( $r = .301$ ,  $p < .05$ ) dimensions, there is a 'low level' positive significant significance between the self-efficacy dimension ( $r = .297$ ,  $p < .05$ ) – and a relationship has been found (Gürbüz & Şahin, 2018). For the dimension of belief that there is a general right for people and the self-efficacy of management of cultural differences ( $r = .384$ ,  $p < .05$ ), self-efficacy to design activities ( $r = .389$ ,  $p < .05$ ) and self-efficacy to understand differences ( $r = .301$ ,  $p < .05$ ) dimensions, a 'medium' positive significant relationship was found. A moderately positive correlation was found between the dimensions of self-efficacy to design events and self-efficacy to understand the differences ( $r = .595$ ,  $p < .05$ ) and management of cultural differences ( $r = .646$ ,  $p < .05$ ). A moderately positive correlation was found between self-efficacy toward understanding differences and dimensions of self-efficacy of management of cultural differences ( $r = .583$ ,  $p < .05$ ).

Latent variables were analysed to determine whether prospective teachers' beliefs regarding the necessity of multicultural education are predictors of self-efficacy perceptions of multicultural education. Path analysis with observed variables is a more straightforward but less advantageous model compared with path analysis with Latent variables. In such analyses, the amount of error can neither be predicted nor eliminated from the model. Therefore, the exclusion of measurement errors from the model is very limited. This makes

the reliability of the analysis results questionable. However, because Latent variables and path analysis allow linear calculations between variables to be calculated free from errors, it allows for more reliable results (Meydan & Şeşen, 2011). Latent variables and findings on path analysis are given in Figure 1. Positive correlations were found at the level of importance.

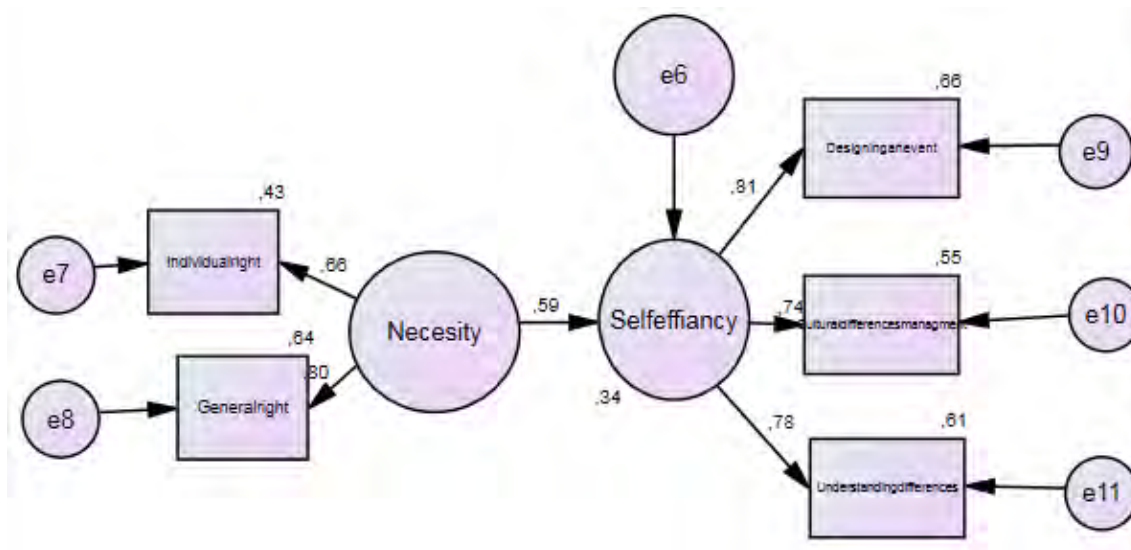


Figure 1. The Path Model

Do prospective teachers' beliefs about the necessity of multicultural education significantly predict self-efficacy perceptions of multicultural education? This subproblem was analysed using IBM AMOS 22. It is suggested that the sample should be more than 150 to make a path model (Gürbüz, 2019). As the participants of this research are 219, this assumption was met. To build a path model, the critical value of multiple kurtosis must be less than 10 (Kline, 2016). In this study, the critical value for multiple simplicity was .054. It was found that this assumption was met. Due to the normal distribution of the data, a covariance matrix was created using the maximum likelihood calculation method. First, the measurement model consisting of the beliefs about the necessity of multicultural education and the self-efficacy perceptions of multicultural education was tested. The fit index values obtained as a result of the analysis indicated that the measurement model was confirmed ( $X^2 [4, N = 219] = 3.061$ ;  $X^2 / df = .765$ ;  $CFI = 1.00$ ;  $SRMR = .0168$ ;  $GFI = .994$ ;  $RMSEA = .000$ ).

In the path model, beliefs related to the need for multicultural education were found to be the belief subdimension ( $R^2 = .43$ ) of the latent variable and the belief subdimension ( $R^2 = .63$ ) of the general right to people. The self-efficacy perceptions of the multicultural education Latent variable, on the other hand, the self-efficacy subdimension ( $R^2 = .61$ ) for understanding differences, the self-efficacy sub-dimension ( $R^2 = .55$ ) to manage cultural differences, and the self-efficacy dimension ( $R^2 = .66$ ) for designing events.

As a result of the research, it was found that the prospective teachers' beliefs about the necessity of multicultural education significantly predicted their self-efficacy perceptions toward multicultural education ( $\beta = .66$ ;  $p < .05$ ). In the interpretation of the effect sizes of the standardized road coefficients shown in Figure 1, Kline (2011) states that values less than .10 indicate small effects, values around .30 indicate medium effects, and values of .50 and above indicate high effects. In this sense, it can be said that the standardized coefficient sizes regarding the necessity of multicultural education have an overall high impact on the belief that it is an individual right and the belief that it is a general right for people.

#### 4. Discussion

Based on the first subproblem of the study, prospective teachers' beliefs about the necessity of multicultural education and their levels of participation in self-efficacy perception scales for multicultural education were examined. From the analysis, prospective teachers participated at the 'high level' of belief that there is an individual right belonging to the belief scale regarding the necessity of multicultural education and general belief for people. Likewise, it is seen that the self-efficacy perceptions scale for multicultural education has a high level of participation in the self-efficacy sub-dimensions of designing effectiveness, self-efficacy regarding the management of cultural differences and self-efficacy sub-dimensions. This result is viewed



positively by researchers. The fact that prospective teachers' beliefs about the need for multicultural education and their self-efficacy perceptions about multicultural education are high indicates that prospective teachers will shape the classroom environment in line with multicultural education when they enter service. Similarly, these findings may help to reduce the problems caused by multiculturalism, both in the school educational process and in the social context. As a result of the research conducted by Yıldırım (2016), teachers' beliefs about the necessity of multicultural education and their self-efficacy perceptions toward multicultural education were high. Kervan (2017) concluded that teachers' attitudes toward multicultural education are high. As a result of the research carried out by Başarır (2012), the perceptions of prospective teachers' toward multicultural education are at a high level. This result coincides with the outcome of this research. Perkins (2012) concluded that prospective teachers have a high level of knowledge and attitude towards multiculturalism. Strickland (2018) found that teachers working in diverse American schools with different ethnic backgrounds have approximately a high mean level of multicultural experience. Roh (2015) found that prospective teachers believe they have moderate multicultural competence. The result of this research coincides with the results of multicultural education in national and international literature. Especially with the wars in recent years and the resulting migrations, individuals with different cultural characteristics have begun to live together. In this case, it has revealed the necessity of multicultural education in different countries.

Based on the second sub-problem of the study, we examined whether there was a significant difference in relation to the gender variable between prospective teachers' beliefs about the need for multicultural education and self-efficacy perceptions of multicultural education. The analyses revealed a significant difference between prospective teachers' beliefs about the need for multicultural education in favour of female prospective teachers. There was no significant difference between prospective teachers' self-efficacy perceptions toward multicultural education in terms of gender.

Based on this result, the gender variable significantly affects prospective teachers' beliefs about the necessity of multicultural education. Still, it does not have a significant effect on self-efficacy perceptions toward multicultural education. It is an important result that both female and male prospective teachers' have a high level of participation in both scales. This result shows that prospective and male prospective teachers' believe in the necessity of multicultural education. Also, the high self-efficacy ratings of male and female prospective teachers regarding multicultural education suggests that students will take cultural differences into account when designing lessons when they start their jobs. As a result of the research conducted by Yıldırım (2016), there was no significant difference in terms of the gender variable between teachers' beliefs about the necessity of multicultural education and their self-efficacy perceptions toward multicultural education. Roh (2015) determined that female prospective teachers' have more multicultural experiences.

The research also examined whether there is a significant difference between prospective teachers' beliefs about the necessity of multicultural education and their self-efficacy perceptions toward multicultural education in terms of the department variable. From the analyses carried out within the scope of the research, no significant difference was found between the beliefs of prospective teachers regarding the necessity of multicultural education and the self-efficacy perceptions of multicultural education in terms of the department variable. Based on this result, the variable of the department, which is studied, does not have a significant effect between the prospective teachers' beliefs about the necessity of multicultural education and their self-efficacy perceptions toward multicultural education. As a result, the average of prospective teachers' studying at the departments of primary education and social sciences teaching is high. Within the scope of the research, it was thought that there would be a significant difference in favor of social studies prospective teachers. Because when the course contents in the social sciences teachers training program are examined, it is seen that there are mostly courses related to cultural characteristics (YOK, 2018). Therefore, there was expected to be a significant difference between the social sciences prospective teachers' belief in the necessity of multicultural education and their self-efficacy perceptions of multicultural education. Aybek (2018) found there was no significant difference between the attitudes of prospective teachers' toward multicultural education in terms of the department variable in which education was found.

Within the scope of the research, it is also examined whether there is a significant relationship between prospective teachers' beliefs about the necessity of multicultural education and their self-efficacy perceptions toward multicultural education. The research determined that there are low- and medium-level significant

relationships between prospective teachers' beliefs about the necessity of multicultural education and their self-efficacy perceptions toward multicultural education. This result shows that prospective teachers' perception of self-efficacy will increase if their beliefs about the necessity of multicultural education increase. In this regard, it is important to inform prospective teachers' about multicultural education in teacher training programmes and to explain the necessity of this education. In this way, prospective teachers' self-efficacy perceptions of multicultural education will develop positively. As a result, prospective teachers will be able to organize their teaching environments according to multicultural education when they start working. Yıldırım (2016) determined that there was a moderately significant relationship between teachers' beliefs about the necessity of multicultural education and their self-efficacy perceptions toward multicultural education. Sezer-Onur and Kahraman-Bahçeli (2017) found a relationship between prospective teachers' attitudes toward multicultural education and their intercultural sensitivity.

Finally, it was investigated whether the prospective teachers' beliefs about the necessity of multicultural education can predict self-efficacy perceptions of multicultural education. As a result of the research, it was concluded that the sub-dimensions of the prospective teachers' beliefs regarding the necessity of multicultural education significantly predicted their self-efficacy perceptions toward multicultural education. Based on this result, prospective teachers' view of multicultural education as an individual and human right increases their perception of multicultural education. Wade (1995) emphasizes the effect of beliefs on instructional practices, pointing out that experiences also influence perceptions of self-efficacy, and perceptions of self-efficacy guide instructional practices. Yıldırım's (2016) research also came to a similar conclusion. As a result of the research undertaken by Türkan, Aydın and Üner (2016), a predictive relationship was found between the attitudes of prospective teachers toward multicultural education and their epistemological beliefs.

## 5. Conclusion

As a result of the research, it has been concluded that the prospective teachers' beliefs about the necessity of multicultural education and their self-efficacy perceptions toward multicultural education are high. This result is one of the important results of the research. A significant difference was found between the beliefs of prospective teachers' regarding the necessity of multicultural education in favour of female prospective teachers'. However, there was no significant difference between prospective teachers' self-efficacy perceptions of multicultural education on the gender variable. There was also no significant difference between the beliefs about the need for multicultural education and the self-efficacy perceptions of multicultural education in relation to the department variable in relation to education. Another important result of the research is to obtain a significant predictive relationship between prospective teachers' self-efficacy perceptions toward multicultural education. This result will make an important contribution to the literature. It shows that prospective teachers will increase their self-efficacy perceptions toward multicultural education if they see and believe in multicultural education as an individual and human right.

## 6. Recommendations

The following recommendations were developed from the research:

- Based on the belief that the necessity of multicultural education predicts the self-efficacy perception of multicultural education, prospective teachers should be given information about multicultural education in their undergraduate education. For this, a lesson on multicultural education can be included in teacher training programmes.
- Studies examining the beliefs about the necessity of multicultural education and the relationship between different scales and self-efficacy perception scales for multicultural education can be conducted.
- Comparative studies can be conducted examining the beliefs of teachers and prospective teachers about the necessity of multicultural education and their self-efficacy perceptions toward multicultural education.
- Among the qualitative research patterns that examine prospective teachers' beliefs about the necessity of multicultural education and the self-efficacy perceptions of multicultural education, research (e.g. phenomenological, case study and action research) can be conducted.

- Research can be conducted to examine the beliefs of prospective teachers' beliefs in different teacher training programs on the necessity of multicultural education and their self-efficacy perceptions of multicultural education.

## 7. References

- Aslan, S. (2017). *Çokkültürlü eğitime dayalı olarak geliştirilen disiplinlerarası öğretim programı aracılığıyla öğrencilerde hoşgörü değerinin ve eleştirel düşünme becerisinin geliştirilme sürecinin incelenmesi: bir durum çalışması* [A review of the development process of tolerance value and critical thinking skills of the students through the interdisciplinary curriculum developed based on multicultural education: A case study] [Doctoral dissertation]. Çukurova Üniversitesi, Adana.
- Aslan, S., & Aybek, B. (2019). *Uygulama örnekleriyle çokkültürlü eğitim ve değerler eğitimi* [Multicultural education and values education with application examples]. Ani Publishing.
- Aybek, B. (2018). An examination of the relationship between the critical thinking dispositions of prospective teachers and their attitudes toward multicultural education. *Yükseköğretim Dergisi*, 8, 282-292. <https://doi.org/10.2399/yod.18.012>
- Banks, J. A., Cookson, P., Gay, G., Hawley, W. D., Irvine, J. J., Nieto, S., Schofield, J. W., & Stephan, W. G. (2001). *Diversity within unity: Essential principles for teaching and learning in a multicultural society*. Washington: Center for Multicultural Education, University of Washington.
- Banks, J. A. (1993). Multicultural education: historical development, dimensions, and practice. *Review of Research in Education*, 18, 3-49. <https://doi.org/10.2307/1167339>
- Banks, J. A. (2010). Multicultural education: Characteristics and goals. In J. A. Banks & C. A. M. Banks (Eds.) *Multicultural education: Issues and Perspectives*. Wiley & Sons.
- Başar, H. (2019). *Sosyal bilgiler öğretmenlerinin çokkültürlü eğitime yönelik eğilimleri*. [The tendencies of social sciences teachers towards multicultural education] [Unpublished master's thesis]. Pamukkale Üniversitesi, Denizli.
- Başarı F. (2012). *Öğretmen adaylarının çok kültürlü eğitime ilişkin görüşlerinin ve öz-yeterlik algılarının değerlendirilmesi (Erciyes Üniversitesi örneği)*. [Evaluation of pre-service teachers' opinions and self-efficacy perceptions about multicultural education (Erciyes University sample)] [Unpublished master's thesis]. Erciyes Üniversitesi, Kayseri.
- Can, A. (2019). *SPSS ile bilimsel araştırma sürecinde nicel veri analizi*. [Quantitative data analysis in the scientific research process with SPSS]. Pegem.
- Çiftçi Acar, Y., & Aydın, H. (2014). Türkiye'de çokkültürlü eğitimin gerekliliği üzerine bir çalışma [A study on the necessity of multicultural education in Turkey]. *SDÜ Fen Edebiyat Fakültesi Sosyal Bilimler Dergisi*, 33, 197-218.
- Dolapçı, E. (2019). *Öğretmenlerin çok kültürlü özyeterlik algısı ve okul iklimi ile mülteci öğrencilere yönelik tutumları arasındaki ilişkilerin incelenmesi*. [The examination of the relationships among teachers' multicultural self efficacy, school climate and teachers' attitudes towards refugee students] [Unpublished master's thesis]. Kastamonu Üniversitesi, Kastamonu.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. (2014). *How to design and evaluate research in education*. McGraw-Hill Education.
- Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice*. Teachers College Press.
- Gay, G. (1994). *A synthesis of scholarship in multicultural education*. Retrieved from: <http://www.ncrel.org/sdrs/areas/issues/educatrs/leadrsph/le0gay.htm#author> Retrieved Date: 17.06.2020.
- Gürbüz, S. (2019). *AMOS ile yapısal eşitlik modellemesi*. [Structural equation modeling with AMOS]. Seçkin.

- Gürbüz, S.,& Şahin, F. (2018). *Sosyal bilimlerde araştırma yöntemleri: Felsefe-yöntem-analiz. [Research methods in social sciences: Philosophy-method-analysis]*. Seçkin Yayıncılık.
- Güvenç, B. (1994). *İnsan ve kültür. [People and culture]*. Remzi Yayınevi.
- Johnson, B.,& Christensen, L. (2014). *Educational research: quantitative, qualitative and mixed approaches*. SAGE.
- Karagöz, Y. (2017). *SPSS ve AMOS uygulamalı nitel-nicel-karma bilimsel araştırma yöntemleri ve yayın etiği.[SPSS and AMOS applied qualitative-quantitative-mixed scientific research methods and publication ethics]*. Nobel.
- Kaya, İ.,& Aydın, H. (2014). *Çoğulculuk, çokkültürlü ve çok dilli eğitim. [Pluralism, multicultural and multilingual education]*. Anı Yayıncılık.
- Kervan, S. (2017). *Öğretmenlerin çokkültürlü eğitime yönelik tutumları ile epistemolojik inançları ve öğretim yaklaşımları arasındaki ilişki. [The relationship between teachers' attitudes towards multi-cultural education with their epistemological beliefs and teaching approaches]* [Doctoral dissertation]. Balıkesir Üniversitesi, Balıkesir.
- Kline, R. B. (2011). *An easy guide to factor analysis*. The Guilford Press.
- Kline, R. B. (2016). *Principles and practise of structural equation modeling*. The Guilford Press.
- Korkmaz, İ. (2009). Sosyal öğrenme kuramı [Social learning theory] In B. Yeşilyaprak (Eds). *Eğitim psikolojisi: gelişim-öğrenme-öğretim [Educational psychology: development-learning-teaching]*. Pegem.
- Meydan, C. H.,& Şeşen, H. (2011). *Yapısal eşitlik modellemesi AMOS uygulamaları. [Structural equation modeling AMOS applications]*. Detay Yayıncılık.
- Özmantar, Z.K. (2019). Eğitim çalışmalarında sık kullanılan araştırma türleri. [Types of research frequently used in educational studies] In S. Turan (Eds). *Eğitimde araştırma yöntemleri. [Research methods in education]*. Nobel.
- Pajares, F. (2002). *Self-efficacy beliefs in academic contexts*: Retrived from: <http://www.uky.edu/~eushe2/Pajares/efftalk.html> Retrived Date: 12.05.2020.
- Perkins, R. M. (2012). *The multicultural awareness, knowledge, skills and attitudes of prospective teachers: a quantitative and heuristic phenomenological study* [Doctoral dissertation]. University of Missouri, Columbia.
- Roh, S. Z. (2015). A study of multicultural efficacy of pre-service secondary teachers in Korea and their experience in multiculturalism and multicultural education. *Advanced Science and Technology Letters*, 96, 36-39. <https://doi.org/10.14257/astl.2015.96.09>
- Schumacker, R. E.,& Lomax, R. G. (2004). *A beginner's guide to structural equation modeling*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Sezer-Onur, G.,& Kahraman-Bahçeli, P. (2017). Sınıf ve okul öncesi öğretmen adaylarının çokkültürlü eğitime yönelik tutumları ile kültürlerarası duyarlılıkları arasındaki ilişki: uludağ üniversitesi örneği. [The relationship between the attitudes of classroom and preschool prospective teachers' towards multicultural education and their intercultural sensitivities: sample of Uludag university] *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 13(2), 550-560. <https://doi.org/10.17860/mersinefd.336742>
- Sinagatullin, I.M. (2003). *Constructing multicultural education in a diverse society*. Scarecrow Press.
- Strickland, D. L. (2018). *Factor relating to the multicultural efficacy and attitudes of teachers* [Doctoral dissertation]. Georgia Southern University, Statesboro.
- Sue, D. W., Arrendondo, P., & McDavis, R. J. (1992). *Multicultural counseling competencie sandstandards: A call to professionals*. Retrived From: [www.aca.org](http://www.aca.org), Retrived Date: 10.06.2020
- Türkan, A., Aydın, H., & Üner, S.S. (2016). Öğretmen adaylarının çokkültürlü eğitim tutumları ile epistemolojik inançları arasındaki ilişkinin incelenmesi. [The relationship between prospective teachers' attitudes towards multicultural education and their epistemological beliefs] *İlköğretim Online*, 15(1), 148-159. <https://doi.org/10.17051/io.2016.16818>

- Wade, R. C. (1995). Developing active citizens: Community service learning in social studies teacher education. *Social Studies, 86*(3), 122-128.
- Yıldırım, S. (2016). *Kosova'daki öğretmenlerin çokkültürlü eğitime yönelik bilgi, inanç, tutum ve özyeterliklerinin sınıf içi uygulamalarıyla ilişkisinin incelenmesi. [Examining the relationships of knowledge, belief, attitude and self - efficiency of teachers toward multicultural education practice in Kosova]* [Doctoral dissertation]. Balıkesir Üniversitesi, Balıkesir.
- YÖK. (2018). *Öğretmen yetiştirme lisans programları [Teacher training undergraduate programs]*. Ankara Üniversitesi Basımevi Müdürlüğü.