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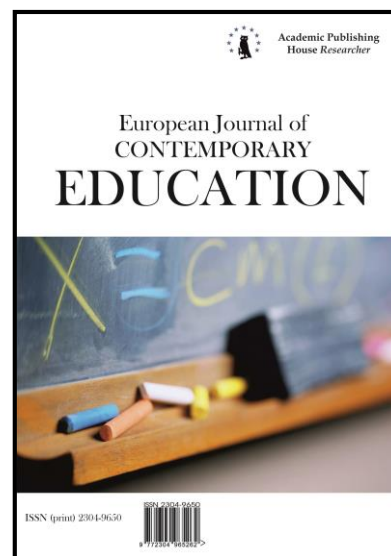
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## **An Analysis of Pre-Service Teachers' Attitudes and Opinions Regarding the Teaching Profession via Q-Methodology**

Servet Demir <sup>a,\*</sup>

<sup>a</sup> Gaziantep University, Turkey

### **Abstract**

One of the factors influential on teacher achievement is their attitudes towards the profession. Teacher attitude influences a teacher's satisfaction with their profession, devotion to the profession, belief in the necessity and importance of the teaching profession, and belief in professional development. General evaluation of pre-service teachers' attitudes has yielded positive and high results in a lot of studies. It is believed that pre-service teachers having high attitudes will also have job satisfaction, which will be promising for the future of the teaching profession. However, there are also studies indicating low levels of attitudes among pre-service teachers. In this study, Q-methodology, a reliable method that takes individuals' unique perspectives, was employed to determine students' opinions and perceptions. The present study was carried out with the fourth year students (i.e. pre-service teachers) studying at a university located in the southern part of Turkey. Q-sort results indicate that majority of the pre-service teachers have positive attitudes towards the teaching profession. Qualitative analyses indicate that they have both positive and negative perceptions. Furthermore, three different groups of teachers were formed in the study: idealists, forced teachers, and confused teachers.

**Keywords:** Pre-Service Teachers, Attitudes, Q-Methodology, Teaching Profession.

### **1. Introduction**

The expectations regarding the quality of educational outcomes increase as social expectations rise. Some important factors influential on educational outcomes are learning process, teaching process, and the quality of teachers and students. Teachers' influence on the quality of outcomes is undeniable. Providing the society with qualified teachers is a priority for nearly all the countries (Furlong, Cochran-Smith, & Bernnan, 2009: 1).

One of the factors influential on teacher achievement is their attitudes towards the

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\* Corresponding author

E-mail addresses: [demirservet@gmail.com](mailto:demirservet@gmail.com) (S. Demir)

profession. Teacher attitude influences a teacher's satisfaction with his profession, devotion to the profession, belief in the necessity and importance of the teaching profession, and belief in professional development (Güneyli & Aslan, 2009). If future teachers have positive attitudes and opinions regarding their profession, they can easily improve the intrinsic motivation of their students, communicate with them, and spend more effort to personalize and diversify the learning situations in the future (Andronache, Bocoş, Bocoş, & Macri, 2014).

Pre-service teachers' perceptions regarding their professional attitudes and opinions (i.e. their ways of perceiving the profession) are as important as the knowledge they have. Teachers' attitudes towards the profession are not defined clearly. They are shaped by teaching, student, classroom environment, and the subjects which are covered unintentionally in general. They are influential on teachers' thinking processes, classroom activities, professional changes, improvements, and teaching skills to a great extent (Güneyli & Aslan, 2009).

Some of the studies in the literature based on Turkish context that deal with pre-service teachers' attitudes and opinions can be summarized as follows:

The study conducted by İpek, Kahveci, & Camadan (2015) revealed that female pre-service teachers have higher positive attitudes regarding the teaching profession compared to male pre-service teachers. Another result of that study is that the second year pre-service teachers have higher positive attitude scores regarding the teaching profession compared to the fourth year students.

Altunkeser's (2014) dissertation study on pre-service primary school teachers proved that the scores pre-service teachers get from Student Selection and Placement Exam (OSYS) and academic achievement are not significant predictors of their attitudes towards the teaching profession. In addition, no significant difference was found between pre-service teachers' attitudes by gender and the type of high school they graduated from.

A study conducted with pre-service primary school mathematics teachers indicated that students' mean attitude scores regarding the teaching profession were at medium level, which refers to a positive attitude towards the teaching profession meaning "suitable". Moreover, the study determined no statistically significant difference between students' attitudes towards the teaching profession by gender. Furthermore, no statistically significant difference was detected between students' attitude scores regarding the teaching profession according to the type of high school they graduated from and grade (Taşdemir, 2014).

According to the results of a study conducted with the 4<sup>th</sup> year pre-service primary school teachers studying at the Faculty of Education at Muş University, pre-service teachers' had positive and highly positive attitudes regarding the teaching profession. That study also identified a significant relationship between pre-service teachers' attitudes towards the teaching profession and their departments (Kesen & Polat, 2014).

In another study focusing on attitudes towards the teaching profession among the first year pre-service teachers attending the Faculty of Education at Sakarya University, pre-service teachers' attitudes were found to be high, and a significant difference in favor of female pre-service teachers was determined. In addition, a variation was detected in the attitudes towards the teaching profession from department to department. In this sense, it was seen that the opinions of the students studying at the Department of Computer and Instructional Technologies, the Department of Science Education, and the Department of Primary School Mathematics Education differed from those of the students attending the Department of Primary Education, the Department of Social Sciences Education, and the Department of Pre-School Education (Gür Erdoğan & Zafer Güneş, 2012).

Another study dwelt on the relationship between education faculty students' attitudes towards the teaching profession and their levels of concern. The results of that study indicated that attitudes were positive while the levels of concern were low and there was a low negative significant relationship between the two variables. It was also seen that gender was influential on their attitudes with female pre-service teachers having more positive attitudes (Doğan & Çoban, 2009).

A study was conducted in the Department of Turkish Language Education at Gazi Faculty of Education. This study revealed that pre-service teachers generally have positive attitudes towards their profession and like it (Temizkan, 2008).

General evaluation of pre-service teachers' attitudes has yielded positive and high results in a

lot of studies (Akpınar, Yıldız, & Ergin, 2006; Çetinkaya, 2009; Andronache, Bocoş, Bocoş, & Macri, 2014). It is believed that pre-service teachers having high attitudes will also have job satisfaction (Taşdemir, 2014), which will be promising for the future of the teaching profession (Kesen & Polat, 2014). However, there are also studies indicating low levels of attitudes among pre-service teachers (Kahyaoğlu, Tan, & Kaya, 2013).

There are studies indicating that there is a difference (Şahin Taşkın & Hacıömeroğlu, 2010; Gökçe & Sezer, 2012; Gür Erdoğan & Zafer Güneş, 2012) and also studies claiming that there is no difference between pre-service teachers in terms of attitudes towards the teaching department (Bozdoğan, Aydın, & Yıldırım, 2007; Hacıömeroğlu & Şahin Taşkın, 2010; Üstüner, Demirtaş, & Cömert, 2009; Bozdoğan, Aydın, & Yıldırım, 2007). These studies report that all the pre-service teachers have high attitudes, but pre-service teachers studying in certain departments have higher attitudes. It is not possible to make a generalization about this difference over the departments.

Ceylan and Turhan (2010) attempted to reveal pre-service teachers' opinions regarding education and instruction. The data were collected from 134 pre-service teachers via interviews. Through the coding of the interviews, pre-service teachers were seen to have both positive and negative views regarding teacher quality and education in the beginning. However, at the end of the course, they did not state any negative concept.

Şener (2015) conducted a study with pre-service teachers from the Department of English Language Teaching and revealed that pre-service teachers had positive attitudes. The general mean score of the positive statements regarding the teaching profession was 4.19 out of 5. When asked about the reasons for selecting the teaching profession, 65.25 % of the pre-service teachers stated positive reasons and denoted that they willingly selected their department.

According to the results of a study conducted with students studying at the Department of Physics Education, students studying physics do not have much concern regarding the profession of teaching. It was seen that students have most concern about appointment, but have less concern about personality and conflicts. Another result of that study is that male students think that the education they receive is not enough for them to be physics teachers. In addition, it was seen that the majority of the students had chosen that department not because they were willing to. Less than two-fifths of the students stated that they selected that department because of their interest in physics courses (Kaya & Büyükkasap, 2005).

Research dwelling on whether having a teacher in family influences attitudes towards the teaching profession generally assumed that children with a family member working as a teacher would have more positive attitudes towards the profession of teaching. Though certain studies confirmed this assumption (Korkmaz & Usta, 2010), some other could not (Aydın & Sağlam, 2012; İltar & Köksalan, 2011).

## **2. Method**

Q-methodology was employed to determine students' opinions and perceptions. Q-methodology is considered as a reliable method that takes individuals' unique perspectives as a reference (Brown, 1996). It refers to the analysis of people's subjective opinions and ideas. The basic tool of Q-methodology is Q-sort technique involving a series of expressions from "I agree" to "I disagree" (Brown, 1996). Though it was originally coined in the field of psychology, Q-methodology later started to be used in social sciences as well. It is a method in which the strong sides of both quantitative and qualitative methods are used, and the data analysis process is carried out via a special software (Brown, 1996; Demir & Kul, 2011).

Thanks to Q-methodology, it is possible to distinguish between groups with dramatically different opinions in relation to the issue focused on in a study. Basically, Q-methodology is comprised of six steps (Reid, 1999): selection of the particular issue; development of the Q-sort statements; implementation of Q-sort; interviews with participants; and statistical analysis and interpretation.

The present study was carried out with the fourth year students (i.e. pre-service teachers) studying at a university located in the southern part of Turkey during the fall semester of the 2015–2016 academic year. Since pre-service teachers were taking teaching practice course in the schools during the period when the survey was administered, they had the opportunity to observe the working conditions of teachers. The pre-service teachers were classified by department, gender, and academic achievement. An attempt was to put equal number of participants in the groups.

Datasets were prepared and administered to the students. The process took 10 to 15 minutes for each student. The students were initially asked to classify the given statements into “Positive”, “Neutral”, and “Negative”. Afterwards, they were asked to classify them based on “-4, +4” grading in accordance with the Q-methodology scale form. Under each grade, the students could put as many statements as shown in Q-sort given in Figure 1 below. After completing the classification of the items, the students filled the Q-sort template. A total of 43 students participated in the process. However, data obtained from 3 students were incomplete, and some of the statements included repetitions. Therefore, data obtained from these 3 students were excluded.

Q-Sort Template

-4	-3	-2	-1	0	+1	+2	+3	+4
2								2
	4						4	
		5				5		
			6	6	6			

**Fig. 1.** Q-Sort Template

In addition, the students were asked to respond the questions below for qualitative analysis.

1. Why did you put the statements into the -4 category?
2. Why did you put the statements into the - +4 category?

*Data Analysis*

The PQMethod program was employed for data analysis. Classification of the participants was based on department (Turkish Language Education=t, Primary Education=p, Mathematics Education=m, English Language Teaching=e), gender (Male=m, Female=f), GPA (from 2.00 to 3.00 =3, from 3.00 to 4.00 =4), high school (Anatolian Teacher Training High School=a, Others=o), and having teacher relatives (Yes=y, No=h). The limit of significance was calculated to be 0.41.

Content analysis method was employed for the analysis of qualitative questions. The responses given by the pre-service teachers were coded freely. The data were re-coded after six weeks. Code similarity rate was found to be 0.86. Free codes were combined under relevant categories and themes. Four themes were created in the study: perception, affective situation, preference, and competence. The definitions of these themes, categories, and codes as well as sample statements concerning them are given in [Table 1](#).

The perception theme involves codes regarding how pre-service teachers perceive teaching. Secondly, the affective situation theme includes codes concerning what they feel in regard to teaching. Thirdly, the preference theme contains codes about pre-service teachers’ voluntariness when choosing the departments which they are attending now. Lastly, the competence theme incorporates codes regarding whether their characteristics are suitable for teaching and whether they have appropriate knowledge and competence for it.

**Table 1.** The table of theme, category, and code definitions

Theme	Category	Code	Explanations and sample sentences
Perception	Positive perception	Willingness	Willingness to be a teacher <i>"I would like to be a teacher"</i>
		Fun	Thinking that teaching profession is fun <i>"I think it will be a fun job"</i>
		Positive perception of teaching	Thinking that one will gain prestige when he becomes a teacher <i>"I think the people around me will appreciate me enough when I become a teacher"</i> <i>"Teaching is a prestigious profession"</i>
	Negative perception	Negative perception of teaching	Thinking that teaching will not be appreciated enough <i>"There is no prestige"</i>
		Difficult conditions	Thinking that teaching has difficult conditions <i>"Teachers have difficult working conditions"</i>
Affective Situation	Affective characteristics regarding the necessity of the profession	Loving teaching	Being happy for teaching <i>"Thinking that I will teach people the things they do not know makes me happy"</i>
		Liking	Liking teaching <i>"I liked teaching"</i>
		Not liking	Not liking teaching <i>"I do not recommend a profession I do not like to others"</i>
	Positive feelings	Not being afraid	Not being afraid of and worried about teaching <i>"Thinking that I will be a teacher never makes me afraid"</i>
		Excitement	Excitement about being a teacher <i>"The teaching profession makes me excited"</i>
	Reflection of negative feelings	Worry	Being worried about being a teacher <i>"The idea of being a teacher worries me"</i>
		Being in fear of making a mistake	Being aware of the responsibility of teaching and being in fear <i>"I am in fear of behaviors that are likely to have a wrong and adverse effect on my students"</i>
Preference	Negativities	Choosing another profession	Possibility of choosing another profession <i>"I would not choose teaching if I had a right to do so"</i>
		Forced choice	Unwillingness and choosing because of nonobjective guidance <i>"I did not want to be a teacher myself"</i>
	Positive	Voluntary choice	Voluntary choice of teaching <i>"I myself chose and wanted to be a teacher"</i>
		Not being regretful	Not regretting choosing to be a teacher <i>"I do not regret choosing to be a teacher"</i>
Competence	Dimension of confidence	Self-confidence	Believing in oneself for teaching <i>"I think I have teaching in my very nature"</i>
		Considering competent	Considering oneself competent at teaching <i>"Teaching suits my competences"</i>
		Believing that one will succeed	Believing that one will be successful when he starts teaching <i>"I do not think I will be unsuccessful in teaching"</i>
	Personal dimension	Being fit for personality	Thinking that teaching suits one <i>"Teaching is a suitable profession for my personality"</i>

		Being skillful	"I believe that I have the skill of teaching"
		Being keen on researching	Being able to research "Research and discussion are my job"
		Being talented	"I think I have the talent to do this job"
		Willingness to discuss	"Discussion is my job"
		Not being fit for personality	"Teaching does not suit me"
		Existence of suitable professions	"There are other professions that are suitable for my personality"
	Dimension of knowledge and education	Good education	"I think I have received a good education"
		Being knowledgeable	"...I think I will be a knowledgeable teacher."
		Overcoming the difficulties	"... I think I will be able to overcome the difficulties I confront with"

### Findings and Interpretations

In the presentation of the findings, information will be given on factor analysis in the first place. Then the characteristics of the emerging groups will be evaluated, and the items on which the groups agreed will be indicated. Finally, the findings obtained through qualitative analysis will be presented.

**Table 2.** The table of factor loadings

Participant/Factor	1	2	3
1 tb4de1	<b>0.7864X</b>	-0.1571	0.3066
2 tb4de2	<b>0.8572X</b>	0.0873	-0.0528
3 te3de5	-0.2386	<b>0.6366X</b>	0.1086
4 tb4de6	<b>0.8346X</b>	-0.3546	0.0298
5 tb3de7	<b>0.6937X</b>	-0.0340	0.0357
6 te3de8	<b>0.8086X</b>	0.1209	-0.0014
7 tb3de10	0.1633	-0.3613	<b>0.5939X</b>
8 sb4de11	<b>0.8300X</b>	-0.2799	-0.0718
9 sb4de12	<b>0.8641X</b>	-0.2242	-0.1600
10 sb3de13	<b>0.7269X</b>	0.0206	0.1542
11 sb3dh14	<b>0.7642X</b>	-0.0265	0.1557
12 sb4de15	<b>0.9016X</b>	-0.1854	-0.0533
13 se3dh16	<b>0.6097X</b>	0.3663	-0.0325
14 se3dh17	<b>0.7875X</b>	0.2061	0.2622
15 se4dh18	0.5623	<b>0.6493X</b>	0.3118
16 se4dh19	<b>0.8098X</b>	-0.3813	-0.1089
17 sb3de20	<b>0.5261X</b>	0.3885	-0.4216
18 mb3de21	<b>0.6608X</b>	-0.2896	-0.1363
19 mb3de22	<b>0.8290X</b>	-0.0182	0.0818
20 me3de23	<b>0.8114X</b>	-0.1377	0.0802
21 me4de24	<b>0.8156X</b>	0.0592	0.0411
22 mb4ae25	<b>0.7781X</b>	0.2804	-0.1261
23 mb4be26	<b>0.8290X</b>	-0.1198	0.1747



24 me3dh27	<b>0.7826X</b>	-0.2717	0.0267
25 me4dh28	<b>0.7378X</b>	0.0011	-0.1237
26 me3dh29	<b>0.8303X</b>	0.1379	-0.0454
27 mb4de30	<b>0.6451X</b>	-0.0133	0.4385
28 mb3de31	<b>0.7139X</b>	0.3705	0.0082
29 ie3de32	0.3081	<b>0.8223X</b>	0.2256
30 ib3dh33	<b>0.5905X</b>	0.5136	-0.2924
31 ib4de34	<b>0.7307X</b>	0.1268	-0.1271
32 ie3dh35	<b>0.7798X</b>	-0.2200	0.0199
33 ib4be36	<b>0.9033X</b>	-0.1153	-0.1588
34 ib3de37	<b>0.6529X</b>	0.0851	-0.1459
35 ie4dh38	-0.7292	<b>0.4390X</b>	0.0811
36 ib4dh39	<b>0.8259X</b>	-0.2647	0.1555
37 ie4de40	<b>0.6938X</b>	-0.3973	-0.0611
38 ib4dh41	-0.1765	<b>0.7291X</b>	0.0586
39 ie4dh42	<b>0.7523X</b>	0.0685	-0.2293
40 ie3de43	<b>0.8374X</b>	0.0022	-0.0970

x indicates the factor the person is included in.

The Table 2 shows the factor results of 40 people constituting the sample. The participants are enumerated and presented as 1, 2, etc. in the table. Principal component analysis and rotation indicated that 40 participants grouped under 3 factors. 34 grouped under the first factor (column), 5 under the second factor, and 1 under the third factor. That 34 of the participating 40 students (i.e. 85 % of the entire study group) grouped under a single dimension may be implying that it is a general character of the group. Hence, it can be said that the pre-service teachers had similar views regardless of their department, achievement level, gender, high school graduation, and having a relative that is teacher. The common ground of such similarity and the statements to which more importance was attached will be presented in the following sections.

**Table 3.** The Z-scores and ranks of importance of the items

Item	Factor 1		Factor 2		Factor 3	
	Z	Rank*	Z	Rank*	Z	Rank*
I think I will be successful in teaching.	1.551	1	0.650	12	-1.366	37
Thinking that I will teach people things they do not know makes me happy.	1.362	2	1.563	3	1.366	3
I am glad that I have chosen the teaching profession.	1.303	3	-1.364	37	0.911	9
I think teaching is a suitable profession for me.	1.256	4	-0.552	27	1.366	5
I am self-confident about the requirements of the teaching profession.	1.200	5	0.551	13	0.455	17
I think I will be a knowledgeable and competent teacher.	1.127	6	1.008	6	-0.000	21
Teaching is the primary profession that suits my personality.	1.026	7	-1.765	39	-0.911	33
I believe that I can maintain teaching in a professional way.	1.013	8	0.514	14	0.911	10
I myself wanted to be a teacher.	0.972	9	-1.027	34	0.455	16
The teaching profession makes me excited.	0.971	10	-1.124	36	-0.000	18

I believe that I will be able to overcome the difficulties I will confront with in the teaching profession.	0.911	11	0.832	8	-0.911	31
I believe that I have a special talent for teaching.	0.887	12	-0.325	23	-0.000	22
The idea of being a teacher does not worry me.	0.734	13	0.093	19	-0.000	20
I discuss and talk about education, learning, and teaching.	0.718	14	1.041	5	0.911	11
The possibility of mistreating my students distresses me.	0.681	15	0.973	7	-0.455	24
Teaching profession is not appreciated enough.	0.594	16	0.808	10	-0.911	34
Teachers have difficult working conditions.	0.518	17	0.826	9	1.366	4
I would still choose teaching if I had a chance to choose a profession again.	0.388	18	-2.025	40	0.455	14
I will recommend teaching as a profession to my students.	0.256	19	-0.584	30	0.455	15
I would like to teach even under difficult conditions.	0.211	20	-0.419	24	-0.455	29
I think the people around me will appreciate me enough when I become a teacher.	0.047	21	-1.051	35	-0.455	25
There are other professions than teaching that suit me.	0.047	22	1.956	2	-1.822	39
The working conditions of teaching attract me.	-0.119	23	-1.740	38	-0.455	27
The people around me would appreciate me more if I had chosen another profession.	-0.456	24	0.451	17	1.822	1
Teaching is a prestigious profession in the society.	-0.488	25	0.782	33	1.822	2
I do not recommend teaching to those who are about to choose a profession.	-0.546	26	0.494	16	-1.822	40
I do not have enough knowledge and competence for teaching.	-0.556	27	-0.170	21	1.366	6
If I had a chance, I would like to have another profession.	-0.643	28	2.157	1	-1.366	35
I will give up teaching if I have problems.	-0.694	29	0.001	20	-0.000	23
I think I will not be able to overcome the difficulties I will confront with during teaching.	.1.065	30	-0.619	31	-0.455	26
In general, I do not like talking about topics related to teaching.	-1.104	31	-0.533	26	-1.366	38
I think I am incompetent at teaching.	-1.110	32	-0.650	33	0.455	12
I think I will not be able to teach at a satisfactory level.	-1.187	33	-0.264	22	0.911	7
I find teaching boring.	-1.195	34	0.732	11	0.911	8
The teaching department was a forced choice for me.	-1.276	35	1.245	4	-0.911	32



Thinking that I will become a teacher makes me afraid.	-1.386	36	-0.575	29	-1.366	36
I think teaching does not suit my personality.	-1.439	37	0.510	15	-0.911	30
I think I will be unsuccessful in teaching.	-1.485	38	-0.504	25	-0.455	28
I think I do not have the skill of teaching.	-1.494	39	-0.563	28	0.455	13
I regret choosing teaching as a profession.	-1.526	40	0.233	18	-0.000	19
THE VARIANCE EXPLAINED (%)	53		10		4	

\* The rank of the importance attached by the individuals included in the factor to the item.

The [Table 3](#) presents the items, their Z-scores, and their ranks of importance in each group (factor). The items were listed based on the degrees to which 34 students grouping under the factor 1 attached importance to them. In other words, the item to which the 34-person group attached the most importance was “I think I will be successful in teaching.” whereas the item to which the group attached the least importance was “I regret choosing teaching as a profession.” The fact that the positive items were the items to which the students grouping under factor 1 attached the most importance and those items had positive Z-scores may prove that the overall attitude is positive. In the second group, the highest Z-score (2.157) was obtained from “If I had a chance, I would like to have another profession.” whereas the lowest score (-2.025) was obtained from “I would still choose teaching if I had a chance to choose a profession again.” It is clearly seen that the second group chose the teaching profession forcedly. In the third group, the highest Z-score (1.82) was obtained from “The people around me would appreciate me more if I had chosen another profession.” whereas the lowest Z-score (-1.82) was obtained from “I do not recommend teaching to those who are about to choose a profession.” It is seen that the individuals in this group think that more prestige can be gained in professions other than teaching, but they would still recommend the teaching profession to others. The items characterizing the groups are presented in [Table 4](#).

**Table 4.** The Items Characterizing the Groups

	Factor 1		Factor 2		Factor 3	
	Z	Item	Z	Item	Z	Item
POSITIVE END	1.55	I think I will be successful in teaching.	2.16	If I had a chance, I would like to have another profession.	1.82	The people around me would appreciate me more if I had chosen another profession.
	1.03	Teaching is the primary profession that suits my personality.	1.96	There are other professions than teaching that suit me.	1.82	Teaching is a prestigious profession in the society.
	1.01	I believe that I can maintain teaching in a professional way.	1.24	The teaching department was a forced choice for me.	1.37	I do not have enough knowledge and competence for teaching.
NEGATIVE END	-1.48	I think I will be unsuccessful in teaching.	-1.36	I am glad that I have chosen the teaching profession.	-1.37	I think I will be successful in teaching.

	-1.49	I think I do not have the skill of teaching.	-1.74	The working conditions of teaching attract me.	-1.82	There are other professions than teaching that suit me.
	-1.53	I regret choosing teaching as a profession.	-2.03	I would still choose teaching if I had a chance to choose a profession again.	-1.82	I do not recommend teaching to those who are about to choose a profession.

The items characterizing the groups show that 34 people under the factor 1 have positive perceptions regarding teaching whereas the other factors involve negative perceptions. Those who are in the first group are the people who have chosen the teaching profession willingly and enthusiastically and feel themselves competent to maintain the profession in the future. This group was named “*idealists*”. Those who are in the second group have chosen the teaching profession forcedly. They do not find teaching interesting. They would like to have another job if they had an opportunity. This group was named “*Forced teachers*”. Finally, those who are in the third group find the teaching profession prestigious, but less prestigious than other professions. They believe that they are not completely competent at teaching and so will not be successful in this profession. This group was named “*Confused teachers*”.

**Table 5.** The Items on Which There Was an Agreement among the Groups

Item	Group1		Group2		Group3	
	Q-SR	Z-Score	Q-SR	Z-Score	Q-SR	Z-Score
* I discuss and talk about education, learning, and teaching.	1	0.72	3	1.04	2	0.91
I think I will be a knowledgeable and competent teacher.	3	1.13	3	1.01	0	0.00
*Thinking that I will teach people things they do not know makes me happy.	4	1.36	3	1.56	3	1.37
*Teachers have difficult working conditions.	1	0.52	2	0.83	3	1.37
I believe that I can maintain teaching in a professional way.	2	1.01	1	0.51	0	0.00
*I think I will not be able to overcome the difficulties I will confront with during teaching.	-2	-1.06	-2	-0.62	-1	-0.46
I think I am incompetent at teaching.	-2	-1.11	-2	-0.65	-3	-1.37

\* It does not lead to a difference that is significant at 0.05 level.

The [Table 5](#) demonstrates the statements on which the groups agreed. It indicates that while the first five items were considered positive or neutral by all the groups, the last two items were deemed negative by all the groups. The items imply that the pre-service teachers think that they can overcome the problems they may confront with and they are competent in professional terms. It is significant that even those pre-service teachers who have chosen this profession forcedly are willing to cope with these problems. All three groups welcome the happiness felt for teaching people the things they do not know at a high level.

### Qualitative Findings

**Table 6.** The Categories, Codes, and Frequencies Concerning the Perception Theme

Category	Code	Frequency	The Number of People	Group	Group	Group
Positive Perception	Willingness	3	3	3	0	0
	Fun	1	1	1	0	0
	Positive perception of teaching	6	5	3	1	1
Negative Perception	Negative perception of teaching	8	6	5	1	0
	Difficult conditions	5	4	2	2	0

The pre-service teachers used 10 positive perception codes and 13 negative perception codes. They have negative perceptions regarding teaching and find working conditions difficult.

**Table 7.** The Categories, Codes, and Frequencies Concerning the Affective Situation Theme

Category	Code	Frequency	The Number of People	Group	Group	Group
Affective characteristics regarding the necessity of the profession	Loving teaching	5	5	5	0	0
	Liking	5	5	5	0	0
	Not liking	1	1	0	1	0
Positive feelings	Not being afraid	7	7	7	0	0
	Excitement	2	2	2	0	0
Reflection of negative feelings	Worry	1	1	0	1	0
	Being in fear of making a mistake	1	1	1	0	0

In the affective situation theme, two negative statements were delivered by the people in Group2. Group1, on the other hand, stated the negativity “being in fear of making a mistake”. The pre-service teachers repeated the positive codes “Loving teaching”, “Excitement”, “Not being afraid”, and “Liking” 19 times. It can be said that the pre-service teachers generally have positive perceptions in affective terms.

**Table 8.** The Categories, Codes, and Frequencies Concerning the Preference Theme

Category	Code	Frequency	The Number of People	Group	Group	Group
Negativities	Choosing another profession	8	7	2	4	1
	Forced choice	2	2	0	2	0
Positive	Voluntary choice	12	8	8	0	0
	Not being regretful	7	7	7	0	0

In the preference theme, negativities were mainly stated by Group2 and Group3. The members of Group1 said that they chose their profession voluntarily and do not regret choosing it. Hence, it can be said that students’ voluntary choice of profession is influential on their maintaining it.

**Table 9.** The Categories, Codes, and Frequencies Concerning the Competence Theme

Category	Code	Frequency	The Number of People	Group	Group	Group
Dimension of confidence	Self-confidence	3	3	3	0	0
	Considering competent	6	4	4	0	0
	Believing that one will succeed	11	10	10	0	0
Personal dimension	Being fit for personality	15	12	12	0	0
	Being skillful	9	8	8	0	0
	Being keen on researching	1	1	1	0	0
	Being talented	6	6	6	0	0
	Willingness to discuss	1	1	1	0	0
	Not being fit for personality	4	2	0	2	0
	Existence of suitable professions	2	2	1	1	0
Dimension of knowledge and education	Good education	1	1	1	0	0
	Being knowledgeable	1	1	1	0	0
	Overcoming the difficulties	7	7	6	1	0

The competence theme consists of the dimension of confidence, personal dimension, and the dimension of knowledge and education. In the dimension of confidence, the pre-service teachers in Group1 consider themselves competent and believe that they will be successful. In the personal dimension, most of the pre-service teachers stated that teaching suits their personality and they are skillful and talented in teaching. In the dimension of knowledge and education, they think that they can overcome the difficulties thanks to the education they receive. It can be said that the pre-service teachers using the codes, “Not being fit for personality” and “Existence of suitable professions” do not have a professional identity developed enough.

### 3. Conclusion and Discussion

Q-sort results indicate that majority of the pre-service teachers have positive attitudes towards the teaching profession. Qualitative analyses indicate that they have both positive and negative perceptions. However, they had more positive codes in the affective dimension. Many previous studies report that pre-service teachers generally have positive and high attitudes towards their profession (Akpınar, Yıldız, & Ergin, 2006; Çetinkaya, 2009; Andronache, Bocoş, Bocoş, & Macri, 2014; Duatepe & Akkuş-Çıkla, 2004; Uğurlu & Polat, 2011; Kayan Fadlemula, 2013; Akbulut & Karakuş, 2011). It is believed that pre-service teachers having high attitudes will also have job satisfaction (Taşdemir, 2014), which is promising for the future of the teaching profession (Kesen & Polat, 2014). However, there are also studies indicating that pre-service teachers have low attitudes (Kahyaoğlu, Tan, & Kaya, 2013). Furthermore, while some studies suggest that pre-service teachers have low levels of concern (Doğan & Çoban, 2009), some others indicate that they do have certain concerns (Kaya & Büyükkasap, 2005).

Three different groups of teachers were formed in the study: idealists, forced teachers, and confused teachers. Qualitative analyses yielded codes that support the characteristics in these groups. In the competence dimension, the pre-service teachers have high levels of self-confidence and think that they will be successful. There are pre-service teachers who think that the profession suits their personality while there are also those who just have the opposite view. The pre-service teachers consider themselves competent. It is important to choose teaching willingly to maintain it.

The presents study revealed that there are both willing and forced pre-service teachers selecting the profession. Similarly, Mtika and Gates (2011) state that there are pre-service teachers who have selected the teaching profession as a last resort while there are also those who have opted for the program because they like teaching. Temizkan (2008) reports that pre-service teachers like teaching while Şener (2015) states that majority of pre-service teachers opt for teaching willingly. However, Kaya and Büyükkasap (2005) argues that there are pre-service teachers that select the department not because of their willingness, but due to other reasons.

Pre-service teachers have both negative and positive perceptions. Ceylan and Turhan (2010) found out that pre-service teachers used both negative and positive concepts at the beginning of the course. However, they used only positive concepts at the end of the education process. In the present study, some of the pre-service teachers stated that they are not suitable for the profession. There are also those who want to engage in other professions. These findings support the claim that the pre-service teachers do not have a teaching profession identity developed enough. Teaching profession identity plays an important role on many issues from motivation to maintaining the profession (Hong, 2010).

In the competence dimension, the pre-service teachers believe that they will be successful. They also think that they receive a good education. The study conducted by Lamote and Engels (2010) also revealed that pre-service teachers have high perceptions of competence. Having high intrinsic motivation is more important for being a teacher (Bruinsma & Jansen, 2010). That the pre-service teachers stated positive concepts particularly in the affective dimension indicates high motivation. This increases the possibility of maintaining the profession for a long period of time. According to the Expectancy Theory, it is important for pre-service teachers to have high motivations to maintain their profession.

The statements on which an agreement was reached are as follows:

- ✓ They use the concepts about education and instruction in their daily lives.
- ✓ They like teaching things to people.
- ✓ They think working conditions are difficult.
- ✓ They think they will overcome the problems they will confront with while teaching.

There was no variation in terms of the independent variables. Different groups of the pre-service teachers stemmed from their opinions. Department, gender, and having or not having a teacher relative, taken as independent variables, were not influential on the formation of these groups.

There is a common belief that teaching is suitable for women (Yaman, Yaman, & Eskicumalı, 2001; Özyurt & Eren, 2014). However, the factor analysis results of the present study, which employed Q-methodology, indicate that the pre-service teachers' attitudes towards the teaching profession do not change by gender, department, academic achievement, and whether they have a teacher relative. No difference was detected by gender, department, the type of high school of graduation, and having or not having a teacher relative in the family. Though there are some studies with results similar to that of ours (i.e. gender is not influential on the attitude) (Hacıömeroğlu & Şahin Taşkın, 2010; Can, 2010; Üstüner, Demirtaş, & Cömert, 2009; Dinçer & Yılmaz, 2015; İltar & Köksalan, 2011), there are also studies indicating that female pre-service teachers have more positive attitudes (Akpınar, Yıldız, & Ergin, 2006; Çetinkaya, 2009; Çapa & Çil, 2000; Duatepe & Akkuş-Çıkla, 2004; Gürbüz & Kışoğlu, 2007; Çağlar, 2013; Kızıltaş, Halmatov, & Sarıçam, 2012; Tümkaya, 2011; Güneyle & Aslan, 2009; Gürbüz & Kışoğlu, 2007). There are also some studies reporting that male pre-service teachers have more positive attitudes (Eraslan & Çakıcı, 2011; Çapa & Çil, 2000).

There are studies claiming that there are differences between pre-service teachers by department (Şahin Taşkın & Hacıömeroğlu, 2010; Gökçe & Sezer, 2012; Gür Erdoğan & Zafer Güneş, 2012) while there are also studies which assert that there is no such influence (Bozdoğan, Aydın, & Yıldırım, 2007; Hacıömeroğlu & Şahin Taşkın, 2010; Üstüner, Demirtaş, & Cömert, 2009). The present study revealed that all the pre-service teachers have high attitudes, but some of them have higher attitudes depending on the department. It is not possible to make a generalization about this difference over the departments.

Generally speaking, the pre-service teachers have positive opinions and consider themselves competent. Having a high perception of competence is important for pre-service teachers to overcome the difficulties encountered while working. Moreover, most of the pre-service teachers



like their profession. In this sense, it is possible to say that faculties of education serve their purposes. Majority of teachers do not regret selecting this profession.

#### 4. Recommendations

Study results indicate that if departments to study are chosen voluntarily and individuals are allowed to pursue different professions even after making these choices, more teachers who are committed to their profession will be introduced. This study is an attempt to reveal the situation of fourth year students. It is recommended for future studies that longitudinal research be carried out and the first year students' attitudes be measured.

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