

# **A Q Methodological Study on the Professional Identities of Academic Staff of the Faculties of Education**

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## **Abstract**

The aim of this study is to examine the professional identities of the academic staff of the faculties of education in Turkey. The study employed the Q methodology, in which both quantitative and qualitative data can be used. The qualitative data were collected and analysed by interviewing seven academics working in the faculty of education in the first stage of the study, which was conducted in two sequential stages. The analysis of the qualitative data showed that the academic staff of the faculty of education defined their professional identities as a “Practitioner”, “Researcher”, “Instructor”, “Coach”, “Counsellor” and a “Preparer”. In the second stage of the study, the Q measurement tool was developed by the researchers based on the specified definitions for professional identities. The quantitative data were collected from 21 academics working in the faculty of education and analysed with the Q measurement tool. According to the analysis of the quantitative data, the academic staff of the faculties of education were seen to adopt six professional identities defined in general. In addition, the professional identity as a “Researcher” was found to be the most preferred, while the professional identity as a “Preparer” was the least preferred of the given identities. According to the findings obtained in the study, it was concluded that the educational experience of the academic staff of education faculties significantly differentiate the preferences and attitudes towards professional identities. Based on the findings and results obtained in this study, it is highly recommended to examine the role of the educational experience of the academic staff of education faculties in the change and transformation of their professional identities.

**Key Words:** Faculty of education, academic staff, professional identity, Q methodology

## **Introduction**

The main purpose of the faculties of education is to provide prospective teachers with the necessary qualifications for being a teacher (Snoek & Zogla, 2009). In order to achieve this goal, the quality of the academic staff, who are the implementers of the policies and programs, is as important as the policies and programs implemented towards the faculties of education. In this respect, academic staff are one of the basic elements of training qualified teachers (Vloet and van Swet, 2010) and have an important effect in determining the quality of future teachers (Loughran, 2006).

The main task of the academic staff at faculties of education (ASFE) is teacher education (Lave and Wenger, 1991). However, structural and political changes and transformations in higher education institutions in recent years have diversified the duties of ASFE, whose main task is undoubtedly teacher education. Academic staff

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now fulfil their duties in faculties of education in a more comprehensive and dynamic way to teach prospective teachers, guide them to gain experience in the field, support and supervise them, develop optimum programs for teacher education, and contribute to education sciences through practices and research (Murray, Swennen & Shagrir, 2008; Izadinia, 2014). The execution of these duties has brought about the change in the professional identities of ASFE associated with teacher education.

In the literature, professional identity of academic staff is defined as “being recognized as a certain kind of person” by oneself and others (Gee, 2001, p. 99), or “the socially and culturally constructed self” within the framework of professional experience (McKeon & Harrison, 2010, p. 27). In this context, shaping the ASFE’s professional identities can be considered as a perception/being perceived. Creating the professional identities of ASFE is a process that focuses on training teachers (Timmerman, 2009). The teacher education process gives rise to the perception about ASFE as possessing a single-dimensional identity as a teacher educator. However, Bernard, Meijer and Verlop (2004) stated that ASFE does not have a clear, standardized and operational single professional identity. Current conditions, practices and professional experience are dominant factors in shaping the ASFE’s professional identities (Dinkelman, 2011). In this context, it can be assumed that the professional identity of ASFE includes diversity and there are factors that ensure this diversity. Today, it has become a necessity for academics to try to make professional progress (climbing up the career steps), to reach the funds, scholarships or incentives they can obtain in order to conduct research, and to establish standards brought by the corporate culture. Such requirements have created a heterogeneous structure in the professional identity of academic staff of faculties of education (Murray, Davison & John, 2006).

Teacher education is conducted by academic staff in faculties of education in Turkey. In this context, ASFE are regarded in the overall group of academic staff in Turkey. The duties of academic staff are also determined by law. The duties that form the professional identities of academic staff are stated in the Higher Education Law No. 2547 as “conducting education and training, and applied studies and having them conducted at higher education level, directing project preparations and seminars, conducting scientific research and publications, arranging certain days to guide and counsel students, and fulfilling the duties given by authorized bodies”. The professional identities of ASFE can be defined within the context of this law. However, these definitions will not go beyond creating a general academic identity. In fact, as Shagrir (2005) stated, grasping the professional identities of ASFE means accepting the unique knowledge theory of teacher education and defining its different tools, language and skills, including the pedagogy and educational science associated with it. In this context, it is noteworthy that the professional identities of ASFE include differences within the general academic group, and how the professional identity, which is the extent of perception / being perceived, is defined by practitioners beyond the duties and responsibilities.

In the literature, there are studies examining the professional identities of ASFE. In one of these studies, Yuan (2016) examined the professional identities of ASFE in Hong Kong. According to the findings obtained in the research, the professional identities of academic staff were defined as an “accidental teacher educator”, a “teacher educator-researcher”, a “struggling researcher”, a “teacher of teachers”, and an “inactive researcher”. The study revealed that academic staff experienced transformation according to the situation, conditions, and environment in these five identity processes. In a similar study, Swennen, Jones and Volman (2010) examined the professional identities of ASFE in line with the related literature. According to the findings obtained in the study, ASFE were defined in four different professional sub-identities in the categories of being a “teacher educator as a school teacher”, a “teacher educator as a teacher in higher education”, a “teacher educator as a teacher of teachers” and a “teacher educator as a researcher”, which are all constructed around the professional identity of ASFE as a teacher educator. In another study, Amott (2018) defined ASFE within the context of professional identities, namely “novice” and “expert”, and examined the transition process of the newly beginning academic staff of the education faculties from being a “professional teacher” to “a teacher educator” through the narratives of the academics. According to the findings obtained in the study, it was stated that professional learning and experiences are influential in the development of professional identity. The analysis of the studies in the literature show in general that some studies focused on defining the professional identity of ASFE (Cochran-Smith, 2003; Beijaard, Meijer & Verloop, 2004; Murray & Male, 2005; Zeichner, 2005; Murray, Swennen & Shagrir, 2009; Swennen, Jones and Volman, 2010; Murray, Czerniawski and Barber 2011; Izadinia, 2014; Yuan, 2016) and some focused on the development and transformation of the professional identity of the ASFE (Cochran-Smith, 2005; Dinkelman, Margolis & Sikkenga, 2006; Davey, 2010; Mayer, Mitchell, Santoro, and White, 2011; Dinkelman, 2011; Williams, Ritter & Bullock, 2012; Amott, 2018). Therefore, two approaches can be assumed to focus on the identification as well as the development and transformation of professional identities in order to examine the professional identities of ASFE. Indeed, Cochran-Smith (2003), Swennen, Jones and Volman (2010) and Amott (2018) stated that defining the professional identities of ASFE should be prioritized rather than examining their professional development. In this context, professional identities must first be defined in the event of examining the professional identities of ASFE. In a study conducted by Izadinia (2014), the majority of the studies examining the professional identities of ASFE were said to be conducted in North America and European countries. No studies were found in the literature examining the professional identity of ASFE in Turkey. This is, therefore, a pioneering study in terms of defining the professional identities of ASFE in Turkey. It is considered that this study will pave the way for the studies on the developments and transformations in ASFE pertaining to professional identity.

Faculties of education in Turkey have a heterogeneous working environment where academics from many disciplines work together. ASFE perform similar duties that make up their professional identities. However, as stated in previous studies, the versatile, dynamic, and changeable professional identities of ASFE (Bernard, Meijer & Verlop, 2004; Davey, 2010) vary according to institutional and sociocultural contexts (Swennen, Jones & Volman, 2010).

In this framework, this study will ensure that all of the duties shaping the professional identities of ASFE in Turkey be considered in a holistic manner and enable clear definitions of the professional identities of ASFE, which are evaluated in the generally defined group of academic staff.

The aim of this study is to examine the professional identities of ASFE in Turkey. To this end, answers were sought to the following questions:

1. What are the professional identities of ASFE? How are these professional identities defined?
2. Do the defined professional identities of ASFE form a common view?
3. What are the attitudes of ASFE towards defined professional identities?
4. What are the preferences of ASFE with regard to the defined professional identities?
5. Are there any significant differences in the preferences of ASFE towards professional identity?

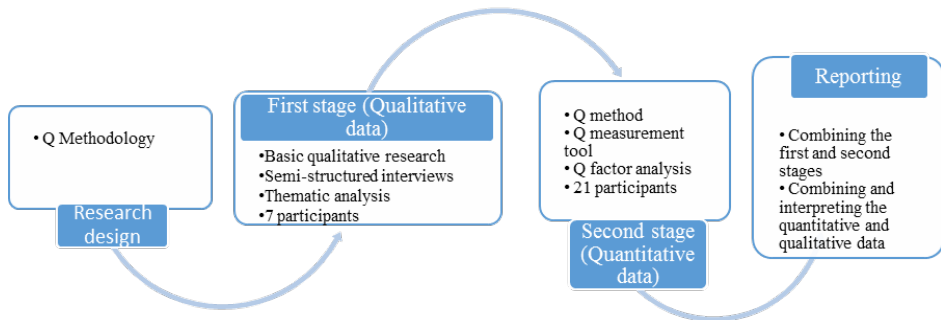
### **Methodology**

Multi-dimensional data collection and analysis techniques were used in this study with the aim of examining the professional identities of ASFE in Turkey. Consequently, the study was developed according to the Q methodology, in which quantitative and qualitative data were jointly used. The Q method is a method in which the strengths of quantitative and qualitative methods are used, and data analysis process is implemented with a special computer software (Brown, 1996; Demir & Kul, 2011; Yıldırım, 2016). Q method aims to present the perspectives, opinions, beliefs, and attitudes of people in a systematic way (Brown, 1993). It is an approach that can be used in grouping individual opinions, creating typologies, and comparing groups and typologies.

The study process was designed as a non-structural Q method with a two-step approach. Non-structural design is often preferred if the relevant subject area has no or inadequate theoretical foundations (Demir & Kul, 2011). In this regard, a preliminary study was conducted in the basic qualitative research approach in the first stage of the Q method to be able to structure the research design and define the professional identities of academic staff of the faculty of education. “All qualitative research studies are about how meaning is built, how they make sense of human lives and worlds. The primary purpose of a basic qualitative research design is to reveal and interpret these meanings” (Merriam, 2015, p. 24). Data were collected through interview technique

in the qualitative research approach in order to determine the professional identities of ASFE in accordance with the way they define and interpret their professional duties and to configure them into the Q method process.

In the second stage of the study, a data collection tool consisting of Q statements was developed in order to compare the defined professional identities of academics from various perspectives in line with the structuring of the Q method process in the basic qualitative research design. Data was collected from a different sample with the Q measurement tool and the professional identities of the academic staff of the faculty of education were compared in various aspects. Figure 1 presents the necessary information on the research process.



*Figure 1.* Schematic Presentation of the Research Process

### Participants and the environment

The participants of this study were formed in two separate groups in accordance with the design of the study. The first group was formed to create a theoretical infrastructure according to the non-structural design of the Q methodology. There were seven volunteers working in the faculty of education selected to create maximum diversity. “The aim here is to create a relatively small sample and to reflect to a maximum extent the diversity of individuals who may be a party to the problem studied in this sample” (Yıldırım & Şimşek, 2013, p. 136). The diversity was shaped according to the titles of the academic staff, their respective specialties, their academic and teaching experiences, and place of PhD degrees. Relevant information of the participants is given in Table 1.

**Table 1.**  
*General Information about the Interview Participants*

Participants	Title	Field	Teaching Experience*	Postgraduate Education	Place of Postgraduate Education	Academic Experience/Ye
G1	Asst. Prof.	Education Sciences	+	Education	Domestic	5
G2	Assoc Prof.	Turkish and Social Sciences	+	Education	Domestic	15
G3	Prof.	Turkish and Social Sciences	+	Science/Literature	Domestic	18
G4	Research Asst.	Education Sciences	-	Education	Abroad	2
G5	Research Fellow	Basic Education	+	Education	Abroad	6
G6	Asst. Prof.	Basic Education	-	Education	Domestic	9
G7	Instructor	Mathematics and Science	-	Science/Literature	Domestic	4

\*In teaching experience, (+) states that the participants have teaching experience, while (-) states that they do not.

The group in the second stage of the study consisted of 21 volunteer participants who responded to the Q statements created in line with the theoretical infrastructure obtained from the analysis of the qualitative data collected with the interviewing technique in the first stage. Convenience sampling method was preferred due to the fact that Q data collection takes time, the method serves the purpose of interpretation and explanation of the research, and there was no such purpose as generalization. Convenience sampling adds practicality and speed to the research and can be used in situations that will allow researchers to collect data easily (Yıldırım & Şimşek, 2013). All of the participants consisted of academics working in the faculty of education of a university (referred to as Faculty a hereafter). Due to the difficulties of collecting Q data, firstly, the purpose and scope of the study as well as the way of collecting data were introduced to the participants. Accordingly, 21 academic staff of the faculty of education who participated in the study on a voluntary basis constituted the working group of the second stage of the study. Table 2 presents the personal information of the participants.

**Table 2.**  
*General information about the group of the Q-participants*

Participants	Title	Field	Teaching Experience*	Postgraduate Education **	Place of Postgraduate Education **	Academic Experience/Year
P1	Asst. Prof.	Education Sciences	+	Education	Domestic	5
P2	Research Asst	Turkish/Social Sciences	+	Education	Domestic	15
P3	Instructor	Turkish/Social Sciences	-	Science & Literature	Domestic	8
P4	Asst. Prof.	Education Sciences	-	Education	Domestic	9
P5	Instructor	Basic Education	+	Education	Domestic	4
P6	Asst. Prof.	Basic Education	-	Education	Abroad	2
P7	Asst. Prof.	Education Sciences	-	Education	Abroad	2
P8	Research Fellow	Education Sciences	+	Education	Abroad	2
P9	Asst. Prof.	Turkish/Social Sciences	+	Education	Domestic	7
P10	Assoc. Prof.	Education Sciences	-	Education	Domestic	13
P11	Research Asst.	Basic Education	+	Education	Domestic	7
P12	Research Asst.	IT Education	-	Education	Domestic	7
P13	Asst. Prof.	Basic Education	+	Education	Abroad	6
P14	Instructor	Turkish/Social Sciences	+	Education	Domestic	4
P15	Research Asst.	Basic Education	+	Education	Abroad	8
P16	Asst. Prof.	Basic Education	-	Science & Literature	Domestic	9
P17	Asst. Prof.	Turkish/Social Sciences	-	Science & Literature	Domestic	8
P18	Research Asst.	Turkish/Social Sciences	+	Education	Domestic	2
P19	Assoc. Prof.	Mathematics and Science	+	Science & Literature	Domestic	15
P20	Asst. Prof.	Education Sciences	+	Education	Domestic	5
P21	Asst. Prof.	Basic Education	+	Science & Literature	Domestic	3

\* In teaching experience, (+) states that the participants have teaching experience, while (-) states that they do not.

\*\* Refers to the completed or ongoing graduate education of the participant.

Faculty A, where the study was conducted, has been providing education since 1998. Sixty-one academics work in the departments of “Education Sciences”, “Basic Education”, “Mathematics and Science Education”, “Turkish and Social Sciences Education” and “Computer and Instructional Technologies Education”. Approximately one thousand prospective teachers study at the undergraduate departments of “Classroom Teaching,” “Preschool Teaching”, “Science Teaching”, “Social Studies Teaching” and “Turkish Teaching”. Apart from undergraduate education, approximately 40 students do master’s degree as well as an average of 300 students taking “pedagogical formation education” every year in “Science Teaching”.

### **Data collection tools, process, and analyses**

In this study, in accordance with the nature of the Q method, data were gathered through interviews to determine what the professional identities of ASFE were and how they were defined. In the face-to-face interviews, a *semi-structured interview form* consisting of three questions was used. Interview questions were supported with probing questions. The questions used in the interviews are given below:

1. What are the duties that make up your profession as an academic working in the faculty of education?
2. How would you define these tasks that make up your profession?
3. What do you think is the most important of these tasks that make up your profession? Can you explain?

Face-to-face interviews were conducted with seven participants, upon their verbal consent obtained on a voluntary basis. Interviews took 7-10 minutes on average. The interviews were held at the interviewers’ offices at the time agreed with the participants and recorded with a voice recorder. The sound recordings obtained during the interviews were first converted into written text for analysis. Thematic analysis approach was adopted in the analysis of qualitative data. The thematic analysis process was performed in the stages of i) recognizing data, ii) creating initial codes, iii) searching the themes, iv) reviewing the themes, v) naming and identifying the themes, and vi) reporting (Braun and Clarke, 2006). MAXQDA package program was used in the analysis of qualitative data.

In the second stage of the study, the themes obtained in the analysis of qualitative data were dimensioned as the duties performed by ASFE and the professional identities involved in the descriptions of these duties. Accordingly, in line with the non-structural design of the Q method, a conceptual infrastructure was formed to develop the measurement tool containing Q statements in order to use it in the second stage of the study. The Q measurement tool is composed of two positive and two negative Q statements representing each of the “Practitioner”, “Researcher”, “Instructor”, “Coach”, “Counsellor” and “Preparer” professional identities that define the profes-



sional duties of an academic working in the faculty of education. The opinions of two experts were taken in the development of the measurement tool, which included 2 statements in each identity and 12 statements in total. In addition, a pilot application of the Q measurement tool was conducted with 3 participants, who were excluded from the scope of the study. Hence, relevant feedback was obtained about the clarity and usefulness of the measuring tool. Accordingly, necessary adaptations were made, and the Q measurement tool was completed for final applications. Table 3 presents the Q statements within the measurement tool used in the second stage of the study.

**Table 3.**  
*Q statements*

<b>Identity</b>	<b>Type</b>	<b>Q Statements</b>	<b>No</b>
<b>Practitioners</b>	Positive	I prefer to use new applications related to my field for my job.	12
	Negative	I prefer to use the existing applications related to my field for my job.	3
<b>Researcher</b>	Positive	It is my main duty to work on solutions to the problems I encounter in my field.	8
	Negative	I have duties to do which are of more priority than other work that will require producing solutions to the problems I encounter in my field.	5
<b>Instructor</b>	Positive	I give priority to providing the prospective teachers with the knowledge, skills and values required by the discipline in which I am an expert.	2
	Negative	I have duties to do which are of more priority than to provide the prospective teachers with the knowledge, skills and values required by the discipline in which I am an expert.	11
<b>Coach</b>	Positive	It is my primary duty to educate good teachers as defined by the MoNE (Ministry of National Education).	9
	Negative	It is not one of my primary duties to educate good teachers as defined by the MoNE (Ministry of National Education).	6
<b>Counsellor</b>	Positive	I provide individual support to my students' academic problems.	1
	Negative	Supporting my students about their academic problems is beyond my job description.	10
<b>Preparer</b>	Positive	I ensure that my students are prepared for the exams that will allow them to start their teaching profession after graduation.	7
	Negative	It is out of my job description to prepare my students for the exams that will allow them to start their teaching profession after graduation.	4

Twelve positive and negative Q statements that define professional identities in six dimensions in *Table 3* were randomly numbered. In order to collect the Q data, the participants were asked to place the items they preferred or not in their professional identity in the forced ranking curve given in *Table 4* developed by the researchers.

The forced ranking, which includes the grading of preferences towards adopting certain professional identities, is composed of  $\pm 3$  and  $\pm 2$ , each of which involves one box,  $\pm 1$  is made up of two boxes, and 0 is made up of four boxes, making 12 boxes in

total. The forced ranking enables us to explain the preferences, attitudes, perceptions, or opinions of the participants by forcing them to choose an item (Demir & Kul, 2011). In this context, it is aimed to reveal the preferences of ASFE towards professional identities.

**Table 4.**

*Q curve*

I Do Not Prefer		Neutral			I Prefer	
-3	-2	-1	0	+1	+2	+3

Three tools were used to collect data with Q statements. The first tool was Q statements, which were composed of twelve sheets of paper of 2x3 cm<sup>2</sup> in size, in which items and random numbers were written. The second tool was the Q curve created via forced ranking in the range of  $\pm 3$ , formed according to the boxes of the same dimensions as 12 Q statements. In addition, the third tool was the information form in which the personal information of the participants (e.g., participant number, title, experience, educational background) were provided and the placement on the Q curve was encoded.

Q data were collected from 22 volunteer participants working in Faculty A. However, it was decided by taking the opinions of the two field experts that there were patterns in the coding of a participant, who then was excluded from the study. Prior to the provision of Q data from the participants, time was planned, and verbal permissions were obtained. It was made sure that data were collected interactively in the offices of the participants. The participants were informed about the purpose and scope of the research in addition to the detailed explanation about the Q methodology. It took 15-25 minutes to collect data from each participant.

PQMethod and SPSS package programs were used in the analysis of Q data and an exploratory factor analysis (AFA)-like factorization was performed. However, Q factor analysis differs partly from the AFA. While items representing the opinions of individuals are factored and grouped in the AFA, people are factored and grouped based on opinions in Q factor analysis. "The parts mentioned as factors in the Q method represent groups with similar opinions" (Yıldırım, 2017, p. 238). The Q factor analysis was performed in two stages. In the first stage, principal component analysis was performed. Principal component analysis is the conversion of correlated variables to a smaller number of variables called factors (Özdamar, 2016). In the second stage, the factors (groups) with eigenvalues greater than 1 were manually selected in the

program and refactored with the varimax rotation method. Rotating the factors enables us to look at and make sense of the groupings that make up the factors from different perspectives (Özdamar, 2016). After rotations, the statistical significance of factor loads representing individuals in the new factor groupings was evaluated at the level of .05. This level was calculated manually with the following formula: “SE (p) = (1 /  $\sqrt{n}$ ).  $\pm$  1.96” (n=number of Q statements, 1.96 reporting the t value for 95% confidence interval). It was determined that people with a factor load above the obtained value (if it is the negative load, then it is the load value whose absolute value was taken) were statistically significant for that group and were members of the group. Z values expressing the preferences for the Q statements were used to evaluate the preferences of the participants in relation to their professional identities in general and to compare the groups. The Z values represent the degree of participation in an item (in the range of  $\pm$  3). Thus, the mean Z values were calculated in order to determine the preferences of the participants in relation to their professional identity in general. The Z values and order of preferences of positive and negative Q statements defining the professional identity were used to compare the participants grouped in Q factors in respect to various variables.

The coded responses of the participants to the Q curve were transferred to the SPSS software package. Responses are categorized as -3, *I absolutely do not prefer* -2, *I partly do not prefer* -1, *I do not prefer* -1, *I am undecided* 0, *I prefer* 1, *I partly prefer* 2 and *I totally prefer* 3. The items of the Q statements were transposed (by replacing the variables) with the participants on the SPSS program. Accordingly, the consistency of the responses that were converted into a 7-point Likert-type measurement instrument consisting of 21 items (21 participants) was calculated with Cronbach Alpha. Alpha value is used to measure the internal consistency based on the average correlation between the variables in a scale, and a value above 0.70 means that the consistency is high (Bayram, 2015). The most basic feature of the Q method is that the measuring tool depends on the participant.

Being the designer of the Q method, Stephenson (1935, 1952) defined the Q method as the “n” number of statements freely chosen by the “m” number of individuals, as a result of which a unique answer key was designed by each individual. Therefore, even more important than the statements that make up the measurement tool in the Q method, are the participants themselves. Creating a coherent cluster of participants produces healthier results in Q measurement. The alpha value calculated in this way can be interpreted as the extent to which the group of participants represents a similar cluster.

### **Validity, reliability, and ethics**

A number of studies were conducted to ensure the validity and reliability of qualitative and quantitative data in the study. The qualitative dimension of the study drew

on the measures of credibility instead of internal validity, transferability instead of external validity, consistency instead of internal reliability and confirmability instead of external reliability (Lincoln & Guba, 1985). The processes carried out in this framework are explained in detail below:

**Credibility:** According to Merriam (2015), participant control can be a strategy to apply in ensuring credibility. In this context, the qualitative data analysed were presented to the approval of some of the participants to ensure the credibility of the research. The participants were asked to examine the themes and descriptions obtained from their opinions. In addition, according to Creswell (2013), an external inspector, who is an expert in the field, will increase the credibility. The findings obtained as a result of the analyses were presented to the control of an external inspector who was an expert in qualitative research upon the control of the participant. Corrections and adjustments were made on the feedbacks obtained from both approaches.

**Transferability:** It includes detailed description of the data on which the study is based as well as creating a purposive sample (Erlandson, Harris, Skipper, & Allen, 1993) and transferring the obtained raw data according to the emerging concepts and themes without adding any comments. In this context, the themes created as a result of the analyses were described in detail without any comments and supported by direct quotations. The fact that the group of participants made for the collection of qualitative data were working in the faculty of education and selected according to different personal characteristics can be regarded as a way of ensuring transferability.

**Consistency:** It can be defined as accepting the fact that events and phenomena are variable and reflecting this variability in research (Yıldırım & Şimşek, 2016). In this context, the experts were sent a form composed of open-ended questions to collect information from the field prior to the creation of the data collection tool. In order to determine the interview questions in line with the information collected, a conceptual infrastructure was created as stated by LeCompte and Goezt (1982). On the other hand, the fact that the researchers are also ASFE and have relevant experience can be considered under the title of consistency given the role of the researchers. Additionally, the field experts were similarly asked for their opinions in all procedures that constituted the qualitative stage of the study.

**Confirmability:** The fact that an independent expert, apart from the researchers, evaluates the data obtained, the data collection tools used, and the analyses of the data increases the reliability of the research (Erlandson et al., 1993). The raw data collected from the participants and the analysis of the data were submitted to the supervision of a researcher who is an expert in qualitative research. Corrections and arrangements were made in line with the feedback received.

In the second stage of the study, quantitative data were collected with the Q measurement tool. The procedures for the validity and reliability of the Q measurement tool are described in detail below.

**Validity:** Validity is defined as the purpose-oriented availability of the data obtained by the measurement tool (Özdamar, 2016). For the validity of the Q measurement tool, a preliminary study and a theoretical infrastructure were designed to integrate the study to create the Q statements. Q measurement tool was created in a way to serve the purpose of the research in the dimensions determined in this scope. Two experts (in the fields of Education Management, and Assessment and Evaluation) were consulted for their opinions to build the Q statements and the curve. At this point, arrangements were made for the purposes of construct validity and scope validity. Positive and negative roots were arranged in the expressions of the Q statements. It was agreed that the forced ranking, which constitutes the  $\pm 3$  interval in the Q curve, should be formed in a balanced distribution in the expressions that are positive, negative, and neutral.

**Reliability:** It is the accurate and complete measurement of what is desired to be measured by the measurement tool in such a way that it is free from random errors. In this context, the researchers accompanied the participants in the Q data collection stage in order to minimize the errors that may arise from the environment, the difference in the method, and from failing to comprehend the scope and purpose. It also makes the points that were not understood in the Q measurement tool clear to the participants in detail without guiding them.

In this context, it was aimed to prevent the participants from making mistakes due to being inexperienced in using a measurement tool they encountered for the first time. Cronbach Alpha value of the encodings transferred to SPSS was calculated as 0.93 in accordance with the responses coded to the Q curve of the participants. Given this value, it can be assumed that the participant group from which Q data was provided constitutes a consistent structure and that the level of representing a similar cluster and the reliability obtained from the Q data were high.

In the ethics of the study, measures were taken to obtain the necessary verbal permissions from the participants, to share the analyses, and not to share the names and institutions of the participants. The faculty of education where the data was collected was named as Faculty "A" and was described only. The participants from whom the qualitative data were collected were labelled as "G1", "G2", "G3", and so forth. The participants from whom the quantitative data were collected were labelled as "P1", "P2", "P3", and so forth.

## Findings

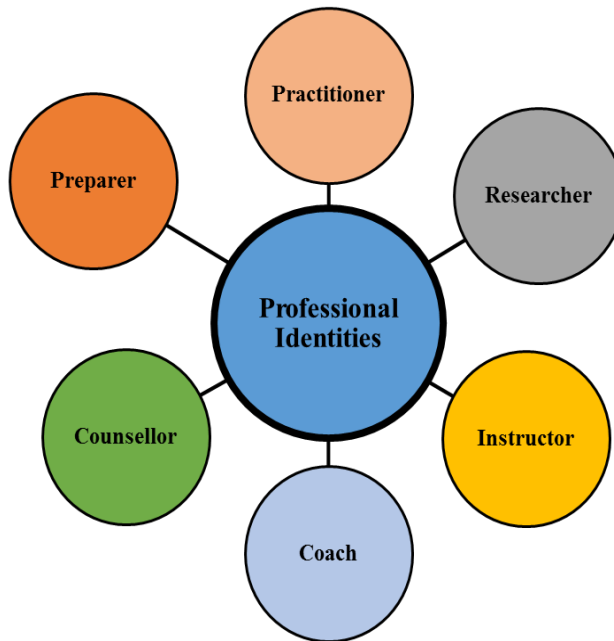
In this section, the findings obtained in the study were titled individually, and presented as qualitative and quantitative findings to form answers to research questions.

## Qualitative results

In the light of the findings obtained as a result of the analysis in this part of the

study, answers were sought to the following questions: “What are the professional identities of ASFE? How are these professional identities defined?”

According to the findings obtained from the interviews with ASFE, professional identities containing the job descriptions of ASFE were collected under six themes. The professional identities and job descriptions that came out as the themes as a result of the analyses are presented in *Figure 2*. As shown in *Figure 2*, the professional identities of academics of faculties of education are gathered in six main themes as “Practitioner”, “Researcher”, “Instructor”, “Coach”, “Counsellor” and “Preparer”. The scope of these themes is given below.



*Figure 2.* Identified professional identities of ASFE

### ***Practitioner***

ASFE defined some of the tasks that make up their professions as the capacity to follow the new methods, techniques or technologies in the relevant field, and reflect them thereto. Some participants consider that this mirroring serves the purpose of adapting to the changing world, while some others think that it serves to the purpose of changing the world.

According to the participants, education is regarded as the key to change and the means of transfer of innovation to society. Moreover, they considered the academic professions as practice and the faculty of education as a field of practice. Some academics stated that being a *Practitioner* is the most important duty in their profes-

sion. According to them, current scientific studies should be followed, contributions should be made on them, and such studies should be given reference to in educational environments, i.e., a laboratory. They also stated that different disciplines should be followed. Some selected opinions of academics regarding the identity of being a practitioner are given below:

*I believe that technology and innovation will contribute to the field. As academics, our main job is to pursue innovation, and even to create innovation... As to the faculties of education, it is a fact that the world changes and education has to catch up with this change. Our job is to reflect this change to education and present it to the society. I mean, developing the society takes place in association with innovation. At this point, I consider ourselves lucky... Because we can shape the whole society thanks to education (G4).*

*I try to follow the international and national studies as much as I can. I'm trying to add something on it. I never forget that the field of education is very complex. I am a field educator, but I have to follow many other fields like sociology, psychology, philosophy, economy, history, and geography... In this respect, my most important tasks are to follow the innovations in the field and use the results I have acquired in my field and in my class (G1).*

### **Researcher**

The participants defined some of the tasks that make up their profession as performing scientific studies that help define and solve problems in the field of education. They emphasized that education is primarily a scientific field and that they are scientists as the staff of the faculty of education.

Participant G7 stated that: *“My job is to do research that will produce solutions to the problems of education. Above all, we are scientists. We can only shape the education, which is the field of our profession, by adopting a scientific perspective.”* Some of the academics expressed that the problems of the education system, of the teachers as the output of the education faculties, and of the society can only be solved with scientific research, and therefore the primary task of the academic staff of the faculties of education should be to try to be part of the solution, not the problem.

Some of the academics stated that doing research is the most important of the duties that make up their professions. Participant G1, who thinks that, for an ASFE, doing research is continuous learning, self-renewing and contributing to one's own profession, further states that: *“... an academic should not forget that he is an expert in a specific field, but a student in other fields ... One must constantly learn, research, and renew oneself and his/her job.”* Other examples of what the academics think of the researcher identity are given below:

*The basic principle of my profession is to do research. First off, I work for science. Education is a field of science. If we do our job under the leadership of science, we can educate teachers, who are the output of our job, as acceptable as science itself. So, this job is not a master-apprentice job. We can raise good people from a traditional perspective, but educating good teachers is another thing... Of course, there must also be good people, but a good teacher is already a concept that covers being a good person, I think. If we raise a good teacher who can think scientifically and work scientifically, s/he will also be an acceptable, good person (G5).*

*As a scholar doing research, this is my core business. But, when I say research, I mean doing research that will directly solve the problems. A faculty of education is an institution that will solve the problems of education. Of course, our job is to fulfil this mission. If we can solve the problems of education, believe me, every problem will be solved (G3).*

### **Instructor**

ASFE defined some of the duties in their profession as enabling students to gain the knowledge, skills and qualifications required by the field in which they are an expert, besides carrying out teaching activities and performing assessment and evaluation procedures. In this context, academics stated that they aim to educate qualified people equipped with necessary knowledge and skills in line with the required specialization areas. They emphasized that they design applications, group, and field studies, and try to give their students the most up-to-date form of the relevant discipline. Some selected opinions of academics regarding the identity of being an *Instructor* are given below:

*I'm a field expert. It is part of my job to give my students what is in theory. However, I think the obsolete way of transferring information is unnecessary. As part of job, my purpose is not to upload information. I try to make prospective teachers gain the logic of concepts, principles, and theories. Actually, my job is to make them gain skills. I make them gain thinking skills and inquiry skills. In fact, isn't it the most important human profile in this period? (G7)*

Participant G3, who thinks that teaching requires a constant motion, expressed this situation as follows: *"I have to follow all the issues that concern my field in the academic world, I have to keep myself up to date with new information... Because I need to learn this first before I can teach my students the newest information. In fact, most academics do this more than enough. Continuous readings and research keep us up to date on our field."*

According to some of the academics, the task of *instructing* constitutes the most



important dimension of the duties in their teaching professions. According to them, their work reflects through instructing. For this reason, they emphasized that, as *instructors*, they try to provide their students with the most up-to-date and current knowledge of their fields in the most viable way with a variety of activities, teamwork and technology support. Participant G7 stated that the dimension of instructing in professional terms is the field that requires the most effort and endeavour and said:

*I am responsible for teaching many disciplines related to my field. As you know, scientific fields are constantly developing and intertwining with each other. I am trying to keep up with this situation. I constantly search for resources and make readings before each class, which requires a lot of effort... I have to find different methods to transfer information in another way... So, these preliminary studies and putting them into practice require a lot of effort.*

### **Coach**

ASFE defined some of the tasks in their profession as organizing activities in accordance with the qualifications of the teaching profession, supervising the prospective teachers' practices and getting them to gain experience. The academics stated that they try to ensure that their students, whom they call prospective teachers, put the knowledge and skills they gain in to practice, that is, transfer them to the classroom environment. They further expressed that they guide their students in courses such as school experience and teaching practice in order to put into practice the pedagogy and field courses that make up the theory. In line with this, some academics emphasized that they give tasks to prospective teachers even in other courses to enable them to experience classroom management, activity design and evaluation. Some of the academics described coaching as their most important task. Participant G7 expressed this situation as follows: "*Since I work in the faculty of education, my main job is to educate teachers who are in accordance with the nature, goals, and vision of this faculty, that is, with the quality they require. None of my duties can precede it.*" Some selected opinions of academics regarding the identity of being a coach are given below:

*I teach in classes, do research and projects. When I look at it, as a requirement of my expertise, I educate class teachers. The better I train these students, the better teachers they will become. So, everything I do is to educate good teachers... Educating good teachers is a job that affects every layer of society. If we educate an engineer, it will affect a certain segment, but a teacher will also affect an engineer, will affect everyone. Its effect value is very high. Therefore, I consider educating the teachers as my job (G6).*

*The most important thing to change the world is to educate good teachers. In this respect, I can say that we have the opportunity to change the*

*world... Everybody is shaped by their parents and the society in which they live, but schools and teachers build a society through people. Even if there is only one person to change the world, the teacher's share in this cannot be denied. We should raise teachers, by being aware of this purpose (G4).*

### **Counsellor**

ASFE defined some of their duties in their profession as producing solutions to academic problems that students experience individually or as a group as well as guiding and directing them. In this context, they stated that they face many situations ranging from the most basic academic skills (even reading and writing) to creating solutions for many personal or social problems (emotional, adaptation...) of students. Participant G1 said that “... students come from out of town and need a guide. I feel like I have to deal with all their problems. I always keep my door open to them,” emphasizing the social and individual dimension of counselling, while Participant G5 stated that, “... I give my students support in academic matters. When I say academic support, I mean making them acquire the most basic student skills... By the most basic academic skills, I meant literacy. Can you imagine? A prospective teacher who does not know how to read or write... There are those who still do not know upper case and lower case,” emphasizing the academic dimension of counselling. Some of the academics thought that counselling has a door-opening role for the success of other identities. G4 expressed this situation as follows:

*As a faculty member, I cannot ignore their [students] academic and social problems... Because I should have a healthy communication with them so that I can do my job in a healthy way. After all, my students are human. My students should be able to discuss all their concerns and problems comfortably with me and benefit from my experience... By finding solutions to their problems, we actually make them gain problem solving skills.*

Participant G5 stated that the main task that constitutes this profession is counselling, and that because of the intensity of this identity, it is hard to focus on other identities involved in this profession: “I see my duties that make up my profession more as counselling and guidance... How can I think of other dimensions of my job now?”.

### **Preparer**

ASFE defined some of the duties in their profession as providing students with information and the necessary academic infrastructure about the exams that enables them to start the teaching profession and preparing them for pre-vocational exams such as KPSS (Public Personnel Recruitment Exam) and field knowledge exam by having them gain field knowledge and general knowledge. In this context, although they stated that the exams are unnecessary, they further said that the students have an expectation for central exams especially in pedagogy and field courses. Participant G1

expressed this situation as follows:

*I mostly teach educational science classes. Regardless of which department or class of students I have, they generally express their expectations for the exams they will take- even during the course or about the evaluation of the course ... They want me to put more emphasis on the issues that may be included in the exams, or to conduct exams with questions being asked before or questions that may be asked. In this case, I feel the need to adopt such an approach... I take these demands into consideration in my lessons.*

Some academics think that what is important in their profession is to ensure that their students are ready to start working life as teachers, and in this respect, it is necessary to meet the demands of the students for central exams, while others stated that a faculty of education does not have a function like a private training centre for the central exams, and therefore, the academics of the faculty of education are not private tutors. Nevertheless, they also emphasized that it is of immense importance that the students being trained as prospective teachers succeed in exams organized as a portal to the profession. They further stated that this is a systematic requirement as students have such demands for being trained in line with this specific aim, that is, this professional identity developed completely independent of their will, and they had to take an approach in this direction even if they did not want to. Some selected opinions of the academics regarding the identity of being a Preparer are given below:

*As an academic, especially because of my work in the faculty of education, the academic development of my students is my job. By ensuring their academic development, we construct their knowledge infrastructure for the exams required for their recruitment as teachers or their background for being teachers. I mean, this is the system. Whether or not they are well-equipped as teachers is measured by whether they are well-equipped academically. We should also provide this background (G4).*

*Faculties of education do not have a mission like a private training centre. Therefore, we cannot work as result-oriented as a private tutor. We have to be process-oriented, that is, training good teachers is training good people... Should people necessarily become teachers at universities or pass certain exams to get appointed as teachers? These people have social circles and families. They also shape them with their teacher identities because they interact... So, if we raise good people, they will already be good teachers at school or outside school (G2).*

### Quantitative results

In accordance with the findings obtained as a result of the analysis in this part of the study, answers were sought to the following questions: “Do the defined professional identities of ASFE constitute a common standpoint?”, “What are the attitudes of ASFE towards defined professional identities?”, “How do ASFE prefer defined professional identities?” and “Are there any significant differences in ASFE’s preferences about professional identities?”.

In order to determine the preferences of academics towards professional identities, the main components of the data collected by Q measurement tool were analysed and converted into factors. Findings obtained as a result of principal component analysis are given in Table 5.

**Table 5.**

*Results of key component analysis of Q factor analysis*

Q Factor	Eigenvalue	Explained Variation %	Total Variance %
1	9.8167	46.7462	46.7462
2	3.0885	14.7070	61.4531
3	2.2028	10.4896	71.9427
4	1.6964	8.0780	80.0208
5	1.1376	5.4173	85.4381
6	1.0608	5.0514	90.4895
7	0.8098	3.8563	94.3458

Table 5 shows that there are six Q factors with eigenvalues greater than 1. In this case, the academics of faculties of education can be assumed to adopt six professional identities and have a common view on the definitions expressing their professional identities. In addition, in order to examine the preferences of ASFE towards professional identities more closely and to make comparisons in various aspects, the Q factors obtained as a result of the principal component analysis were rotated with the varimax technique. Findings obtained as a result of rotations, Q factors and factor loads are given in Table 6.

**Table 6.**

*Findings of the factor and factor loads for the participants as a result of the rotations of the Q factor analysis*

Participants	Postgraduate Education	Place of Postgraduate Education	Q Factor 1	Q Factor 2
P1	Education Sciences	Domestic	0.4668	<b>0.7659X</b>
P2	Education Sciences	Domestic	0.4212	<b>0.7046X</b>
P3	Science / Literature	Domestic	0.4277	0.5325
P4	Education Sciences	Domestic	<b>0.7133X</b>	0.0164
P5	Education Sciences	Domestic	<b>0.8661X</b>	0.3718
P6	Education Sciences	<b>Abroad*</b>	-0.5330	<b>0.7891X</b>
P7	Education Sciences	<b>Abroad*</b>	0.1941	<b>0.9249X</b>
P8	Education Sciences	<b>Abroad*</b>	0.2889	<b>0.7119X</b>
P9	Education Sciences	Domestic	0.0453	<b>0.9219X</b>
P10	Education Sciences	Domestic	<b>0.8701X</b>	0.2083
P11	Education Sciences	Domestic	-0.1266	<b>0.8309X</b>
P12	Education Sciences	Domestic	0.5082	0.1105
P13	Education Sciences	<b>Abroad*</b>	<b>0.8731X</b>	0.0831
P14	Education Sciences	<b>Abroad*</b>	0.3801	<b>0.8163X</b>
P15	Education Sciences	Domestic	0.2130	<b>0.7652X</b>
P16	<b>Science / Literature*</b>	Domestic	<b>0.6951X</b>	0.2017
P17	<b>Science / Literature*</b>	Domestic	<b>0.6834X</b>	0.3468
P18	Education Sciences	Domestic	0.4752	0.4893
P19	<b>Science / Literature*</b>	Domestic	<b>0.8671X</b>	0.3219
P20	Education Sciences	Domestic	0.5270	0.4609
P21	<b>Science / Literature*</b>	Domestic	<b>0.7677X</b>	0.4078

\*Significance at 95% confidence interval  $SE(p) = (1/\sqrt{12}) \pm 1.96 = \pm .678$  \*Personal information that shows variation

As seen in Table 6, 17 of the 21 participants who formed the sample group were collected in two Q factor groups. Of all the participants, 38.1% (n = 8) were in the first Q factor group and 42.8% (n = 9) were in the second. When the academics of the faculties of education were compared according to the variables of academic title, teaching experience, field, and location of the completed or ongoing graduate education, some differences were observed according to the field and location of graduate education. It was also found that the academics with completed or ongoing postgraduate education other than the field of education are concentrated in the first Q factor group (4 of the 5 academics are in the first factor group significantly, 80%). On the other hand, the academics with completed or ongoing postgraduate education abroad are all gathered in the second Q factor group. In this case, it can be assumed that ASFE with completed or ongoing graduate education abroad or in a field other than education choose a common professional identity. The ranking scores of the Z values and preferred Q statements were taken into consideration in order to evaluate the preferences of the participants towards professional identities in general and to compare the attitudes and preferences of the participants in two different factor groups towards professional identities. The findings obtained are given in Table 7.

**Table 7.***Z values for Q statements, participants' preference rank and average Z Values*

Identity	Q Statements	Q Factor 1		Q Factor 2		Mean Z
		Z	Rank	Z	Rank	
Practitioner	I prefer to use new applications related to my field for my job.	0.07	6	<b>0.89</b>	<b>2*</b>	0.45
	I prefer to use the existing applications related to my field for my job.	0.18	5	<b>-1.03</b>	<b>11*</b>	
Researcher	It is my main duty to work on solutions to the problems I encounter in my field.	<b>0.61</b>	<b>4*</b>	<b>1.79</b>	<b>1*</b>	1.18
	I have duties to do which are of more priority than other work that will require producing solutions to the problems I encounter in my field.	<b>-0.36</b>	<b>9*</b>	<b>-1.99</b>	<b>12*</b>	
Instructor	I give priority to providing the prospective teachers with the knowledge, skills and values required by the discipline in which I am an expert.	<b>1.19</b>	<b>2*</b>	0.34	5	0.54
	I have duties to do which are of more priority than to provide the prospective teachers with the knowledge, skills and values required by the discipline in which I am an expert.	<b>-1.25</b>	<b>11*</b>	0.69	4	
Coach	It is my primary duty to educate good teachers as defined by the MoNE (Ministry of National Education).	<b>1.74</b>	<b>1*</b>	-0.02	6	0.95
	It is not one of my primary duties to educate good teachers as defined by the MoNE (Ministry of National Education).	<b>-1.73</b>	<b>12*</b>	-0.35	8	
Counsellor	I provide individual support to my students' academic problems.	<b>0.78</b>	<b>3*</b>	<b>0.83</b>	<b>3*</b>	0.75
	Supporting my students about their academic problems is beyond my job description.	<b>-0.85</b>	<b>10*</b>	<b>-0.53</b>	<b>10*</b>	
Preparer	I ensure that my students are prepared for the exams that will allow them to start their teaching profession after graduation.	-0.03	7	-0.07	7	0.20
	It is out of my job description to prepare my students for the exams that will allow them to start their teaching profession after graduation.	-0.36	8	-0.53	9	

\* Identities in which positive and negative Q statements are symmetrical

The mean value of Z given in Table 7 was calculated with the formula:  $Z\_mean = (Z \text{ value of a positive statement defining the professional identity} - Z \text{ value of a negative statement defining the professional identity}) / 4$ . The mean Z value was used to evaluate the preferences of the 17 participants, divided in two different Q factor groups in the participant group, towards professional identities. According to the mean Z values calculated in Table 7, the participants preferred the professional identities of being a “Researcher” ( $Z\_mean = 1.18$ ), a “Coach” ( $Z\_mean = 0.95$ ), a “Counsellor” ( $Z\_mean = 0.75$ ), an “Instructor” ( $Z\_mean = 0.54$ ), a “Practitioner” ( $Z\_mean = 0.45$ ), and a “Preparer” ( $Z\_mean = 0.20$ ), respectively. The academics in the study primarily adopted the *Researcher professional* identity. Moreover, the least adopted professional identity by the same academics is the *Preparer* identity.

As can be seen in Table 7, 8 participants in the first Q factor group preferred positive Q statements with positive attitudes and negative Q statements with negative attitudes pertaining to the professional identities of being a *Researcher* ( $Z = 0.61, -0.36$ ), an *Instructor* ( $Z = 1.19, -1.25$ ), a *Coach* ( $Z = 1.74, -1.73$ ) and a *Counsellor* ( $Z = 0.07$ ). In addition, participants in the same group preferred the positive and negative Q statements signifying their professional identity as being a *Practitioner* ( $Z = 0.07, 0.18$ ) in a positive manner, whereas they preferred the positive and negative Q statements expressing their professional identity as being a *Preparer* ( $Z = -0.03, -0.36$ ) in a negative manner. In this regard, it can be assumed that the participants who constitute the group have a positive attitude towards the professional identities of being a *Researcher*, an *Instructor*, a *Coach* and a *Counsellor*, as opposed to their neutral attitude towards the professional identities of being a *Practitioner* and a *Preparer*.

The most preferred Q statement of the 8 participants in the first Q factor group is “It is my primary duty to educate good teachers as defined by the MoNE” ( $Z = 1.79$ , rank = 1), and the least preferred Q statement is “It is not one of my primary duties to educate good teachers as defined by the MoNE” ( $Z = -1.73$ , rank = 12), exhibiting a negative attitude towards this professional identity. Consequently, it can be concluded that the most preferred professional identity by the participants in this group is being a *Coach* since these two opposite situations are symmetrical with Z scores that constitute two extreme values. The Q statement preferred by the participants in the same group in the second place is “I give priority to providing the prospective teachers with the knowledge, skills and values required by the discipline in which I am an expert.” ( $Z = 1.19$ , rank = 2). Indicating the negativity of the same professional identity, the statement saying: “I have duties to do which are of more priority than to provide the prospective teachers with the knowledge, skills and values required by the discipline in which I am an expert” is the second least preferred statement forming a symmetry ( $Z = -1.25$ , rank = 11). In this case, it can be assumed that the second most preferred professional identity of the 8 participants in the first Q factor group is being an *Instructor*. Other professional identities preferred by the participants in the same factor group with

statistically significance were determined as being a *Counsellor* ( $Z = 0.78, -0.85$ ; Rank = 3, 10) and a *Researcher* ( $Z = 0.61, -0.61$ ; Rank = 4, 9), respectively. The preferences of the participants in the first Q factor group towards positive and negative Q statements about the professional identities of being a *Practitioner* ( $Z = 0.07, 0.18$ ; rank = 6, 5) and *Preparer* ( $Z = -0.33, -0.06$ ; rank = 7, 8) are not symmetrical. Therefore, it can be said that the preferences of the participants in this group towards the professional identities of being a *Practitioner* and *Preparer* are not significant. Therefore, it can be said that the preferences of the participants in this group towards being a *Practitioner* and a *Preparer* as a professional identity are not significant.

Four of the 8 participants in the first Q factor group also constitute 80% of the participants with completed or ongoing postgraduate education in a field other than education. In this case, it can be assumed that the ASFE with completed or ongoing postgraduate education outside the field of education have a positive attitude towards the professional identities of being a *Researcher*, an *Instructor*, a *Coach* and a *Counsellor*; and identify themselves with the professional identities of being a *Coach*, an *Instructor*, a *Counsellor* and a *Researcher* in order of importance. On the other hand, it can be argued that they have a neutral attitude towards being a *Practitioner* and a *Preparer* as a professional identity, and do not adopt the professional identities of being a *Practitioner* or a *Preparer* in their own definition of a professional identity.

As can be seen in Table 7, 9 participants in the second Q factor group preferred the positive Q statements in a positive manner on the professional identities of being a *Practitioner* ( $Z = 0.89, -1.03$ ), a *Researcher* ( $Z = 1.79, -1.99$ ), and a *Counsellor* ( $Z = 0.78, -0.53$ ), while approaching negative Q statements negatively. In addition, the participants in the same group preferred the positive and negative Q statements about the professional identity of being an *Instructor* ( $Z = 0.68, 0.69$ ) in a positive manner, as opposed to the positive and negative Q statements about the professional identity of being a *Coach* ( $Z = -0.02, -0.35$ ) and a *Preparer* ( $Z = -0.07, -0.53$ ), for which they have negative attitudes. In this case, it can be assumed that the participants of the group have positive attitudes towards the professional identities of being a *Practitioner*, *Researcher*, and a *Counsellor*, while having neutral attitudes towards being an *Instructor*, a *Coach*, and a *Preparer* as a professional identity.

The most preferred Q statement of 9 participants in the second Q factor group is, "It is my main duty to work on solutions to the problems I encounter in my field." ( $Z = 1.74, \text{rank} = 1$ ), as opposed to the least preferred Q statement, which indicates the negative attitude towards this professional identity: "I have duties to do which are of more priority than other work that will require coming up with solutions to the problems I encounter in my field" ( $Z = -1.99, \text{rank} = 12$ ). Thus, it seems that the most important preference of the participants in this group towards a professional identity is being a *Researcher*, since these two opposite situations are symmetrical with the Z scores that form two extreme values. The Q statement preferred by the participants in



the same group in the second place, saying, “I prefer to use new applications related to my field for my job.” ( $Z = 0.89$ , rank = 2). Indicating the negativity of the same professional identity, the statement saying, “I prefer to use the existing applications related to my field for my job” is the second least preferred Q statement forming a symmetry ( $Z = -1.03$ , rank = 11). Therefore, the second most preferred professional identity by the 9 participants in the second Q factor group can be said to be the identity of being a Practitioner. The other preference of the participants towards a professional identity in the same factor group was determined as being a *Counsellor* ( $Z = 0.83$ ,  $-0.53$ ; rank = 3, 10). The preferences of the participants in the second Q factor group regarding the positive and negative Q statements referring to the professional identities of being an *Instructor* ( $Z = 0.34$ ,  $0.69$ ; rank = 5, 4), a *Coach* ( $Z = -0.02$ ,  $-0.35$ ; rank = 6, 8) and a *Preparer* ( $Z = -0.07$ ,  $-0.33$ ; rank = 7, 9) are not symmetrical. Therefore, it can be assumed that the preferences of the participants in this group towards being an Instructor, a *Coach* and a *Preparer* are not statistically significant.

Five of the 9 participants in the second Q factor group also constitute all the participants with completed or ongoing postgraduate education abroad. In this case, it can be said that the ASFE with completed or ongoing postgraduate education abroad have a positive attitude towards being a *Practitioner*, a *Researcher*, or a *Counsellor* as a professional identity, and that they define themselves as being a Researcher, a Practitioner and a *Counsellor*, respectively, in order of importance. On the other hand, it can be argued that they have a neutral attitude towards the professional identities of being an *Instructor*, a *Coach*, and a *Preparer*, and do not adopt such professional identities in their own definition of a professional identity.

### **Conclusion, Discussion and Suggestions**

The current study aimed to examine the professional identities of ASFE. Findings revealed that ASFE define and make sense of their professional identities as *Practitioners*, *Researchers*, *Instructors*, *Coaches*, *Counsellors* and *Preparers*. The professional identities of being a *Practitioner*, a *Researcher*, an *Instructor*, a *Counsellor*, and a *Coach*, which define the duties of the ASFE in different ways, directly or indirectly cover the general duties as specified in the Higher Education Law No. 2547. In addition, when the *Preparer* professional identity is associated with the relevant law article that includes the duties of academics, it can be partially explained with the dimension of guiding the prospective teachers for the teaching profession after graduation. The participants stated that their students expect support especially in the courses of Field Knowledge and Education Science in order to get prepared for the proficiency exams that they take to be able to work as teachers. They stated that this situation is systematic, and some academics have to adopt such an identity even if they do not want to. The professional identities of ASFE relate not only to what their duties are but also how they are performed (Loughran, 2011). It is a fact of today that students

who graduate as prospective teachers are entitled to start their profession based on the extent of success achieved in KPSS as well as field and oral exams. It is inevitable that such a role exists, if not officially, in the tasks that make up the professional identities of ASFE. Faculties of education and teacher education reflect national education systems (Snoek & Zogla, 2009). In this context, it can be said that ASFE have a different professional identity stemming from the national teacher education system. In similar studies, Swennen, Jones and Volman (2010) determined the professional identities of ASFE as a “teacher educator as a school teacher”, a “teacher educator as a higher education teacher”, a “teacher educator as a teacher of teachers” and a “teacher educator as a researcher”, while in a study conducted in Hong Kong, Yuan (2016) made relevant definitions as being an “accidental teacher educator”, a “teacher educator-researcher”, a “struggling researcher”, a “teacher of teachers” and an “inactive researcher”. Compared with the professional identities defined in the current research, it can be said that the professional identities of a *Practitioner*, a *Researcher*, an *Instructor*, a *Coach*, and a *Counsellor* are defined similarly. The main reason for this may result from the fact that teacher education is carried out with similar programs and systems in different countries of the world. However, the Preparer professional identity defined in the current study is a finding specific to this research.

In a report published by the Association of Teacher Educators, the ASFE’s professional identities were defined under the subtitles of “teaching”, “cultural competence”, “researching”, “professional development”, “program development”, “cooperation”, “public interest” and “teacher education” (Association of Teacher Educators (ATE), 2007). According to the report, ASFE stated that due to being relevant field experts, they have duties including teaching, developing and implementing educational programs, contributing to teacher education, creating an atmosphere sensitive to sociocultural elements, developing their professions as teacher educators, conducting research studies and presenting them to the field, ensuring that prospective teachers gain experience, designing studies in professional collaborations and improving professional collaborations, and taking the public benefit as a basis in the public dimension of teacher education. In the current study, the duties that define the professional identities of ASFE as being a *Researcher*, an *Instructor*, a *Coach* and a *Counsellor* and the identification standards of ATE (2007) completely overlap. On the other hand, the “public interest” standard can be associated partially and indirectly with the job description of the professional identity as a *Practitioner*. Yet, there is no standard directly or indirectly defining the professional identity as a *Preparer* within the standards established for the ASFE by ATE (2007). Once again, it can be underlined that the professional identity as a *Preparer* is a sociocultural identity specific to this study. From another point of view, it is obvious that special emphasis is placed on the concept of “professional cooperation” (ATE, 2007) within the definitions of the specified standards. However, it was also observed that ASFE did not make an assessment regarding professional coopera-

tion in their professional identities and definitions. Professional cooperation standard is a concept that covers the process of executing the profession. The current study adopted a result-oriented approach that defines the professional identities of ASFE. This approach may be assumed to have limited the concept of professional cooperation, which is a process-oriented concept.

In this study, the professional identities of ASFE and the duties (as instructors, coaches, counsellors, and preparers) they define are mostly directed towards prospective teachers, who are the main subject of their profession. Similar findings were found in a study by Mckeon and Harrison (2010). According to them, today, the focus is more on the roles towards students in defining the professional identities of ASFE. It can be argued that the changes experienced in the learning-teaching paradigm today are effective in the emergence of this situation. In another sense, the corporate duties of ASFE are also one of the elements that form their professional identity (Murray, Swennen & Shagrir, 2009). Considering the duties and responsibilities of ASFE within their institutions, it is clear that they are expected to establish a corporate identity or make a job description. However, the participants were not seen to include such a duty in their definitions of professional identity. Given that identity formation and the adoption of this identity is a process, it can be thought that this situation may be due to the fact that the roles involving institutional duties are not sustained in the Faculty "A", where the study was carried out.

The Q measurement tool was created, and the data were collected from a different participant group in order to determine whether the identified professional identities of ASFE are a common view, to examine their attitudes and preferences towards professional identities, and to compare them according to various variables. In the analysis of the data, principal component analysis and factor rotations were made. According to the findings of the principal component analysis, it was concluded that ASFE adopted the professional identities as *a Practitioner, Researcher, Instructor, Coach, Counsellor*, and *a Preparer* in a common point of view. The results showed that the *Researcher* identity is the one preferred with the highest priority among the six professional identities adopted by ASFE. Today, institutional requirements in higher education make the researcher identity much more important. According to Zeichner (2005) and Wilson (2006), ASFE should rather be explained with its professional identity as a researcher. The basis of this is the idea that education should be carried out on a scientific basis and that social-individual (e.g., social change and development, career ladder) and institutional benefits (institutional recognition, etc.) can be achieved through research. On the other hand, the least adopted professional identity by ASFE is the identity as a Preparer. As defined earlier, it is a necessity brought about by the teacher education system and the requirement stemming from the conditions confirms this situation. According to the findings of rotating Q factors, 17 of 21 participants were significantly gathered in two different Q factor groups. Eight participants were in the first Q factor

group and 9 participants in the second. The participants were also concentrated in two separate groups according to their field and place of graduate education. Four of the 8 participants in the first Q factor group also constitute 80% of the participants with completed or ongoing postgraduate education in a field other than education sciences. In this case, it can be said that academicians with completed or ongoing postgraduate education other than the field of education have a positive attitude towards their professional identity as a *Researcher*, *Instructor*, *Coach* and *Counsellor*, and they identify themselves with such professional identities as a *Coach*, *Instructor*, *Counsellor* and *Researcher* in order of priority. On the other hand, it can be thought that they have a neutral attitude towards the professional identities as a *Practitioner* and *Preparer* and they do not adopt professional identities as a *Practitioner* and a *Preparer* in their own definition of a professional identity. Five of the 9 participants in the second Q factor group constituted all the participants with completed or ongoing postgraduate education abroad. It can be said that such ASFE have positive attitudes towards the professional identities as a *Practitioner*, *Researcher*, and a *Counsellor*, and they define themselves with their professional identities as a *Researcher*, *Practitioner*, and a *Counsellor*, respectively, in order of importance. Yet, it can be assumed that they have a neutral attitude towards the professional identities as an *Instructor*, *Coach*, and a *Preparer*, and do not adopt the professional identities as an *Instructor*, a *Coach*, and a *Preparer* in their own definition of a professional identity. The fact that the participants gathered in the first Q factor group preferred more of the identity of an *Instructor* and a *Coach* led us to the conclusion that the ASFE whose completed or ongoing postgraduate education is science and literature give priority to own a disciplinary expertise and to educate teachers. The fact that the participants in the second Q factor group preferred the identities of being a *Practitioner* and a *Researcher* shows that the ASFE with completed or ongoing postgraduate studies abroad give priority to conduct scientific research and use new methods, techniques, and strategies. Professional identity consists of different dimensions shaped in pre-vocational and a professional process (Wong & Kaur, 2018). Therefore, it can be assumed that professional identity, which has a dynamic structure, varies according to the ASFE's educational experiences. In addition, the fact that the participants in the second factor group have a neutral attitude towards the identity of being a *Coach* is thought to stem from the following expression "in accordance with the definition of MoNE... (having general knowledge, professional and field knowledge, and proficiency)," which defines the identity in the Q measurement tool. It is evident that the relevant group adopts more of the identities of being a *Practitioner* and a *Researcher* and does not adopt the definition of a static teacher. Murray, Czerniawski, and Barber (2011) stated that the ASFE in England previously defined themselves as a teacher educator (*Coach*), while in the new century they define themselves with the professional identity of being a researcher. In both factor groups, ASFE have a neutral approach towards the professional identity of being a

*Preparer*, which can be explained by the fact that ASFE have to adopt a sociocultural identity as a consequence of the teacher education system. This was confirmed during the interviews to define the professional identities of ASFE.

In general, according to the results of this study, ASFE defines their professional identities by associating them with formal and informal duties (*as a Preparer*). The identified professional identities are related to each other in terms of teacher education. In addition, defined professional identities are generally adopted by ASFE. However, academics' attitudes and preferences towards professional identities vary according to their educational experience. This study has the limitations as there are 12 Q statements created in line with the academic staff of the faculty of education "A" and their definitions for professional identities. Professional identity varies depending on the individual's self-defined professional goals, interests, values, and roles (Skorikov & Vondracek, 2011) and on what type of organization they work for (Sethi & Compeau, 2002). Therefore, professional identity is a multi-faceted and varying as well as time and context dependent phenomenon with individual and organizational dimensions. This study presents results covering a limited area and findings obtained with limited participants. In similar studies, Vloet & van Sweet (2010) and Amott (2018), focusing on the process and experience dimension of professional identity, made in-depth examinations in accordance with the narrative analysis method with the ASFE. Accordingly, studies directed at the narratives of academics can be designed in order to define the professional identities of ASFE in more detail and to examine them on the basis of educational experiences. Teacher education in Turkey developed into an institutional structure completely at the faculty level in 1992 (Ataünal, 2003). Hence, it can be said that faculties of education have a relatively young cultural background and professional environment. In this respect, more studies are needed in different environments with a variety of academics in order to make the definitions for professional identity of the ASFE more comprehensive.

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