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Evaluation of Prospective Teachers in Terms Of Academic Self-Efficacy and Professional Competence *

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Abstract: This study aims to determine the relationship between the self-efficacy perceptions of the prospective teachers and the levels of their professional competence. In the study, relational screening model is used and it is investigated whether prospective teachers' perceptions of academic self-efficacy and professional competence differed according to various variables. The population of the research constitutes 1430 university students (prospective teachers) who are educated in Inonu University Pedagogical Formation Education (PFE) Program in 2015-2016 academic year. In the sample of the study, there are 537 participants who were determined by random sampling method. The Ohio Teacher Competence Scale and The Academic Self-Efficacy Scale (Turkish versions) are used as a data collection tool. In the analysis of the data, the standard deviation, frequency, percentage and arithmetic mean of respondents were calculated. One-way analysis of variance, ANOVA and Scheffe Test are used. The main result of this research is that the perceptions of academic self-efficacy of prospective teachers are "Moderate" but their perceptions of professional competence are in level "Very". According to this result, prospective teachers are of the opinion that the teaching profession can be achieved with “a moderate level of academic competence”.

Keywords: *Academic self-efficacy, professional competence, prospective teacher, teaching profession.*

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Introduction

Self-efficacy, expressed as the sense of competence felt by a person in situations within the natural flow of life, is a concept introduced and mainly disseminated by Bandura (1977, 1982). The feeling of self-efficacy more or less leads to drastic changes in one's life. Accordingly, people with a sense of self-efficacy have a great deal of confidence in themselves about solving and coping with the problems in their lives and reflecting this self-confidence into every aspect of their lives (Tuckman, 1991). For them, there is no obstacle or way that can’t be get over. They act with this belief and do not stop to the struggle. On the other hand, people with low levels of self-efficacy feel ineffective in fighting or achieving problems. They cannot find the power to change events and conditions in themselves. According to Bandura (1977), people can be motivated to do what they would do by the outcomes and benefits that their actions will bring to them. However, as mentioned earlier, self-efficacy belief of one’s plays an very important role in this motivation process (Burger, 2006).

Self-efficacy beliefs are among the factors that determine how the individuals will feel, think and act in specific situations. A strong self-efficacy can provide significant contributions to the success and happiness of individuals. The theory of self-efficacy is based on two factors, including personal belief in achieving something and expectation of getting a successful result of something (work or activity) (Bandura, 1994, 1997). Self-efficacy effects both academic success at any level and all types of behaviours in any situations (Schunk and Pajares, 2009: 39; Schunk, 2011).

The academic self-efficacy, defined as "the perception of the subject's ability to perform an assigned academic task at the specified level of achievement" (Ekici, 2012: 175), is important for the reflection of it on the individual's performance. No competence, whether academic or not, is independent of the individual's ability and capacity. The applicability of any given subject depends on the perception of the person's individual competence and the perception of what he or she can or cannot do. Thus, the perceptions of the individual's cognitive, affective, and kinesthetic competence prepare him/her for both the social and academic dimensions of his/her life. The level of competence in human behaviour is affected by different factors such as direct and indirect experiences, verbal persuasion,

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physiological and emotional states, social models, etc. On the other hand, it would not be wrong to suggest that the most important factor is one's self-efficacy perceptions.

The concept of competence emerges when various units such as knowledge, skill, motivation, values come together (Sagir 2006). The personal judgments of teachers about their abilities and skills in teaching play a significant role in the education and training processes of the students (Ozdemir, 2008, p.279). Teachers gain some values as well as a lot of knowledge and skills to their students (Albayrak, 2015). In this context, teachers' self-efficacy beliefs can affect the quality of the education. Teacher self-efficacy is the belief in organizing and practicing the activities necessary for a teacher to successfully perform an instructional work in a particular subject (Tschannen-Moran et al., 1998).

It is possible to talk about studies on self-efficacy in the literature in Turkey (Azar, 2010; Coskun, 2010; Capri and Celikkaleli, 2008; Cetin, 2008, 2009; Ekici, 2006, 2012; Maden, 2010; Yaman, Koray and Altuncekic, 2004; Yilmaz and Cimen, 2008). It is very important that teachers who are roles-models for students both in their personal dialogue with students and in-class activities should be able to demonstrate their self-efficacy beliefs (Bayrakci, 2007). Moreover, the behaviour of teachers with this kind of self-efficacy belief will already bear the sign of this belief. Therefore, it would not be wrong to establish a link between the self-efficacy perception and the level of success (Guzel & Oral, 2017).

In this context, it can be argued that self-efficacy perceptions are extremely important in the academic achievement of students. Because the student's sense of academic self-efficacy depends on his/her belief in himself/herself and the academic achievement he/she can achieve (Guzel & Oral, 2017). Determining the self-efficacy perceptions of students, especially those who will be tomorrow's teachers, plays a decisive role in ensuring both the criteria and characteristics of entry to the profession and the qualifications expected of the teaching profession. This study is important in order to determine the academic self-efficacy of prospective teachers and to ensure that the results obtained from this determination can create better conditions to educate tomorrow's teachers.

The understanding of competence in the teaching profession predicts that prospective teacher is competent both cognitively and behaviourally. In this context, the student achievements embodied in the direction of these goals and evaluated in a scientific and objective way are important as much as the orientation and motivation of the students towards close and distant goals. Determining the level of competence of today's prospective teacher with respect to this profession makes it possible to determine and resolve any negativity that may arise in teacher training programs and practices at the beginning of the work. By doing so, future teachers would be more competent and successful. The research seems to be important in terms of giving direction to both pre-service and in-service practices in teacher education from these aspects. In light of all these approaches, the research is seeking answers to the following questions:

What are the relationships between prospective teachers' perceptions of academic self-efficacy and their professional competence?

1. What are the perceptions of prospective teachers' academic self-efficacy and professional competence?
2. Are the perceptions of academic self-efficacy and professional competence of prospective teachers significantly different according to
    a) gender?
    b) branch?
3. Is there a relationship between prospective teachers' perceptions of academic self-efficacy and their professional competence?
4. Are the academic self-efficacy perceptions of prospective teachers a predictor of their level of proficiency in the teaching profession?

Methodology

Research Goal

In this study, it was aimed to determine the relationship between the self-efficacy perceptions of the prospective teachers and the levels of their professional competence. In this study, relational screening model was used. It was also investigated whether prospective teachers' perceptions of academic self-efficacy and professional competence differed according to various variables (Karasar, 2007**;** Buyukozturk et al., 2011).

Frankel, Wallen and Hyun (2011) state that, in various conditions, screening research is used in the descriptive method. These conditions are; in order to explain personality or opinion (eg, competence, ideas, attitudes, beliefs and knowledge accumulation), if the basic method of obtaining information is to gather the answers given by the group members of the study data to the questions and the information is collected from a sample representing the entire universe they are qualified. Relational screening models are research models aimed at determining the presence or degree of coexistence between two or more variables (Cohen, Manion and Morrison, 2000; Karasar, 2007) and it has been deemed appropriate to use it in this study.

Sample and Data Collection

The population of the research constitutes 1430 university students (prospective teachers) who are educated in Inonu University Pedagogical Formation Education (PFE) Program in 2015-2016 academic year. In the sample of the study, there are 537 participants who were determined by random sampling method from the universe.

71.7% of the prospective teachers is female and 28.3% is male. The main reason for the difference between the proportions is that the proportion of girls is higher in males than in males in the department. This situation is naturally reflected in the selection of the sample. 6,0% of participants were in sports, 9,5% in health, 23,8% in theology, 7.3% in natural sciences, 8,4% in fine arts and 45,1% in social sciences. Scale was applied to the participants included in the sample in accordance with the permission given for the use of the scale by Baloglu and Karadag (2008).

Data Collection Tools

Ohio Teacher Efficacy Scale (2008): The Ohio Teacher Competence Scale (2001), developed by Tschannen-Moran & Woolfolk-Hoy, was adapted to Turkish literature by Baloglu and Karadag (2008) and examined the validity and factor structure. In the study, Ohio State Teacher Efficacy Scale in English Form (Tschannen-Moran & Woolfolk-Hoy, 2001), English-Turkish translation congruence rating scale, Turkish language coherence and meaning rating scale and Turkish language and meaning validation rating scale for items are used to create Turkish form of Ohio State Teacher Efficacy Scale.

The cohesion averages of the scale items were 9.05 out of 10; It is also seen that nearly 55% of the scales are compatible with 9.00 out of 10. As a result of the explanatory factor analysis, it was found that the core values of the items were collected in 5 subscales larger than 1 and the factor loadings were between .436 and .772; therefore, factor analysis validity was found to be high.

Correlations between subscale scores of the scale are between .526 and .723. Accordingly, "Guidance" subscale is 3.92 (S = .53), "Behavior Management" is 4.06 (S = .54), "Motivation" is 3.99 (S = .45), "Teaching Ability" is 3.81 and Evaluation" is 3.85 (S = .56). It could be said that this scale can able to measure sense of efficacy for prospective teachers and teachers in a high level of reliability. Based on all these conclusions, the Ohio Teacher Competence Scale is thought to be a useful tool to use on teachers and teacher candidates.

Academic Self- Efficacy Scale: The Academic Self-Efficacy Scale (Ekici, 2012) was developed by the study of validity and reliability of the academic self-efficacy scale prepared by Owen & Froman (1988). The Turkish translation of the scale was made by language experts; expertise has also been assessed in terms of conformity to Turkish content, measurement and evaluation. There was a high consistency ($r = 86$, $p < 0.001$) between the English and Turkish form scores of the academic self-efficacy scale for the linguistic equivalence study; scale was applied to 683 prospective teachers in the spring semester of 2009-2010 academic year.

In the validity study of the academic self-efficacy scale, the fit of the data obtained after the application of the measurement tool to the sample group was found to be Kaise-Meyer-Olkin (KMO) = 0.86 and Barlett Test result $\chi 2 = 4376, 13$ ($p < .000$). As a result of the analysis, a measuring instrument consisting of 33 items and 3 sub-dimensions, which account for 45.8% of the total variance, was obtained and it was determined that the items in the sub dimensions overlapped with the items of the original measurement. These dimensions are named as “Social status” dimension, Cognitive practice” dimension and “Technical skill” dimension.

The findings of the scale were obtained by the factor analysis method. The scale consists of three sub-dimensions; social status dimension, cognitive applications dimension and technical skills dimension. The Cronbach Alpha reliability coefficient for the general population with 33 items was 0.86; 0.88 for the social status dimension, 0.82 for the cognitive practice dimension and 0.90 for the technical skill dimension. The results have shown that the scale can also be used in Turkey.

Analyzing of Data

First of all, it has been determined whether the scale items have skewness and kurtosis values and whether there is extreme value in the data set. As a result of the analyzes, it was seen that the skewness and kurtosis values of the data set changed between -.762 / +.782 and there was no extreme value.

In the analysis of the data, the standard deviation, frequency, percentage and arithmetic mean of respondents graded by 1-5 for each scale item were calculated. One-way analysis of variance in multiple comparisons was used to determine whether there was a difference between the perceptions of the prospective teachers about the proficiency levels in the teaching profession; and t-test was used for binary comparisons. Before the Independent Sampling t-test was performed between the bipartite groups, it was checked whether the data satisfied the assumptions required for the test. For multiple groups, before the ANOVA test was performed, the data were checked to see if they met the necessary assumptions. In case of statistically significant difference in ANOVA test, Scheffe test was preferred for multiple comparisons of mean scores in cases where variances were distributed equally in order to determine the difference between groups (Buyukozturk, 2010).

Kruskal Wallis-H test and Mann Whitney U test were done. The Pearson Moments Multiplication Correlation coefficients were calculated to determine whether there is a relationship between the teacher self-efficacy perceptions and their proficiency perceptions of the teaching profession and if any, the direction and level of this relationship. Multiple linear regression analysis was conducted to determine whether the teacher self-efficacy perceptions of prospective teachers were a predictor of their level of competence in the teaching profession. The independent variables of the analysis are the perceptions of the prospective teachers regarding the dimensions of 'Social Status', 'Cognitive Practices' and 'Technical Skills' with sub-dimensions of academic self-efficacy and academic self-sufficiency.

Findings / Results

Perceptions of prospective teachers about academic self-efficacy and professional competence

Descriptive statistical calculations were made on the data obtained in order to reveal the self-efficacy and professional competence perceptions of the prospective teachers. The lowest and highest scores, arithmetic mean and standard deviation scores from the scale and its sub-dimensions were calculated and the findings are presented in Table 1.

Table 1. Academic self-efficacy and professional (occupacional) competence perceptions of prospective teachers.

	Dimension	**Number of Items**	**Minimum**	**Maximum**	$\bar{X}$	***Standard Deviation***	***Level***
Academic Self-efficacy	Social Status	10	2,18	3,87	3,08	,57	Intermediate
	Cognitive Practice	19	2,57	4,04	3,37	,52	Intermediate
	Technical Skills	4	2,46	3,43	3,10	,75	Intermediate
	Academic Self-efficacy (Total)	33	2,18	4,04	3,18	,51	Intermediate
Professional competence	Guiding	6	3,71	4,00	3,87	,510	High
	Behavior Management	5	3,45	4,00	3,84	,541	High
	Motivation	6	3,78	4,02	3,88	,494	High
	Teaching Skill	5	3,61	4,18	3,80	,513	High
	Measurement and Evaluation	2	3,84	3,91	3,87	,641	High
	Teacher Competence (Total)	24	3,45	4,18	3,85	,465	High

When the findings in Table 1 are examined, the items with the lowest and highest arithmetic means are found to be item (article) 5 (duties in student associations: Student boards, commissions, etc., $\bar{X}$ =2.18)) and article 15 (listening carefully during a lesson, $\bar{X}$=4.04) for the whole scale. When looking from the perspective of sub-dimensions, the lowest arithmetic mean relates to 'Social Status'. In this context, they see that "prospective teachers are less able to express themselves well in social settings". It is noteworthy that the self-efficacy arithmetic mean scores of the prospective teachers are highest in the "Cognitive Practices" sub-dimension. This can be related to traditional point of view of students and test-oriented upbringing.

When looking at the teacher competence scale from the perspective of sub-dimensions, the arithmetic mean is close to each other, with the lowest arithmetic mean for 'Teaching Ability' and the highest arithmetic mean for 'Motivation'. In all subscales and across the scale, the perception of competence in the teaching profession was found to be ' high'.

The most important result of these analyses is that although the perceptions of the academic self-efficacy of the prospective teachers are "Moderate", the perceptions of competence related to the teaching profession are "High". It can be said that prospective teachers are of the opinion that the teaching profession can be achieved with a moderate level of academic competence.

Examination of prospective teachers' perceptions of academic self-efficacy and professional competence according to gender and major field of graduation variables

The t-test and one-way ANOVA were performed to determine whether the perceptions of competence of the prospective teachers about the self-efficacy and teaching profession differed significantly according to gender and major field of graduation variables.

Evaluation of academic self-efficacy and professional competence perceptions of prospective teachers according to "gender" variable

A t-test was conducted to determine whether prospective teachers' perceptions of academic self-efficacy and professional competence perceptions differ significantly for "gender" variable and the findings are given in Table 2.

Table 2. Comparison of perceptions of academic self-efficacy and professional competence of prospective teachers in terms of "gender" variable

	Sub-dimension	**Gender**	**N**	$\bar{X}$	**SS**	**sd**	**t**	**p**
Academic Self-efficacy	Social Status	Female	385	3,019	0,55418	535	-4,074	,000*
		Male	152	3,238	0,58493			
	Cognitive Applications	Female	385	3,396	0,49915	535	1,765	0,078
		Male	152	3,308	0,56854			
	Technical Skills	Female	385	3,07	0,76538	535	-1,571	0,117
		Male	152	3,184	0,74096			
	Total	Female	385	3,162	0,5044	535	-1,664	0,097
		Male	152	3,244	0,53946			
Teacher Competence	Guiding	Female	385	3,86	0,484	535	-0,535	0,593
		Male	152	3,89	0,571			
	Behaviour Management	Female	385	3,81	0,534	535	-2,185	,029*
		Male	152	3,92	0,551			
	Motivation	Female	385	3,86	0,474	535	-1,149	0,251
		Male	152	3,92	0,54			
	Teaching Skills	Female	385	3,76	0,5	535	-2,803	,005*
		Male	152	3,9	0,533			
	Measurement and Evaluation	Female	385	3,82	0,623	535	-2,752	,006*
		Male	152	3,99	0,672			
	Total	Female	385	3,82	0,449	535	-2,245	,025*
		Male	152	3,92	0,497			

As a result of the t-test according to gender variable, it was determined that the self-efficacy perceptions of prospective teachers differ significantly in favour of male teachers only in the 'Social Status' [t(535) = -4.074, p<.05] sub-dimension. When other sub-dimensions and whole scale were taken into consideration, it was determined that the self-efficacy perceptions of prospective teachers did not show statistically significant difference according to gender variable [t(535) = -1.664, p>.05]. However, there is a difference in favour of female teachers in the 'Cognitive Practices' subscale, while the male prospective teachers have a higher average in the other two subscales than female teachers.

According to Table 2, the perception of competency of the prospective teachers regarding the teaching profession is seen to make a meaningful difference in terms of all sub dimensions except "Orientation" and "Motivation" for gender variable. It is understood that the statistical analysis reveals a significant difference in favour of male teachers as in all sub-dimensions the male prospective teachers have a higher average. In terms of 'Teaching Ability' sub-dimension, the difference between the averages of female and male prospective teachers appears to be highest when compared to other sub-dimensions.

Assessment of self-efficacy and professional competence perceptions of prospective teachers according to "Major Field of Graduation" variable.

One-way ANOVA was performed to determine whether the perceptions of prospective teachers on academic self-efficacy and professional competence differed significantly according to the "major field of graduation" variable and the findings are presented in Tables 3 and 4.

Table 3. Comparison of academic self-efficacy perceptions of prospective teachers in terms of "Major Field of Graduation"

Sub-dimension	**Major**	**N**	**$\bar{X}$**	**SS**	**F**	**p**	**Difference**
Social Status	A-Sports	32	3,10	,423	1,280	,271	
	B-Health	51	2,96	,691			
	C-Theology	128	3,08	,605			
	D-Natural Sciences	39	3,01	,488			
	E-Fine Arts	45	3,24	,581			
	F-Social Sciences	242	3,08	,549			
	Total	537	3,08	,571			
Cognitive Practices	A-Sports	32	3,28	,599	1,890	094	
	B-Health	51	3,35	,527			
	C-Theology	128	3,29	,494			
	D-Natural Sciences	39	3,56	,477			
	E-Fine Arts	45	3,35	,604			
	F-Social Sciences	242	3,39	,506			
	Total	537	3,37	,520			
Technical Skills	A-Sports	32	3,09	,826	3,512	,004*	C – E
	B-Health	51	3,18	,805			
	C-Theology	128	2,93	,723			
	D-Natural Sciences	39	3,35	,711			
	E-Fine Arts	45	3,36	,872			
	F-Social Sciences	242	3,08	,724			
	Total	537	3,10	,759			
Academic Self-efficacy (Total)	A-Sports	32	3,16	,527	1,742	,123	
	B-Health	51	3,16	,594			
	C-Theology	128	3,10	,511			
	D-Natural Sciences	39	3,31	,449			
	E-Fine Arts	45	3,32	,581			
	F-Social Sciences	242	3,18	,490			
	Total	537	3,18	,515			

As a result of the analysis of the variance, the teacher self-efficacy perceptions of the prospective teachers show a significant difference only in 'Technical Skills' [F (5.531) = .3.512; P <0.05] sub-dimension. According to the findings obtained from the Scheffe test, the significant difference determined in this sub-dimension is between the Faculty of Fine Arts and the Faculty of Theology and students and it is favoured Faculty of Fine Arts students.

Academic self-efficacy perceptions of the prospective teachers from all fields are "moderate" and similar to each other. Nevertheless, the difference in academic self-efficacy perceptions of prospective teachers studying at the Faculty of Theology and Fine Arts can be explained by the fact that one is educated in a more concrete and visual field, while the other is educated in a more abstract and spiritual field.

Table 4. Comparison of professional perceptions of prospective teachers in terms of "Major Field of Graduation"

Sub-dimension	Major	N	$\bar{X}$	SS	F	p	Difference
Guiding	A-Sports	32	3,83	,512	1,916	,090	
	B-Health	51	3,83	,505			
	C-Theology	128	3,82	,519			
	D-Natural Sciences	39	3,75	,550			
	E-Fine Arts	45	4,05	,531			
	F-Social Sciences	242	3,88	,490			
	Total	537	3,86	,510			
Behaviour Management	A-Sports	32	3,85	,588	1,186	,315	
	B-Health	51	3,82	,392			
	C-Theology	128	3,78	,543			
	D-Natural Sciences	39	3,83	,600			
	E-Fine Arts	45	4,01	,568			
	F-Social Sciences	242	3,85	,543			
	Total	537	3,84	,541			
Motivation	A-Sports	32	3,87	,527	1,705	,132	
	B-Health	51	3,80	,434			
	C-Theology	128	3,85	,492			
	D-Natural Sciences	39	3,86	,466			
	E-Fine Arts	45	4,07	,558			
	F-Social Sciences	242	3,88	,490			
	Total	537	3,88	,494			
Teaching skills	A-Sports	32	3,78	,495	2,888	,014*	E – F
	B-Health	51	3,77	,479			
	C-Theology	128	3,78	,468			
	D-Natural Sciences	39	3,71	,532			
	E-Fine Arts	45	4,07	,546			
	F-Social Sciences	242	3,78	,526			
	Total	537	3,80	,513			
Measurement and Evaluation	A-Sports	32	3,79	,670	1,533	,178	
	B-Health	51	3,95	,512			
	C-Theology	128	3,79	,589			
	D-Natural Sciences	39	3,90	,637			
	E-Fine Arts	45	4,07	,698			
	F-Social Sciences	242	3,86	,674			
	Total	537	3,87	,641			
OHIO Teacher competence (Total)	A-Sports	32	3,83	,484	2,054	070	
	B-Health	51	3,83	,388			
	C-Theology	128	3,81	,462			
	D-Natural Sciences	39	3,81	,477			
	E-Fine Arts	45	4,05	,531			
	F-Social Sciences	242	3,85	,459			
	Total	537	3,85	,465			

As a result of the variance analysis in Table 4, the perception of competence of the prospective teachers regarding the teaching profession shows significant difference only in 'Teaching Skills' [F(5. 531) = 2.888; p<0.05] subscale. According to the results of the Scheffe test on the source of the difference, the meaningful difference found in the 'Instructional skill' sub-dimension is between prospective teachers of Social Sciences and Fine Arts and in favour of teachers who will work in the field of fine arts.

However, when the scale is taken as a whole, the perceptions of competence regarding the teaching profession [F(5. 531) = 2.054 p>.05] do not show any significant difference due to the major field variable. It is noteworthy that the highest average of the scale and all sub-dimensions belong to the prospective teachers in the field of fine arts in terms of major field of graduation variable.

Examination of the relationship between prospective teachers' perceptions of academic self-efficacy and professional competence

The Pearson Moments Multiplication Correlation coefficients were calculated to determine if there is a relationship between prospective teachers' academic self-efficacy and professional competence perceptions, and if so, the direction and level of this relationship. The findings are presented in Table 5.

Table 5. The relationship between prospective teachers' perceptions of academic self-efficacy and professional competence

Dimensions	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1- Social Status	-									
2- Cognitive Practices	,550**	-								
3- Technical Skills	,527**	,546**	-							
4- Guiding	,380**	,463**	,351**	-						
5- Behavioural Management	,331**	,393**	,312**	,735**	-					
6- Motivation	,380**	,441**	,369**	,759**	,694**	-				
7- Teaching Ability	,358**	,402**	,342**	,754**	,745**	,745**	-			
8- Measurement and Evaluation	,312**	,308**	,287**	,617**	,618**	,605**	,575**	-		
9- Academic Self-efficacy	,814**	,808**	,870**	,469**	,408**	,470**	,436**	,360**	-	
10- Teacher competence	,406**	,461**	,382**	,888**	,876**	,871**	,876**	,810**	,493**	-

**p<0.01

As a result of the correlation analysis, significant relationships were found between all sub-dimensions (p <0.01). In terms of academic self-efficacy, there is a moderately positive relationship between the 'Social Status' sub-dimension and the 'Cognitive Practices' (r = .550) and 'Technical Skills' (r = .527) sub-dimensions. There is a high level of positive relationship between 'Social Status' and academic self-efficacy (r = .814).

There is a moderate relationship between 'Cognitive Practices' and 'Technical Skills' (r = .546) subscales positively. In addition 'Cognitive Practices' has a high level of positive correlation with academic self-efficacy (r = .808).

There is a high level of positive correlation between the 'Technical Skills' sub-dimension and the Academic Self-efficacy (r = .870).

When we look at Table 5, which explains the relationship between prospective teachers' perceptions of academic self-efficacy and professional competence, in terms of teacher competence, there exists a moderate positive correlation between 'Guiding' and 'Measurement and Evaluation' (r = .617) subscales. Among the items of 'Behaviour Management' (r = .735), 'Motivation' (r = .759), 'Teaching Ability' (r = .754) and 'Teacher Competence' (r = .888) a positive relationship at high level has been determined.

While there is a moderate relationship between 'Behavior Management' sub-dimension and 'Motivation' (r =, 694) and 'Measurement and Evaluation' (r =, 618) sub-dimensions in the positive direction; there is a high positive relationship between 'Teaching Skill' (r =, 745) and 'Teacher Competence' (r =, 876), which is the whole scale.

There is a moderate relationship between the 'motivation' sub-dimension and the 'measurement and evaluation' (r = .605) sub-dimension positively and there is a high level of positive correlation between 'Teaching Skill' (r = .745) and 'Teacher Competence' (r = .871). There is a high level of positive correlation between 'Measurement and Evaluation' sub-dimension and 'Teacher Competence' (r = .810). According to the above-mentioned relational analyzes, it is concluded that there is a weak correlation between 'Academic Self-efficacy' and 'Teacher Competence' (r = .493) in the positive direction.

Academic self-efficacy perceptions of prospective teachers as a predictor of the level of competence in teaching profession

Multiple linear regression analysis was performed to determine whether the teacher self-efficacy perceptions of prospective teachers were a predictor of their level of proficiency in the teaching profession. The independent variables of the analysis are the perceptions of the prospective teachers' academic self-efficacy and its sub-dimensions 'Social Status', 'Cognitive Practices' and 'Technical Skills'. The dependent variable is the perception of competence in the teaching profession. The results are given in Table 6.

Table 6. Results of Multiple Linear Regression Analysis of prospective teachers' academic self-efficacy perceptions on their professional competence levels

Variable	B	Standard error	β	t	p	Zero r	Partial r
Constant	2,283	.120	-	18,996	.000		
Social Status	,144	,039	,177	3,741	,000	.406	.160
Cognitive Practice	,262	,043	,293	6,106	,000	.461	.256
Technical Skills	,079	,029	,129	2,743	,006	.382	.118
R= .506	R^2 = .256						
$F_{(3-533)}$ =61,156	p=0,000						
Constant	2,437	,110		22,234	,000		
Academic Self-efficacy	,445	,034	,493	13,103	,000	,493	,493
R= .493	R^2 = .243						
$F_{(1-535)}$ =171,197	p=0,000						

According to the results of multiple linear regression analysis conducted to determine whether academic self-efficacy perceptions are a significant predictor of occupational competence of prospective teachers, the independent variables (R= .506, R^2= .256) were significantly associated with the occupational competence perception ($F_{(3-533)}$ = 61.156, p<0.01).

Social Status, Cognitive Practices, and Technical Skills variables together account for 25.6% of the change in the perception of professional competence of prospective teachers. Regarding the standardized regression coefficients, the order of significance of the predictive variables are listed as; Cognitive Practices (β= .293), Social Status (β= .177), and Technical Skills (β= .129). Academic self-efficacy variable alone account for 24.3% of prospective teachers' perception of professional competence. According to these results, it is the academic self-efficacy perception that determines the teacher's future proficiency at a rate of one fourth.

Discussion and Conclusion

It can be said that the authenticity of this research comes from the fact that the researches that deal with the issues of academic self-efficacy and professional competence in terms of prospective teachers analysed have not yet been done in our country. The main result of this research, which aims to evaluate the perceptions of prospective teachers about their academic self-efficacy and professional competence, is that the perceptions of academic self-efficacy of prospective teachers are "Moderate" but the perceptions of professional competence are "Very". According to this result, prospective teachers are of the opinion that the teaching profession can be achieved with "a moderate level of academic competence". However, Bandura (1997) and Raudenbush, Rovan and Cheong (1992) state that, it is also necessary to have self-efficacy beliefs as well as having the necessary academic competence. Otherwise, low academic competence can damage the educational process by preventing the teacher from coping with the uncertainties and problems in the classroom. When the literature is examined, it can be seen that there are some studies showing that the self-efficacy perceptions of prospective teachers are at a high level (Aggul Yalcin, 2011; Harurluoglu and Kaya, 2009; Yesilyurt, 2013).

The results of the research also show that there is a significant relationship between some personal characteristics of prospective teachers (gender, branch) and perceived academic self-efficacy and professional competence. According to the gender variable, male teachers' perceptions are higher in terms of both academic self-efficacy and professional competence. The perception of male prospective teachers as being more competent and academically sufficient for the teaching profession can be explained in that they take the pre-service education more serious and in this way they can be better prepared for the profession. Moreover, this may be explained by their high degree of professional self-esteem.

According to the branch variable, the perceptions of those of the "fine arts" branch are higher in terms of both academic self-efficacy and professional competence. Fine Arts is based on a content based on both audiovisual qualities and on the learning of kinetic (psycho-motor) behaviors. For this reason, it requires a more visible teaching skill compared to other branches and therefore leads the perceptions of prospective teachers on this dimension.

Another important result of this research is that there is a positive relationship between prospective teachers' perceptions of academic self-efficacy and professional competence, and that academic self-efficacy perceptions are a significant predictor of competence in the teaching profession. The variables of "Social Status, Cognitive Practices and Technical Skills", which are the dimensions of academic self- efficacy, together explain 25.6% of the change in prospective teachers' perceptions of professional competence. Accordingly, it can be argued that academic self-efficacy perceptions play a decisive role and influence on the professional competence of prospective teachers. Besides all this results, teacher competence - in this context professional competence- creates a positive discipline atmosphere in the class and sets the ground for a productive learning environment. So, it would be beneficial to have prospective teachers who have both higher professional competence and academic self-efficacy.

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