Full Length Research Paper

The effect of the pedagogical Formation Education process in Turkey on self-efficacy beliefs of students in teaching

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In light of the recent ongoing debates in Turkey, the Formation Education, which is provided to students who graduated from faculties other than Educational Faculties, targets to make graduate students acquire the requirements and efficacy criteria of the teaching profession, which are defined in the Turkish National Education Basic Law 1739, Item 32? However, there have been a great deal of serious debates on several issues such as the difference in quality between the teacher candidates who receive this training after graduating from science-literature faculties and the teacher candidates who graduated from educational faculties, the reflection of this difference in the educational community, the duration in which this training is provided, the desire of each candidate receiving this training for being a teacher, and the changes in the attitudes of teacher candidates who receive formation education towards their profession. In this study, which was based on empirical model, the basic aim was to investigate the effects of Formation Education, which is one of the issues of debate in recent years, on the self-efficacy beliefs of students. When the results obtained in the present study were analyzed, it was observed that students experienced a decrease in the self-efficacy levels in the Formation Education process.

Key words: Formation Education, teaching, belief, efficacy.

INTRODUCTION

The sole purpose of educational systems is to raise conscious individuals are beneficial to themselves and to the society of which they are members. Teachers have great responsibilities in ensuring this (Gömleksiz, 2002, p. 150). For this reason, the expectations of the society from teachers have always been high; and the teaching profession has been referred to with high positions and values to reach these social expectations (Başaran, 1994, p. 77). Teaching is one of the oldest professions of human history; because, with this profession, the teaching concept has been integrated in the lives of humans (Koçoğlu, 2013, p.193). It is important that such

a profession that is cared for so much by all sections of the society is performed by people who love teaching and who are enthusiastic about it (Yılman, 2006, p. 181). Naturally, the humane skills that are necessary for teachers to adopt require a positive personal adequacy (Bandura, 1989, p. 1176).

In education, whose general purpose is to make individuals become beneficial for society (Küçükahmet, 2012, p. 180), the duties, responsibilities, roles and adequacy of teachers who are associated with an extremely comprehensive role are critical factors to form the educational activities in agreement with the main purpose of education (Helvacı, 2010, p. 297). In brief, the duty of teachers is to help students continue learning activity in all aspects. Learning is one of the consistent and specific behaviors which involve several aspects like the learning style, perception, processing, organizing and making sense of the stimuli around the individual (Aydemir et al., 2016, p. 1882). As the first and oldest profession, the teaching profession (Çelikkaya, 2014, p. 6,8), whose core activity is raising humans, refers to the attributes that are owned by a teacher in order to perform education and teaching in an efficient way. It also refers to the knowledge, understanding, skills and attitudes that are required by this profession to realize it in the expected manner (Şahin, 2009, p. 291).

Today, with the increasing duties and responsibilities of teachers, the "Professional Competence" concept, which refers to the power to perform and sustain a profession, and to the specific knowledge, skills and equipment required by a profession, has gained great importance in terms of increasing the quality of education (Çelebi, 2014, p. 127). For teachers, performing these requirements in the expected manner is directly related with their beliefs in performing their duties and responsibilities in due manner (Gürol et al., 2010, p. 1396).

The self-efficacy concept, which is associated with several cognitive and motivational processes, defined as having, being aware of, and using the rights of oneself, performing the expected duties, undertaking responsibilities and liabilities (TDK, 2015), was first mentioned by Bandura, and was based on the Social-Cognitive Theory (Bandura, 1993, p. 117). The efficacy of a teacher, on the other hand, may be considered as a factor that explains individual differences in performing an efficient education (Gibson and Dembo, 1984, p. 569). This factor refers to having certain skills like being planned to run educational processes, fluent speaking, and applying educational techniques by using several tools (Açıkgöz, 2000, p. 82). In addition to these qualifications, having a positive effect on the learning of students, and being in direct relation with the success of students are the characteristics showing that teaching cannot be performed by ordinary person (Kushner, 1993, p. 1). Furthermore, several concepts like student motivation, adopting innovation, classroom management, and productiveness of education are included in the self-

efficacy concept (Woolfolk and Hoy, 1990, p. 81).

The belief in efficacy in a professional field means that the teacher trusts in himself/herself or has judgments claiming that he/she has the skills to achieve success in his/her profession (Wolters and Daugherty, 2007, p. 181). This is the belief in being able to show the behaviors that are needed to achieve success for the desired target (Bandura, 1977, p. 193). The trust of teachers in having the skills that will ensure students will perform well in learning is one of the few educational variables that provide us with foresight in reliable learning outcomes and teacher practices (Poulou, 2007, p. 192). The belief of the teacher in being able to organize the learning of students and the level of trust in this context depend mostly on the experiences and school culture (Protheroe, 2008, p. 42).

Self-efficacy, which has a critical place in the self-perception of an individual, is a basic concept that is considered to be influential on behaviors. Self-efficacy is the belief and judgment on the skills of an individual in coping with different situations, in achieving success in an activity, and self-perception on his/her capacity (Senemoğlu, 2012, p. 228). It is the capacity of an individual in organizing the activities that are required to show a certain performance on the events that affect his/her life. Self-efficacy belief is one of the basic determiners of personal motivation and behavior, and it tells the individual how to feel and think. A strong self-efficacy belief increases the well-being and success of an individual in many aspects. In this context, individuals that have high self-efficacy beliefs about their capacities see difficult duties as the obstacles that will provide an opportunity for development instead of seeing them as threats that must be avoided. Such an effective viewpoint feeds a deep concentration and a basic interest in business life by decreasing stress (Bandura, 1994, p. 71). The expectations that affect self-efficacy perception directly are important factors affecting the selection of proper behaviors of a teacher and the efforts spent to achieve certain goals. In this sense, the self-efficacy expectation is the belief of a teacher in achieving success in a behavior that requires reaching a certain goal (Bandura, 1977, p. 193).

According to Bandura (1997, p. 1), there are several affective-cognitive properties in people with high self-efficacy perceptions like a desire to teach, a wider frontier concept, thinking in an accurate manner, being prepared for difficulties, and a decisive devotion to overcome obstacles. They can predict possible outcomes by shaping and assessing their beliefs in what they can do. They can plan their reactions by organizing targets. Since they can manage risks, they feel less pressure. They have control over uncomfortable opinions.

According to Jerald (2007, p. 1), a teacher with high self-efficacy belief has the tendency of making planning and organization at a very high level. Such a teacher is more enthusiastic to try new methods and is open to new

ideas to cover the needs of students. When things do not go right, such a teacher remains patient and is willing to continue. He/she is less critical in the face of students' mistakes and less enthusiastic to send difficult students to special education institutions.

Teacher self-efficacy perception was first conceptualized in 1976. A strong and significant relation was determined between the self-efficacy beliefs of teachers and the reading test scores of the students in a study which was conducted in the context of a Reading Program preferred at the school where the study was conducted (Armor et al., 1976, p. 24). In another study, a positive relation was detected between the self-efficacy beliefs and the rate of achieving targets, innovation of teachers, and increase in student performance (Ashton, 1984, p. 30). It was reported in another study that the self-efficacy perception was a strong explanatory variable in sustaining educational activities, in achieving targets and increasing the performances of students and teachers (Bergman et al., 1977, p. 11; Girgin, 2017). The following outcomes were reported in previous studies; teachers who consider themselves as efficient at a high level in teaching and who had self-confidence are highly efficient in new educational activities that require mastership; and such teachers are the most understanding and innovative teachers (Guskey, 1987, p. 10). Teachers who have high personal and educational efficacy perceptions are more passionate than their colleagues and have higher end-of-the-year targets (Allinder, 1995, p. 251; Poulou, 2007, p. 191; Bulut and Oral, 2011, p. 1). A healthy school medium that has efficient administrative auditing and academic activities contributes to the development of self-efficacy perception in teachers which may be influential on the learning of students (Hoy and Woolfolk, 1993, p. 355). A significant relation was determined between the self-efficacy of teachers in classroom management and in the observed classroom organization, and in the educational-emotional support. In other words, it was observed that the teachers who considered themselves as efficient in decreasing and managing unwanted behaviors of students were good at managing behaviors, using the time allocated for education in an effective manner, and provided various supports for students in educational and emotional terms (Ryan et al., 2015, p. 152). It was also determined that the willingness to apply more interesting and difficult techniques and creative programs in education, and classroom management practices intended for developmental, affective and cognitive targets were related with high self-efficacy perception (Ross, 1994, p. 2). It was reported in a study that female teacher candidates considered themselves as being more efficient in student participation and classroom management; and male teachers considered themselves to be more efficient in educational strategies (Aydemir et al., 2014, p. 164). In addition, it was reported in several studies that teacher candidates had the fear of non-communication during classes (Morgil et al., 2004, p. 70);

teacher candidates had more positive attitudes than the teachers who were in active duty (Arslan, 2013, p. 71); there were no differences between the self-efficacy perceptions of the students who graduated from Educational Faculties and those who graduated from Science-Literature Faculties and received Formation training (Elkatmış et al., 2013, p. 41).

The purpose of the study

The purpose of this study is to determine the effects of the Pedagogical Formation education process on the students graduating from Science and Literature, Theology, Fine Arts and Health Sciences Faculties as regards self-efficacy beliefs in the teaching profession.

METHODOLOGY

The model of the study

The Single Group Pretest-Posttest Empirical Design, which is one of the Quantitative Research Methods, was used as the method in the present study for the purpose of determining the answers to the questions of the study. In this model, the knowledge of one single group is measured before the application, and then the study is conducted. After the application, the group is subjected to the measurement process again. If the data obtained show statistically significant differences between the Pretest and Posttest results, it is accepted that this difference stems from the application (Baştürk, 2012, p. 37; Özmen, 2014, p. 56).

The study group

The study was conducted at Inonu University Educational Faculty in 2014-2015 academic years with the Pedagogical Formation students. The pre-test was applied to 250 students who were selected randomly at the beginning of the academic year, and the post-test was applied to 250 students who were selected randomly at the end of the academic year. 236 scales that covered the application criteria were assessed in the pre-test, and 171 scales that covered the same criteria were assessed in the post-test.

The data collection tool

The "Teacher Self-Efficacy Scale", which was developed by Tschannen-Moran and Woolfolk Hoy (2001), and adopted into Turkish by Çapa et al. (2005), was used in the study as the data collection tool. The scale consists of a total of 24 items and 3 sub-dimensions, which are "*student participation*", "*teaching strategies*" and "*classroom management*". The reliability of the scale was 0.94 for total self-efficacy score; 0.87 for student participation; 0.91 for teaching strategies; and 0.90 for classroom management (Tschannen-Moran and Woolfolk Hoy, 2001). In the study conducted by Çapa et al. (2005) on teacher candidates in Turkey, the reliability scores were found as 0.93 for total self-efficacy scores; 0.82 for "*student participation*"; 0.86 for "teaching strategies", and 0.84 for "classroom management".

Findings and interpretations

In this part, the findings on professional self-efficacy beliefs of the

Table 1. The t-test results for measurements related with pre-test-post-test average scores.

Measurement	Number of Items	$\overline{X}$	S	sd	T	p
Pretest	24	7.05	0.323	23	7.61	**0.000**
Posttest	24	6.8	0.257			

Table 2. The t-test results of the post-test Scores for the irrelevant measurements according to gender.

Gender	N	$\overline{X}$	S	sd	t	P
Female	122	6.75	0.98	169	0.866	0.388
Male	49	6.91	1.23			
Total	171					

students receiving Pedagogical Formation education are given.

The findings on the differences between the pre-test-post-test values in professional self-efficacy beliefs of the pedagogical formation students

The analysis of results on the difference between the pre-test-post-test results on self-efficacy beliefs of Pedagogical Formation Students are given in Table 1. It was observed that there was a significant decrease in the items in the self-efficacy beliefs of teachers in teaching profession after the Pedagogical Formation process [$t_{(23)}$=7.61, $p<0.05$]. While the average of self-efficacy beliefs in teaching profession before the Pedagogical Formation education was $\overline{X}$=7.05; it decreased to $\overline{X}$=6.8 after the training. The difference between pre-test and post-test averages shows that the self-efficacy beliefs of students decreased at a significant level in formation education process. This finding may be interpreted as awareness was formed on the fact that teaching profession requires certain qualifications and equipment, unlike what is thought about this profession; and pedagogical knowledge obtained by students in the process brought them a certain conscious level.

Findings on the analysis of post-test scores of pedagogical formation students according to gender

The findings on the analysis of self-efficacy belief posttest scores of pedagogical formation students according to the gender variable are given in Table 2. It was determined that the self-efficacy beliefs of male students ($\overline{X}$=6.91) were higher than that of female students ($\overline{X}$=6.75); however, it was also determined in the analyses that the self-efficacy beliefs did not show any significant differences according to the gender variable [$t_{(169)}$=0.866, $p>0.05$].

RESULTS AND DISCUSSION

Several steps have been taken in order to improve the teacher training programs in Turkey. It is still a question in the minds of many people whether these steps were taken because of political and social concerns or because of teacher training approaches. Higher

Educational Council (HEC) abolished the Pedagogical Formation program in April 5, 2012 by stating that there were too many teachers to be appointed after the Pedagogical Formation trainings. After this decision, which received reactions of Science-Literature Faculties, first the right to provide Pedagogical Formation was granted to Science-Literature Faculties in 2013 and then, it was declared that branch teachers would be educated and trained by Science-Literature Faculties (Yıldırım and Vural, 2014, p. 82). Instead of providing detailed information by HEC on this subject, Council of Deans of Science-Literature Faculties' (CDSLF) President made some explanation to the public. This shows that Science-Literature Faculties achieved success and it was declared to the public. However, instant, political and social decisions must be avoided in educational field. Education is the job of planning for the future. Decisions that will save the present day must be avoided in an institution that builds the future. HEC must define the long-term teacher training strategy and the approaches that are the bases of these strategies. The institutions that will train teachers must be informed in detail about these strategies and approaches for future planning; and the teacher training system must proceed in this way with sound steps (Yıldırım and Vural, 2014, p. 83). In the context of the decision taken by HEC, Formation Education practices started in educational faculties of the universities in Turkey. Unfortunately, the debates on this issue have continued until our present day. Despite these debates, an increase has been observed in the demand for teaching profession with the increase of employment of teachers in Turkey. When the increasing demand and the debates on this field are considered, it is observed that there is an inverse proportion. However, we may also claim that the appointments made so far without considering the efficacy criteria of teaching profession have also been influential on the increasing demands for teaching profession. Unfortunately, a teacher who is

teaching his/her subject based on the principle of "from the concrete one to the abstract one", which is one of the special education principles, and who is using up-to-date techniques (Koçoğlu, 2017), is only performing the requirements of the certificate or diploma he/she is given. The basic aim of formation education must be to increase the number of such teachers.

Although it has been reported in previous studies and in the present study which focused on self-efficacy that formation education is a requirement in Turkey (Demirtaş and Kırbaç, 2015, p. 148; Kartal and Afacan, 2012, p. 95; Katkat and Mızrak, 2003, p.156). Is it not necessary to change the dimension of the debates? The people who discuss these issues must be asked this question. In actual fact, the dimension that awaits change is asking the questions: "What are the differences between the self-efficacy belief levels of a teacher candidate receiving the certificate showing that he/she has the right to be a teacher? and "What are the reasons of these differences?" These questions will increase the quality of the debates, and will change the viewpoint on Formation Education. The present study was conducted in the light of this aim.

There are many university graduates who graduated from different faculties and would like to be teachers. For this purpose, the professional qualities needed by teacher candidates who are not graduates of Educational Faculties are provided with the Pedagogical Formation Education. The extent to which the students, who are to participate in this process, feel themselves as having self-efficacy in the teaching profession must be questioned, and answers must be given. The present study was conducted for this purpose. In the analyses, a significant decrease was detected in the professional self-efficacy levels of students after the Pedagogical Formation Education, and this interesting result was interpreted as pointing out to the necessity of Pedagogical Formation Education. As a matter of fact, this process provides students with the opportunity to assess their professional self-efficacy, and educators with the opportunity to assess the process. In the present study, the significant difference detected between the pretest and posttest teacher self-efficacy levels provides us with the most important evidence against those who want to simplify teaching profession in Turkey in many ways.

Based on the present study, it was concluded that the effort must be given to increase the quality of Pedagogical Formation Education by relevant units rather than discussing whether or not this education will be given. In addition, the criteria for receiving Pedagogical Formation Education must not be eliminated and the quality of this education must not be decreased with the concern of covering teachers' needs in the country.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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