

THE STUDY OF RELATIONSHIP BETWEEN PRE-SERVICE TEACHERS' SELF-EFFICACY BELIEFS AND ATTITUDES TOWARDS THE TEACHING PROFESSION

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The purpose of this study was to examine the relationship between preservice teachers' attitudes towards the teaching profession (ATP) and teachers' self-efficacy beliefs (TSEB). In particular, the study aimed to understand the effect of preservice teachers' self-efficacy beliefs (TSEB), age, gender and discipline on their attitudes towards the teaching profession (ATP). The study was conducted with a correlational research design. Sample for the study comprised 157 preservice teachers attending a public university. Attitude Scale towards the Profession of Teaching (ASPT) and the Teachers' Sense of Efficacy Scale (TSES) were used as tools for data collection. The data were analyzed using correlation and multiple regression analysis techniques. The results showed that there were positive and significant relations between the variables selected for the study. Regression analysis revealed that preservice teachers' self-efficacy beliefs (TSEB) have a positive and significant effect on their attitudes towards teaching profession (ATP).

KEYWORDS: Attitude, Preservice Teachers, Self-Efficacy, Teaching Profession

INTRODUCTION

Providing teachers with stable and successful professional development experience is a way to improve the quality of teaching and learning in

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institutions. Self-efficacy is an important and valuable concept in the framework of teachers' professional development (Bray-Clark & Bates, 2003). Educational research has also focused on exhibiting the factors developing and influencing teachers' effectiveness for a long time, and it has sought answers to the following questions a) What personal qualities do teachers really have? b) What are the ideal properties of effective teachers? and c) What is the dimension and nature of the differences between ideal and actual teacher properties? (Gavora, 2010).

Teachers' self-efficacy belief is an important motivational component to enhance teachers' effectiveness in the teaching-learning process and directly influences classroom output (Pendergast, Garvis, & Keogh, 2011). Teacher self-efficacy is a construct-based on Bandura's social cognitive theory, and it represents individuals' beliefs in their capacity to arrange and actualize the road maps needed in managing the probable situations (Bandura, 1997). In educational mediums specifically, it is teachers' individual beliefs in their aptitude to plan and to attain educational goals. In reality, high self-efficacy facilitates the effective employment of professional knowledge and skills. Therefore, teacher efficacy is a self-regulating property facilitating teachers' use of their potential to raise students' learning and it is associated with patience (Gavora, 2010). Teacher self-efficacy, as mentioned by Woolfolk, Hoy and Hoy (2009), is one of several personal properties, which is associated with student achievement. It is teachers' belief that enables them to be aware of how well their students learn and achieve the educational goals and how much they can influence and improve their students (Dellinger, Bobbett, Olivier, & Ellett, 2008).

Scrutinizing the development of teacher self-efficacies throughout pre-service teachers' training is so crucial. That is because teachers with high self-efficacy are more resistant in their teaching process and they try harder to reach all of their students' potentials (Pendergast, Garvis, & Keogh, 2011). Teachers with high self-efficacy attend to discover new efficiently alternative methods, search for more developed methods of teaching and experiment with more comprehensive teaching materials (Allinder, 1994). Such teachers are more willing to employ different approaches and methods encouraging their students to include the teaching-learning process (Caprara, Barbranelli, Steca, & Malone, 2006). Good and Brophy (2003) conclude that teachers with high self-efficacy allocate more time to monitoring their students, leading them during classes and making them work in groups and do cooperative work; and thus, they assure student participation.

Another concept influencing educational output is teachers' attitudes towards teaching profession. Both in-service teachers and pre-service teachers

are the most important factors in effective teaching and learning. Training pre-service teachers in a manner so as to have positive attitudes towards teaching-learning process as well as developing and updating in-service teachers' knowledge and skills is important in this process (Htang, 2017). An attitude is a continuous regulation of beliefs, feelings and behavioral tendencies towards events, objects, groups or symbols (Hogg & Vaughan, 2005). It is shaped by the way individuals are raised and by their lifelong experience (Eren, 2001). Attitudes displayed by people doing a job like teaching that has influences over community are important since attitudes affect individuals' behaviors (Alkan, 2018). While determining attitudes towards working in a specific profession is predictive of future working performance (Abas, 2013), it can also be effective on labor performance (Wegge, Schmidt, Parkes, & Dick, 2007). Andronachea, Bocos, Bocos and Macrib (2014) suggest that if preservice teachers have positive attitudes towards teaching profession, they can make their students develop intrinsic motivation more easily, they can communicate with them more effectively and they can be more available in the differentiation and individualization of learning situations.

An examination of relevant literature showed that studies analysing the development of teacher self-efficacy (Pendergast et al., 2011; Swan, Wolf, & Cano, 2011) are available. Studies considering the correlations between teacher self-efficacy and other variables have also been conducted. Chao, Sze, Chow, Forlin and Ho (2017) found that such variables as teacher self-confidence and the type of school were the important predictors of teacher self-efficacy. In another study in literature; Bruce, Esmonde, Ross, Dookie, and Beatty, (2010) analysed the correlations between teacher self-efficacy and student achievement while Bray-Clark and Bates, (2003) analyzed the correlations between teacher behaviours and teacher self-efficacy, student output. Uzun, Özkılıç, and Şentürk (2010) examined the correlations between the variables of gender and general academic achievement and teacher self-efficacy. Studies determining participants' attitudes towards teaching profession (Andronachea, Bocoş, Bocoş, & Macrib, 2014; Awanbor, 1996) and analyzing the attitudes towards teaching profession according to a number of variables (Alkan, 2018; Arthur, & Kambey, 2014; Bademcioğlu, Karataş, & Alcı, 2014) are also available in the literature. The fact that the number of researches considering the two variables- that is to say, attitudes towards teaching profession and teacher self-efficacy - together is limited (Çakır, 2005; Çakır, Erkuş, & Kılıç, 2004; Demirtaş, Cömert, & Özer, 2011; Nakip & Özcan, 2016; Ravi, 2013); that the number of researches focusing on the correlations between teacher self-efficacy beliefs and teacher-related variable is small (Chao, Sze, Chow, Forlin & Ho, 2017) and that the current research especially determines

the variables in predicting attitudes towards teaching profession makes us think that it could contribute to the literature. It can be a remarkable finding in terms of teacher self-efficacy' importance in sense of variables such as student learning, student output. On the other hand, influencer variable such as attitudes towards teaching profession on teaching-learning process and student performance makes the variables crucial in various teaching-learning mediums.

AIM OF THE STUDY

The purpose of the current research was to analyse the relationship among preservice teachers' self-efficacy beliefs (TSEB) and attitudes towards the teaching profession (ATP). In particular, the study aims to understand the effect of preservice teachers' self-efficacy beliefs (TSEB), age, gender and discipline on their attitudes towards the teaching profession (ATP)

RESEARCH METHODOLOGY

This research employed a correlational research design. The purpose of the correlational research is to describe the relationship between two or more variables and make predictions. Correlational research is a type of non-experimental design; therefore, correlational researches cannot be used to establish causal relations among the variables of a research.

SAMPLE OF THE STUDY

The research group was determined with convenience sampling method. A total of 157 preservice teachers attending the faculty of education in a public university during the fall semester of the 2018-2019 academic year participated voluntarily in the study. The number of female preservice teachers (78.3%) was higher than the number of male preservice teachers (21.7%). The age of preservice teachers ranged from 18 to 52 years with an average age of 20.23 (SD = 3.48); only one preservice teacher was 52 years old (Table 1).

Table 1**The Pre-Service Teachers' Characteristics.**

		N	Percentage (%)
Gender	Female	123	78.3
	Male	34	21.7
Age	18-22	141	89.8
	23-27	12	7.7
	28-32	1	0.6
	33-37	2	1.3
	38-up	1	0.6
Discipline	Early Childhood Education	10	6.4
	Guidance and Psychological Counselling	5	3.2
	Gifted Education	4	2.5
	Chemistry Education	44	28.0
	Mathematics Education	34	21.7
	Science Education	4	2.5
	Physics Education	5	3.2
	Biology Education	5	3.2
	German Language Teaching	23	14.6
	Turkish Education	2	1.3
	Classroom Education	15	9.6
	French Language Teaching	2	1.3
	English Language Teaching	4	2.5

TOOLS FOR DATA COLLECTION

Attitude Scale towards the Profession of Teaching (ASPT): ASPT developed by Üstüner (2006) was used to examine the preservice teachers' attitudes towards the profession of teaching. ASPT was a single dimension Likert type scale with 5 points in the range between strongly disagree (1) to strongly agree (5), in which some items are scored in reverse. The scale includes 34 items. The Cronbach's alpha reliability coefficient of the total scale is 0.93.

Teachers' Sense of Efficacy Scale (TSES): TSES was developed by Woolfolk Hoy (2001). The translation and adaption of scale into Turkish was made by Çapa, Çakıroğlu, & Sarıkaya (2005). In this study, the short form of the scale was used to measure preservice teachers' self-efficacy beliefs. The short form is composed of 12 items clustered into three factors named Efficacy for Instructional Strategies (EIS), Efficacy for Classroom Management (ECM), and Efficacy for Student Engagement (ESE). TSES was a 9-point Likert scale ranging from "1 = nothing" to "9 = a great deal". The Cronbach's Alpha internal consistency coefficient for the entire scale was 0.93; for the subscale EIS was 0.86, for the subscale "ECM" was 0.84, and for the subscale ESE was 0.82.

RESULTS OF THE STUDY

Before the regression analysis, the relationships between the variables of the study were explored using Pearson product-moment correlation coefficient. The results of correlation analysis are given in Table 2.

Table 2

Results of Correlations Analysis.

SCALES		(1)	(2)	(3)
1. Efficacy for Classroom Management (ECM)	Pearson Correlation			
	Sig. (2-tailed)			
2. Efficacy for Student Engagement (ESE)	Pearson Correlation	0.705(**)		
	Sig. (2-tailed)	.0001		
3. Efficacy for instructional Strategies (EIS)	Pearson Correlation	0.748(**)	0.793(**)	
	Sig. (2-tailed)	.0001	.0001	
4. Attitudes towards the teaching profession (ATP)	Pearson Correlation	0.606(**)	0.613(**)	0.646(**)
	Sig. (2-tailed)	0.0001	0.0001	0.0001

*** Correlation is significant at the 0.01 level (2-tailed).*

According to Cohen's (1988) criteria, the results of correlation analysis revealed that there was a strong, positive and significant correlation between the variables. Table 2 showed that there was a significant and positive correlation between the ECM and ESE ($r=0.705$, $n=157$, $p<0.001$), the ECM and EIS ($r=0.748$, $n=157$, $p<0.001$), the ECM and ATP ($r=0.606$, $n=157$, $p<0.001$). However, according to the correlation analyses, a strong, positive and significant correlation existed between the variables of ESE and EIS ($r=0.793$, $n=157$, $p<0.001$), ESE and ATP ($r=0.613$, $n=157$, $p<0.001$), and EIS and ATP ($r=0.646$, $n=157$, $p<0.001$). The results of standard multiple regression analysis are given in Table 3.

Table 3

The Results of Multiple Regression Analysis.

Model		Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	<i>p</i>
		β	Std. Error	β		
1	(Constant)	61.476	9.186		6.692	0.000
	ECM	0.850	0.363	0.221	2.341	0.021
	ESE	0.844	0.398	0.213	2.121	0.036
	EIS	1.270	0.408	0.337	3.113	0.002
	Age	0.369	0.333	0.066	1.106	0.270
	Gender	-5.627	2.814	-0.119	-1.999	0.047
	Discipline	-0.484	0.394	-0.077	-1.229	0.221

The results of standard multiple regression analysis revealed that preservice teachers' self-efficacy beliefs have a positive effect on their ATP. The results indicated that the six predictors together explained 48.9% of the variance ($R=0.699$, $R^2=0.489$, $F(6,150)=23.947$, $p<0.01$). Table 3 summarizes the coefficients, t values and analysis results. According to the result, ECM ($\beta=0.221$, $p<0.05$), ESE ($\beta=0.213$, $p<0.05$), and EIS ($\beta=0.337$, $p<0.05$) predicted significantly preservice teachers' ATP. Moreover, only gender of the preservice teachers from their characteristics contributed significantly to the model ($\beta=-0.119$, $p<0.05$). The gender has a negative effect on attitude. The final predictive model was:

$$\text{ATP} = 61,476 + (0.850 * \text{ECM}) + (0.844 * \text{ESE}) + (1.270 * \text{EIS}) + (-5.627 * \text{Gender})$$

DISCUSSION AND CONCLUSIONS

In the current research, the relationships between preservice teachers' ATP and TSEB were explored utilizing correlation analysis. According to the results of correlation analysis, there was a strong, positive and significant correlation between the variables. There was a significant and positive correlation between the ECM and ATP ($r=0.606$, $n=157$, $p<0.001$), ESE and ATP ($r=0.613$, $n=157$, $p<0.001$), and EIS and ATP ($r=0.646$, $n=157$, $p<0.001$). Similarly, while Nakip and Özcan, (2016) found that there is a significant correlation between TSEB and ATP of preservice teachers, Demirtaş, Cömert, and Özer, (2011) found that a positive, low and significant correlation exists. Also, some researchers (Çakır, 2005; Çakır, Erkus, & Kılıç, 2004) determined that there is a positive and significant correlation between TSEB and ATP of preservice teachers.

Multiple Regression Analysis was used to analyse the effect of preservice teachers' TSEB, age, gender and discipline on their ATP. The results showed that preservice teachers' self-efficacy beliefs have a significant and positive effect on their ATP. Similarly, Arastaman (2013) found that professional self-efficacy beliefs are significant predictors of ATP. Also, six predictors together explained 48.9% of the variance ($R=0.699$, $R^2=0.489$, $F(6,150)=23.947$, $p<0.01$). According to the result, ECM ($\beta=0.221$, $p<0.05$), ESE ($\beta=0.213$, $p<0.05$), and EIS ($\beta=0.337$, $p<0.05$) predicted significantly preservice teachers' ATP. Moreover, only gender of the preservice teachers from their characteristics contributed significantly to the model ($\beta=-0.119$, $p<0.05$). Nakip and Özcan, (2016) did not find a significant difference between TSEB and ATP of preservice teachers according to their gender and discipline.

Teachers' self-efficacy has been found to be predictive of attitudes towards teaching profession in this research which is a remarkable finding because it is

very important in raising teachers committed to their profession (Tschannen-Moran & Woolfolk Hoy, 2001), in assuring that students learn better (Gavora, 2010) and in having better student output (Podell & Soodak, 1993; Soodak, & Podell 1993). In the same way, attitudes towards teaching profession also influence the way students learn (Kavcar, 2005). Considering all this, the significance of these two variables in the educational process is undeniable. For this reason, it is very valuable to offer pre-service teachers who are to raise the next generations of learners, instructional activities enabling them to adopt positive attitudes towards teaching profession and to have high self-efficacy beliefs so that they can perform the profession in the most effective way possible and to give them the opportunity to show their competence and thus to make them gain experience to perform the profession in the best way possible. In future longitudinal research studies examining the diversity of preservice teachers' attitudes towards the teaching profession and teacher self-efficacy beliefs during their teaching process could be conducted.

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