

Determining the Factors Effective on the Instructor Profile of Teacher Candidates Through Conjoint Analysis

RESEARCH ARTICLE

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Abstract

The aim of this study is to determine the factors that affect the profile of the instructor in the minds of teacher candidates. For this purpose, the cross-sectional survey model was used, as the research aimed to reveal the existing situation as it is, and in which data were collected from a predetermined sample at a certain time. The study group of the research consists of a total of 271 students studying at the Basic Education Department of the Faculty of Education of a state university located in the Eastern Anatolia Region. In the research, a conjoint questionnaire and a questionnaire for determining the qualification of the instructor, consisting of open-ended questions, were used in order to reveal the ideal instructor profile in the minds of teacher candidates. In order to determine the factors that affect the teacher candidates' academic staff profile, the data obtained were analyzed using percentage, frequency and conjoint analysis methods. Conjoint analysis was performed by writing the appropriate program in the “Syntax” editor of the SPSS 23 package program. According to the results obtained from the teacher candidates in the research, middle-aged, titled Dr. Instructor member or Assoc. Dr. can be defined as “ideal”, a good scientist, objective, understanding, female, and a faculty member who communicates with all of the students.

Keywords: pre-service teacher, instructor profile, ideal instructor, student evaluations, conjoint analysis

Öğretmen Adaylarının Öğretim Elemanı Profili Üzerinde Etkili Olan Faktörlerin Konjoint Analiziyle Belirlenmesi

Öz

Bu çalışmanın amacı, öğretmen adaylarının zihnindeki öğretim elemanı profili üzerinde etkili olan faktörleri belirlemektir. Bu amaçla yapılan araştırmada, var olan durumu olduğu gibi ortaya koymak amaçlandığından ve belli bir zamanda önceden belirlenmiş örneklemeden veriler toplandığından kesitsel tarama modeli kullanılmıştır. Araştırmanın çalışma grubunu Doğu Anadolu Bölgesi'nde yer alan bir devlet üniversitesinin Eğitim Fakültesinin Temel Eğitim Bölümünde öğrenim gören toplam 271 öğrenci oluşturmaktadır. Araştırmada, öğretmen adaylarının zihnindeki ideal öğretim elemanı profilini ortaya koyabilmek için konjoint anketi ve açık uçlu sorulardan oluşan öğretim elemanı niteliğini belirleme anketi kullanılmıştır. Öğretmen adaylarının öğretim elemanı profili üzerinde etkili olan faktörleri belirlemek amacıyla elde edilen veriler yüzde, frekans ve konjoint analizi yöntemleri kullanılarak analiz edilmiştir. Konjoint analizi SPSS 23 paket programının "Syntax" editöründe uygun program yazılarak yapılmıştır. Araştırmada öğretmen adaylarından elde edilen sonuçlara göre orta yaşlı, unvanı Dr. Öğr. üyesi veya Doç. Dr., iyi bir bilim insanı, objektif, anlayışlı, cinsiyeti kadın olan ve öğrencinin tamamı ile iletişim kuran bir öğretim elemanı "ideal" olarak tanımlanabilmektedir.

Anahtar Kelimeler: *öğretmen adayı, öğretim elemanı profili, ideal öğretim elemanı, öğrenci değerlendirmeleri, konjoint analizi*

Introduction

In the 21st century, change and development have become inevitable in higher education as in many other fields. In this sense, the quality of the lecturers, who are an important part of higher education, should also be evaluated and questioned. Considering that faculty members have responsibilities such as education, research, and consultancy (Korkut, 2001), it is very important to make some evaluations to increase the competencies and professional development in these fields, to ensure continuity, and to enhance the quality of higher education.

There are many approaches used in the evaluation of teachers or university lecturers (Gravestock and Gregor-Greenleaf, 2008). Accordingly, the professional development of the academic staff is evaluated by various stakeholders (department heads, friends, the inspection board formed in the dean's office, students, etc.). The most widely used and most effective evaluation system is student evaluation, which is applied in almost all universities (Aljubaily, 2010). Koçak (2006) found student assessment as the most meaningful source of information for teachers to determine

their performance levels. The results of such evaluations made to increase the qualifications of lecturers in teaching are of great importance for universities. In this context, measuring and evaluating the performance of lecturers at the university increases the quality level of universities (Greenwald and Gillmore 1997; Kalaycı, 2009; Kuh, 1995). As a result of these evaluations, faculty members have the opportunity to see their deficiencies and correct them, while universities have the opportunity to complete them by organizing various in-service studies to complete the shortcomings of the lecturers. The qualifications of the lecturers should be developed in line with contemporary and innovative skills (Valeri, 2008). In this direction, the teaching staff will raise the quality of education to the next level according to the evaluation results.

Some universities evaluate their lecturers with questionnaires filled out by students every year, and various scales are also found in the literature in this direction (Dalgıç, 2010; Kazancı Tınmaz, 2018; Thompson, 2001). In these questionnaires, students evaluate the instructors in terms of personal values, the course process and the competencies for assessment and evaluation, and their communication skills. In research, it is emphasized that it is very important for teaching staff to be evaluated by students (Ahmadi, Helms, and Raiszadeh, 2001; Arubayi, 1987; Murray, 1983). In fact, it was stated that the students made the correct determinations regarding the effective planning and execution of the lesson process, the assessment-evaluation competence, and the communication with the student (Beran and Rokosh, 2007; Miller, 1988). However, studies have revealed that student evaluations are consistent with the evaluations of other stakeholders or observers and that an instructor is not evaluated in the same way by different students or in different courses (Beran, Violato, Kline, and Frideres, 2005; Öztürk, 1999).

The number of universities in our country has increased rapidly in recent years. Therefore, considering the increase in the number of universities, it becomes inevitable to increase the educational skills of the people who will be teaching staff and the existing teaching staff (Ladyshevsy, 2013). While universities train new staff carefully and with high quality, they should try to increase the quality of existing teaching staff through in-service training or consultancy (Erçetin, 1997). In this direction, although it is expected that the teaching staffs have certain qualifications, it can be said that it is very important to improve their qualifications.

Characteristics of the Instructors

In studies aimed at determining the quality of higher education services, it is emphasized that the most important element in ensuring quality is “teaching staff” (Açan and Saydan, 2009). Therefore, the success of teacher training is directly related to the quality of the faculty members (Türkoğlu, 1991). A lot of research has been done on

what should be the ideal characteristics of a good teacher, and long lists of characteristics and behaviors have been created based on these research; (Aljubaily, 2010; Dilek, 1993; Feldman, 1976; Kazancı Tınmaz, 2018; Poellnitz, 2007; Pozo-Muñoz, Rebolloso-Pacheco, and Fernández-Ramírez, 2000; Yağcı, 1997) but there is not much research on the relationships of instructors with students. In general terms, research is about what the characteristics of teaching staff should be. The ideal teachers and lecturers are those who establish healthy pedagogical relationships with their students (Ergün, Duman, Kıncal, and Arıbaş, 1999). Thus, the professional success of the teacher or lecturer will be proven (Beran and Rokosh, 2007).

The ideal lecturer is people with a developed vision, who are proficient in his field, who produce academic knowledge by making continuous research, and who are experts in his field (Feldman, 1997; Valeri, 2008). The instructor should be someone who prepares well for the lesson he will teach in the classroom and transfers it to the students by choosing the appropriate methods, techniques, and tools according to the subject he will teach (Beran and Rokosh, 2007; Ladyshewsky, 2013). An ideal instructor reduces the content that he / she will transfer to students related to his / her field to a level that they can understand and makes the content he will transfer clear and understandable (Mogan, 2003). It can be said that an instructor who has these features will have a significant impact on students, and it is inevitable that students gain their trust. In this context, It has also been stated in the studies that faculty members assume important and active roles in issues such as outside-class relationships between students and faculty members, students' personal and social development, their success in lessons, students' self-confidence and self-esteem (Kuh and Hu, 2001; Endo and Harpel, 1982; cited in Açıkan and Saydan, 2009). In this direction, another task that falls on the teaching staff is to create an environment that can provide sufficient support to students psychologically and socially (Corsi, 2017; Oskay, 1997). Akgöl (1994) qualifications that an ideal instructor should have, personality, professional attitude, measurement and evaluation, and human relations. Çakmak (2009), in his study aiming to determine the opinions of Turkish teacher candidates about effective teacher qualifications, found that the teacher trait with the highest average according to the opinions of the pre-service teachers was "being objective" and the feature with the lowest average was "making presentations to the students in the lesson".

The Importance of Training Qualified Instructors

Intercultural interaction has increased with the developing technology. Social, economic, political, and cultural changes have also increased in societies and these changes have accelerated the interaction. The change of existing knowledge or the production of knowledge and its adaptation in daily life has become important for

individuals to keep up with this change. The higher education level is one of the educational institutions most affected by these changes. Therefore, society's expectations from higher education are increasing by differentiating. Higher education institutions are at the top level of their education systems. It both provides individuals with a profession and shapes the future by contributing to the cognitive and psycho-social development of students (Çelik and Tümkaya, 2012). The positive and negative reflection of this formation has a significant impact on the psychological health of the academic staff as well as their academic competence (Akman, Kelecioğlu, and Bilge, 2006). In short, the effect of the proficiency of the teaching staff on the quality of teaching is of great importance.

Nowadays, teaching staff's understanding of transferring information to students and students' being passive in the process is changing; instead, there is a high-level and complex understanding of education that research, questions, structures and produces knowledge, in which students are active in the process. From this point of view, lecturers working at universities should renew themselves by this educational approach. The qualified academic staff contributes to the development of students (Akman, Kelecioğlu, and Bilge, 2006). It can be said that the qualified upbringing of students depends on the personal and academic qualifications of the lecturers (Özgüngör and Duru, 2014). However, there is a systematic relationship between the educational qualifications of an instructor and the academic success of his students (Wayne and Youngs, 2004). For this reason, teaching staff needs to provide satisfaction in their profession to fulfill the duties expected from them (Bilge, Akman, and Kelecioğlu, 2005). Sergiovanni and Starratt (1998) also emphasize that there is an important positive relationship between the academic success of students and the satisfaction of faculty members in their profession. In addition, it is emphasized that the qualified teaching staff in teaching processes is an important variable in the development of students (Balkar, 2009). Academic staff's achievement of professional satisfaction in terms of academic career and personal development affects the social, psychological, and behavioral development of students (Kara, İzci, Köksalan, and Zelyurt, 2015). On the other hand, it is thought that qualified and equipped lecturers have an important function in better communication with students and in enriching students' cognitive and personal development processes (Invention, 2001). Therefore, the quality of the teaching staff contributes to the development of qualified students in higher education.

Studies conducted in Turkey and abroad have examined the factors affecting the professional development of faculty members according to various variables such as the age, gender, academic title, communication skills of the instructor (Bedard and Kuhn, 2008; Cheng, 2011; Johnson, Narayanan, and Sawaya, 2013; Watchtel, 1998; Theall and Franklin, 2001). Özgüngör and Duru (2014) examined students' percepti-

ons of their teaching staff in their study. The research results emphasized that students' perceptions of their teaching staff became negative due to the increase in the course load, experience, and many students. Devebakan et al. (2003), in the study, faculty members working in the Institute of Health Sciences were evaluated by the students. The results of the study give various messages to the lecturers to improve the content, level, and presentation techniques used, and as a result of the evaluations, it has been concluded that students are the most important element in increasing the quality of the lecturers. Zaman Kılıç and Gümüşeli (2010) stated in their study for academic staff that there is no relationship between job satisfaction and professional seniority, marital status, gender, and education level. However, it was determined that there is a significant relationship between the age of the teaching staff and their job satisfaction. In their study, Bilge, Akman, and Kelecioğlu (2005) found that the older ones have higher internal satisfaction than the younger ones, the faculty members have higher education staff, the ones who have no experience abroad, the ones with a high title have higher internal satisfaction than the ones with a low title, and those with a longer service period than those with a low level of service. In addition, it was stated in the study that the external satisfaction of those working in the field of social sciences was lower than those working in the field of engineering and science. Again, in another study conducted by Akman, Kelecioğlu, and Bilge (2006), a significant difference was found between the gender, seniority, and academic status of the academic staff and their job satisfaction. Yavuz Konokman and Yanpar Yelken (2014) found that the life-long learning competence perceptions of faculty members differ according to gender, foreign language level, and technology use level.

In some studies, the age, gender, and education level of the students were not very effective in the evaluations of the instructors, while the crowd of the class and the content of the course were found to be effective (Bedard ve Kuhn, 2008; Mahiroğlu, 1988, while some studies stated that the effect of factors such as the class size and the number of students was at a negligible level (Özgüngör and Duru, 2014). Centra and Gaubatz (2000) stated in their study that students found the performance of female teaching staff higher than male teaching staff. In addition to this study, it was found that the performance perceptions of the lecturers differ according to the gender and grade level of the students (Wigington, Tollefson ve Rodriguez, 1989; Nargundkar ve Shrikhandle, 2014). However, in the study conducted by Petcher and Chow (1988), it was concluded that the titles of the instructors did not create a significant difference between their perceptions of performance. Contrary to this study, it was concluded that the performance perception level of the professors was lower (Bianchini, Lissoni ve Pezzoni, 2013; Nasser ve Hagtvvet, 2006; Wigington ve diğerleri, 1989;).

In this study, it was aimed to determine the factors that affect the profile of the instructor from the perspective of the teacher candidate. It is thought that determining the factors that affect the professional development of the academic staff will contribute to the training of more qualified students and to make more qualified studies. Therefore, it is important to fully identify and eliminate physical, psychological, and behavioral situations that are thought to affect the development of instructors negatively or to take preventive measures in the occurrence of these situations (Balkar, 2009). It is thought that the training of academic staff and revealing the positive and negative situations that affect them professionally and carrying out studies to eliminate these situations will contribute to the provision of qualified education. However, since university students are the people directly involved in this process, it is of great importance to reveal their opinions on the subject. Evaluation of the performance of teaching staff in higher education constitutes one of the quality indicators of universities (Kalaycı, 2009). In this direction, it is thought that the quality of university education will increase if the lecturers renew themselves by taking into account the expectations and needs of university students and improve themselves in the areas they are lacking. In this context, an answer was sought for the research problem and sub-problems given below. The problem statement of the current study is “What are the factors affecting the profile of the instructor from the perspective of the teacher candidate?”. In this connection, answers to the following sub-problems were sought:

(1) What are the results of the factors affecting the teacher candidates’ instructor profile according to the conjoint analysis?

(2) What are the results of the factors affecting the teacher candidates’ instructor profile by gender?

(3) What are the results of the factors affecting the teacher candidates’ instructor profile according to the grade level?

(4) What are the results of the factors affecting the teacher candidates’ instructor profile by branch/department?

Method

Research Model

Survey research model, one of the quantitative research methods, was used in this study. Survey studies are studies conducted on larger samples compared to other studies, in which the views of the participants or the characteristics of interest, skills, abilities, attitudes, etc. regarding a subject or event are determined (Fraenkel, Wallen and Hyun, 2012). The purpose of these studies is to make a description by taking a picture of the current situation regarding the research subject. There are two types of survey studies: cross-sectional and longitudinal surveys. In this study, a “cross-sec-

tional survey” design, in which data was collected from a predetermined sample at a certain time, was used.

Study Group

The research was conducted on 271 students who were determined on the basis of voluntary participation among the 1st, 2nd, and 3rd grade students studying in the Elementary Mathematics Education, Primary Education, Science Education Department of a state university in an eastern region of Turkey. The distribution of teacher candidates participating in the study by gender, department, and grade level is given in Table 1.

Table 1

Descriptive Information about Teacher Candidates Participating In the Study

Variable	Category	N	%
Gender	Female	186	68.64
	Male	85	31.36
Department of	Primary Education	98	36.16
	Elementary Mathematics Education	87	32.10
	Science Education	86	31.74
Grade Level	1st Grade	92	33.94
	2nd Grade	88	32.47
	3rd Grade	91	33.58

When Table 1 is examined, it is seen that the pre-service teachers participating in the study are distributed in a balanced way in terms of gender, department, and class level. Considering the distribution in terms of grade level, the reason why 4th grade students are not included in the study group is that there are a small number of volunteer participants at the 4th grade level.

Ethical Approval

Ethical permission was obtained from Van Yuzuncuyıl University Social and Human Sciences Publication Ethics Committee (30.04.2021-2021/06-32) for this research.

Data Collection

In this study, which was conducted to reveal the ideal instructor profile of pre-service teachers, a questionnaire for determining the qualification of the instructor consisting of a conjoint questionnaire and open-ended questions was used. In this context, while developing the conjoint questionnaire, the literature on the subject

was reviewed first. In this context, the characteristics that pre-service teachers pay attention to while creating the profile of lecturers were determined by using the relevant sources and taking the opinions of the students, and these features were turned into questionnaire items. Later, the order of importance of these features in the eyes of the students was revealed. Thus, the characteristics that an ideal lecturer can have are listed based on the results obtained. After the questionnaire items were prepared, expert opinion was sought to finalize the questionnaire. In line with the opinions of 8 experts working in the field of teacher training (4), assessment-evaluation (2) and statistics (1), the content validity rate (CGO) with the Lawshe Technique was found to be 1.00. The content validity criterion (CAS) for 7 experts at $\alpha = 0.05$ significance level, which was transformed into a table by Veneziano and Hooper (1997), is 0.99. For each item, it can be said that the CGO value is sufficient when the $CGO > CVI$ (Yurdugül, 2005). The content validity index (CGI), which expresses the average of the scope validity rates, was found as 1.00 in this study. When the values found and the criteria are compared, it can be stated that the content validity of the items in the measurement tool is statistically significant, since the $CGI > CVI$, that is, the content validity of the prepared measurement tool is provided. Personal information is included in the first part of the conjoint questionnaire and the questionnaire items are included in the second part. The Cronbach Alpha internal consistency coefficient of the conjunct questionnaire used in the study was found to be 0.91. It can be said that the obtained reliability coefficient is quite high.

Personal information is included in the first part of the “Questionnaire for Determining the Required Characteristics of the Instructor”, which consists of open-ended questions. In the second part, pre-service teachers were asked to write down the five most important characteristics that an instructor should have in an open-ended manner and to indicate the number of lecturers who attend their classes according to their level of having these characteristics.

Data Collection Process

Data collection tools were applied online / online to students who volunteered after obtaining ethics committee permission from the relevant institution during the period when universities switched to distance education due to the Covid19 Pandemic in the spring of 2020-2021. Although more than one measurement tool was used during the data collection process, due to the low number of items in the measurement tools, the scales were given to the participants at the same time and they were filled in, and it was observed that filling the scales took between 10 and 15 minutes.

Data Analysis

After the conjoint questionnaire was shared with the students online, 7 forms that were filled in incorrectly and incompletely were removed, and the remaining 271 for-

ms were evaluated. As a result, the following analyzes were made on the questionnaire of 271 pre-service teachers, and the data obtained were analyzed using percentage, frequency and conjoint analysis methods in SPSS 23 package program. In addition, in the study, it was examined whether the factors affecting the profile of the instructor in their minds changed in terms of the gender of the teacher candidates, the department they studied and their grade level.

In order for the conjoint analysis to be applied and the expected benefits to be optimal, the study should be carried out in the following stages (Tatlıdil, 1995):

- 1) Determination of all important characteristics of goods or services
- 2) Determining the levels for each feature
- 3) Preparation of Conjoint questionnaire

a) With the trade-off method: Collecting information by considering two features at a time.

b) With the full concept method: collecting information by considering all features at the same time.

- 4) Application of prepared conjunct analysis
- 5) Finding the utility coefficients of the levels for each feature
- 6) Determination of general and group consumption patterns
- 7) Interpretation of simulation cards.

In this study, the application of conjunct analysis was carried out in 4 stages:

1. Stage: The features (factors) of the instructor profile were determined as follows. During the selection of the features, attention has been paid to the characteristics that can reflect the instructor profile of the individuals and to be considered in decision-making.

2. Stage: While having a high number of levels is an advantage in reaching detailed information, it may be a problem in terms of representation in an orthogonal order.

Considering this situation, the levels for each factor were determined as Table 2.

Table 2*Levels Regarding the Factors Affecting the Profile of Instructors*

Levels				
Features	1	2	3	4
Age and title of the instructor	Young and research assistant	Middle-aged and lecturer (Dr.)	Being old and a professor	
Academic status	Dominate the field	Being a good scientist	Good command of English	
Communication	Communicating with all students	Effective use of language	Effective use of body language	Ensuring class participation
Personal characteristics	To be understanding	To be sympathetic	To be democratic	be disciplined
Teaching style	Using different methods-techniques	Considering the student's interests and needs	Eligibility for student level	Being objective in the evaluation
Gender	Female	Male		

Looking at the levels of the factors, there are 1152 possible combinations. However, since it will not be possible to order the combination in a reliable and accurate way, 25 combinations were created in the SPSS package program with the Syntax editor in orthogonal order, taking into account the main effects. These combinations form the cards to be given to the people to be surveyed. In addition to these cards, 3 simulation cards were created.

3. Stage: While preparing the questionnaire, care was taken to ensure that the questions were clear, precise, and clear. In addition, to facilitate the determination of the target audience, it was decided to add the age, gender, department, and class level information of the individuals to the questionnaire. The questionnaire form presented to the people is given in Annex 2.

4. Stage: It is the stage of application of the prepared conjunct questionnaire to individuals. The questionnaire was applied to a total of 271 teacher candidates, 186 female and 85 male, who are between 18-22 years old and studying in the 1st, 2nd and 3rd year of the Education Faculty of a state university located in the Eastern Anatolia Region. The students were asked to list the instructor profile in a way that they give number 1 to the card they prefer the most and 25 numbers to the card they prefer least, in line with the 25 cards created.

The results of the questionnaires applied to the individuals were arranged and conjoint analysis was applied by writing the appropriate program in the “Syntax” editor of SPSS 23 package program. For the instructor profile, no ranking (direction) was specified in terms of gender, communication characteristics, academic characteristics, and teaching style characteristics. A “linear more” constraint was introduced for academic title and age. All other factors have been described as “discrete”. In this study, the design created by SPSS v.23, called Orthogonal, was used.

Table 3

Definitions of the Factors Affecting the Profile of the Instructor

Factors	Model	Levels	Label
Age and title	Linear more	3	Teacher
Academic Status	Discrete	3	Academic Standing
Communication	Discrete	4	Communication
Personal characteristics	Discrete	4	Personal
Teaching style	Discrete	4	Tutoring
Gender	Discrete	2	Gender

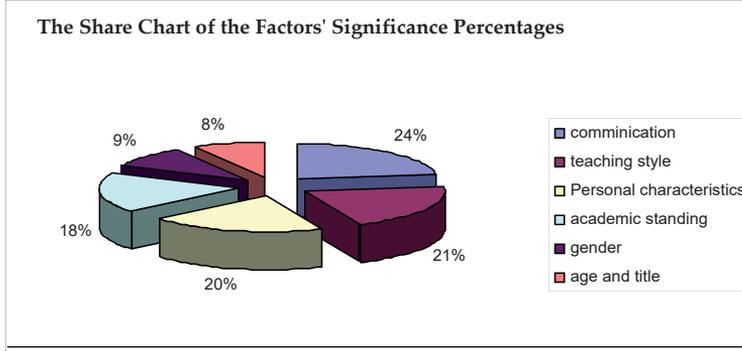
The information about each individual from the results obtained after the conjoint analysis was applied, was not included in the report because the number of people (271 people) was quite high. Summary information was used to make comments and to obtain the general instructor model over all individuals. The significance levels in the formation of the factors and the benefit coefficients of these levels were reached. In addition, the expected “score” values of the “simulated” products were obtained with the Pearson R and Kendall Tau coefficients, which give the compatibility of the observed results with the established model.

Findings

In this section, firstly the results of the conjoint analysis and then the findings obtained from the “Questionnaire for Determining the Required Characteristics of the Instructor”, which consists of open-ended questions, are included. The findings obtained as a result of these two analyzes were compared and interpreted.

Findings Obtained as a Result of Conjoint Analysis

Conjoint analysis was used first to determine the factors that affect the teacher candidates’ instructor profile. For this purpose, the graphic on which factors were taken into consideration by the 271 pre-service teachers participating in the study while determining the profile of the instructor is given in Figure 1.

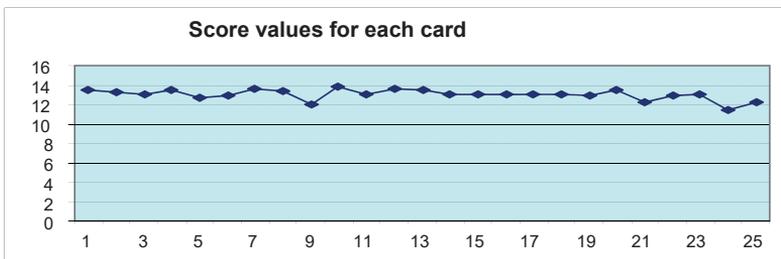
Figure 1*The Share Chart of the Factors' Significance Percentages*

When Figure 1 is examined, communication skill with 24% is seen as the most important factor in determining the profile of the instructor. In second place comes the style of teaching with 21%. Next comes personal characteristics, academic status, gender, and finally, age and title, respectively. When determining the profile of the instructor according to the results obtained, the first important feature is the communication skill with 24%. Considering the communication skill, it is mostly preferred to “communicate with the whole student” with a benefit coefficient of 0.336. Then, respectively; It is preferred to “use body language effectively” with a benefit coefficient of 0.247, “to use language effectively” with a benefit coefficient of -0.087, and to “participate in class” with a benefit coefficient of -0.495. The second important factor in determining the profile of the instructor is the style of teaching the lesson with a rate of 21%. Regarding the style of teaching the lesson, “being objective in the evaluation” with a benefit coefficient of 0.370, “taking into account the interests and needs of the student” with a benefit coefficient of 0.225, “using different teaching methods and techniques” with a benefit coefficient of -0.158, “suitability to student level” with a benefit coefficient of -0.438. is preferred. The third important factor is determined as personal characteristics with a rate of 20%. Considering the personal characteristics, it is most preferred that the instructor be understanding with a benefit coefficient of 0.630. Then, respectively; It is preferred to be “sympathetic” with a benefit coefficient of 0.148, “to be democratic” with a utility coefficient of -0.172, and lastly to be “disciplined” with a benefit coefficient of -0.250. The fourth important factor is the academic status factor at 18%. Looking at the academic status, respectively; It is preferred to be “a good scientist” with 0,199 utility coefficient, “good command of English” with -0,014 utility coefficient, and “command of the field” with -0,185 utility coefficient. The fifth important factor is gender, with a rate of 9%. Regarding

the gender, respectively; It is preferred to be “female” with a benefit coefficient of 0.267 and “to be a man” with a benefit coefficient of -0.267. In the sixth and last place, age and title come with 8%. Looking at the age and title, respectively; With a benefit factor of 0.560, “middle-aged and Dr. Lecturer Member or Assoc. Dr. with a benefit coefficient of 0.373, “the elderly and Prof. “Being a young and research assistant” with a benefit coefficient of 0.186 is preferred. Here, the age and title feature are defined as “linear more”, but the order is not suitable for this. According to the results, the middle-aged and the title Dr. Lecturer member or Assoc. Dr. A lecturer, who is a good scientist, who is objective in assessment, who is understanding, communicates with the entire student and whose gender is female, can be defined as “ideal”. Pearson (R) = 0.62 regarding the rate of conformity of the established model to the preferences of the individuals; $p < 0.01$ and Kendall Tau = 0.42; It was found to be $p < 0.01$. According to Pearson’s R statistic and Kendall’s Tau correlation coefficients, it can be said that there is a relationship of 0.62 between the results observed with the constraint on the age and title factor among the features of the instructor profile. Although the “linear more” constraint, which is brought to the characteristics of age and title, was consistent with the established model, 142 people who participated in the survey answered in the opposite direction. Score = Constant + b1 (communication) + b2 (teaching style) + b3 (personal characteristics) + b4 (academic status) + b5 (gender) + b6 (age and title) for each card, the score values for each card were calculated and ranking has been made by substituting utility values. However, the graph of the point values of each card is given in Figure 2.

Figure 2

Line Graph of Score Values of Each Card



In terms of university students’ preferences, Card number 10 is in the first place with a score of 13.78, card number 7 is in the second place with a score of 13.59, and card number 12 is in the third place with a score of 13.57. The cards with the highest score values are given in Table 4.

Table 4*Cards With the Highest Score Value*

Age and title	Academic Status	Communication	Personal characteristics	Teaching style	Gender	Card No	Score (%)
Being middle-aged and a lecturer	Being a good scientist	Communicating with all students	to be understanding	Being objective in the evaluation	Female	13,78	10
Elder and Prof. to be	Dominate the field	Considering the student's interests and needs	to be understanding	Using different methods-techniques	Female	13,9	7
Young and research assistant	Dominate the field	Communicating with all students	to be understanding	Using different methods-techniques	Female	13,57	12

Simulation cards are used to predict the preference of students in case a new instructor emerges. In addition to 25 cards, 3 simulation cards are given in Table 5.

Table 5*Simulation Cards*

Age and title	Academic Status	Communication	Personal characteristics	Teaching style	Gender	Card No	Score (%)
Young and research assistant	Being a good scientist	Using language effectively	to be understanding	Being objective in the evaluation	Female	1	13.4
Elder and professor	Good command of English	Communicating with all students	to be sympathetic	Eligibility for student level	Male	2	13.1
middle-aged and lecturer	Being a good scientist	Being a good scientist	Ensuring class participation	to be democratic	Female	3	13.0

When Table 5 is examined, the 1st simulation card is in the first place with a score of 13.4, followed by the 2nd simulation card with a score of 13.1 and the 3rd simulation card with a score of 13.0. In addition, Bradley Terry-Luce (BTL) and Logit coefficients for the simulation cards obtained in the study are given in Table 6.

Table 6

Bradley Terry-Luce (Btl) and Logit Coefficients for Simulation Cards

Card	Max Utility (%)	BTL (%)	Logit (%)
1	33.58	34.23	34.43
2	37.27	32.86	36.66
3	29.15	32.91	28.91

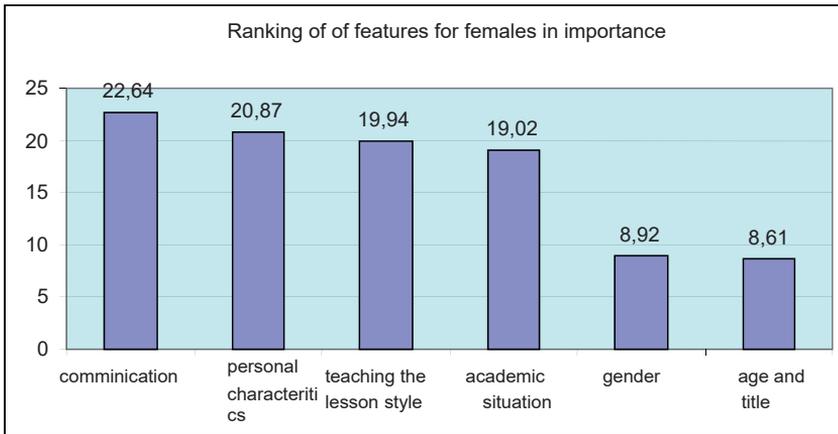
Maximum utility, Bradley Terry-Luce (BTL) and Logit coefficients for the three simulation cards are given in Table 6 in percent. When Table 6 is examined, it can be said that the 2nd simulation card is the card with the maximum benefit, and it will be the most preferred instructor profile. As can be seen from Table 6, it was concluded that the 1st simulation card would be preferred with a rate of 33.58%, and the 3rd simulation card would be preferred with a rate of 29.15%.

Determination of Instructor Profile Characteristics by Gender

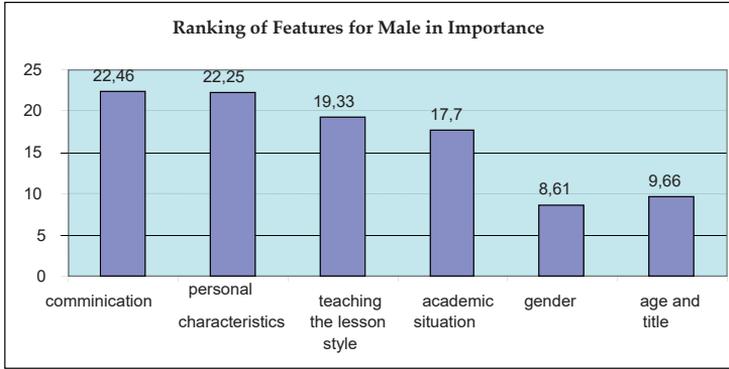
The graphic regarding the importance order of the features for female was obtained as in Figure 3 below.

Figure 3

Ranking of Features for Females in Importance



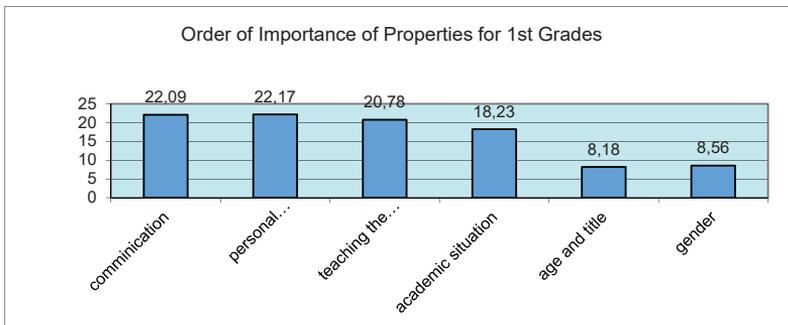
While determining the profile of the instructor, female participants give importance to “communication” with 22.64%, “personal characteristics” with 20.87%, and “style of teaching the lesson” with 19.94%, “academic status” with 19.02%, “gender” with 8.92% and “age and title” with 8.61% respectively. The graph regarding the order of importance of the features for males was obtained as in Figure 4 below.

Figure 4*Ranking of Features for Male In Importance*

While determining the profile of the instructor, males give importance to “communication” with 22.46%, “personal characteristics” with 22.25%, and “style of teaching the lesson” with 19.33%, “academic status” with 17.7%, “age and title” with 9.66% respectively. It is seen that males give importance to “gender” in the last place with a rate of 8.61%.

Determination of Instructor Profile Characteristics by Grade Level

The graphic regarding the importance of the features for the students studying in the first grade was obtained as in Figure 5 below.

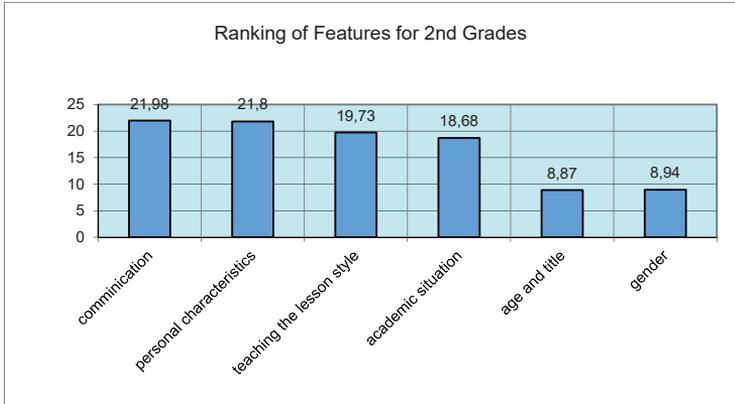
Figure 5*Order of Importance of Properties for 1st Grades*

While the 1st year students determine the profile of the instructor, they give importance to “personal characteristics” with 22.17% and “communication” with 22.09%, “teaching style” with 20.78%, “academic status” with 18.23%, “gender”

with 8.56% respectively. “Age and title” was the last important feature with 8.18%. The graph regarding the order of importance of the features for the 2nd grade students was obtained as in Figure 6 below.

Figure 6

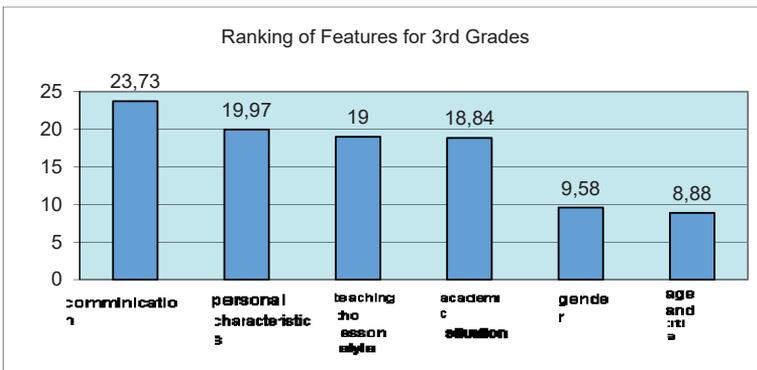
Ranking of Features for 2nd Grades



While determining the profile of the lecturer, the students studying in the 2nd grade give importance to “communication” with 21.98% and “personal characteristics” with 21.8%, “style of teaching” with 19.73%, “academic status” with 18.68%, “gender” with 8.94% and finally “age and title” with 8.87%, respectively. The graphic regarding the importance of the features for the 3rd grade students was obtained as in Figure 7 below.

Figure 7

Ranking of Features for 3rd Grades



While determining the profile of the instructor, the 3rd grade students give importance to “communication” with 23.73% and “personal characteristics” with 19.97%, “style of teaching” with 19 %, “academic status” with 18.84%, and finally “age and title” with 9.58%, respectively. With a rate of 8.88%, “gender” was the most important feature.

Findings Obtained from the “Qualification Questionnaire for Determining The Characteristics of Instructors” Consisting of Open-Ended Questions

In this section, the percentage and frequency distributions that emerged as a result of the analysis of the data obtained from the “Qualification Questionnaire for Determining the Characteristics of Instructors” consisting of open-ended questions applied to the teacher candidates, which constitute the sample of the research, are given. Percentage and frequency distribution of the factors affecting the teacher candidates’ profile of instructors are given in Tables 7, 8, and 9 for Primary Mathematics Education, Classroom Education, and Science Education departments, respectively.

Table 7

Percentage and Frequency Distribution of Factors Affecting the Instructor Profile of Primary School Mathematics Education Department Students

The five most important factors affecting the academic staff profile of primary school mathematics education students	f	%
1. Communication Skills	20	39.21
2. Field Knowledge	14	27.45
3. Being Conscientious	5	9.8
4. Paying Attention to Students’ Ideas	5	9.8
5. Lecture Style and Creativity	7	13.7
Elementary Mathematics Education	Total	51
		100

When Table 7 is examined, it is seen that the most important factor affecting the academic staff profile of the students studying in the Department of Primary Education Mathematics Education is communication skills (39.21%), while the second most important factor is “field knowledge”. Then comes the understanding of the lecturer, giving importance to the students’ thoughts, teaching style and creativity, respectively.

Table 8

Percentage and Frequency Distribution of Factors Affecting the Instructor Profile of Primary School Classroom Teaching Department Students

The five most important factors affecting the academic staff profile of primary school classroom teaching department students	f	%
1. Field knowledge	24	39.34
2. Communication skill	14	22.95
3. Being understanding	6	9.83
4. Lecture style	10	16.39
5. Being cheerful	7	11.47
Primary Education Classroom Teaching	Total	61 100

When Table 8 is examined, it is seen that the most important factor affecting the academic staff profile of the students studying in the Department of Classroom Education is field knowledge (39.34%), while the second most important factor is communication skills. Then, the instructor's understanding, lecture style and smiling face come, respectively.

Table 9

Percentage and Frequency Distribution of Factors Affecting the Faculty Profile of Science Education Department Students

The five most important factors affecting the academic staff profile of primary school science education department students	f	%
1. Field knowledge	24	40
2. Communication skill	10	16.66
3. Lecture style	14	23.33
4. Being understanding	7	11.66
5. Being Disciplined	5	8.33
Science Education	Total	60 100

When Table 9 is examined, it is seen that the most important factor affecting the academic staff profile of the students studying in the Department of Science Education is field knowledge (40%), and the second most important factor is communication skills. Then comes the style of lecture, being understanding and being disciplined, respectively. In the study, it was stated that the results obtained in the survey, according to the opinions of the teacher candidates, primarily the instructors should have field knowledge. Another issue that teacher candidates pay attention to in teaching staff is that they should have communication skills. It is seen that the style of lecture, understanding and discipline are other features expected from the instructors.

Discussion, Conclusion and Suggestions

In this study, it is aimed to determine the factors that affect the profile of the instructor from the perspective of the teacher candidates. Accordingly, in this section, the results obtained from the sub-problems of the research, which are conjoint analysis, gender, grade level and the factors that affect the instructor profile according to the branch are given. Conjoint analysis is seen as a combined method that uses many statistical methods that examine both characteristics and interpersonal relationships and environmental interactions (Nakip, 2003). Although conjoint analysis is handled in the business sector, it can also be used in the service and education sector. In this sense, it is important to determine the ideal instructor profile when considering the service that an instructor will provide to university students and therefore to the country. According to the results obtained by the conjoint analysis in the study, the participants ranked the factors (communication, teaching style, personal characteristics, academic status, gender and age and title) in determining the instructor according to their importance percentages. Participants ranked the factors such as communication skills, teaching style, personal characteristics, academic status, gender, age and title in order of importance in determining the instructor. According to the results obtained, it has been determined that the most sought-after feature in a lecturer is communication skills. In other studies on this subject (Beran and Rokosh, 2007; Teryy, 2015; Valeri, 2008), similar results were reached and it was seen that the most important feature that a lecturer should have is communication skills and lecture style. In another study, it was concluded that an ideal instructor should consider the emotional and social characteristics of students (Pozo-Muñoz, Reboloso-Pacheco, and Fernández-Ramírez, 2000). While determining the instructor profile, the results of the participants' benefit coefficient were obtained for each factor. According to the results obtained, the qualifications expected to be possessed by an instructor in communication, which is the first important factor, are as follows; communicating with all students, using body language effectively, using language effectively and ensuring students' participation in the lesson. This result is similar to the results of the study by Lyde, Grieshaber, and Byrns (2016) titled Evaluation of faculty performance. In the aforementioned study, multi-source assessment method was used and it was suggested that an instructor should communicate well with all students and use body language effectively. The second important factor in the study, the way of teaching the lesson, is a lecturer's respectively; It was stated that he should have the ability to be objective, to consider interests and needs, to use teaching methods and techniques, and to give lectures appropriate to the level of the student. In personal characteristics, which is the third important factor, a lecturer's; Being understanding, sympathetic, democratic and disciplined is preferred by the participants. In terms of academic status, which is

the fourth important factor, a lecturer's; be a good scientist, have a good command of English and have the skills to dominate the field. In the fifth important factor, the gender variable, it is preferred that the instructor be female. In terms of age and title, which are the last and sixth important factors, a lecturer's; middle-aged and doctor lecturer or associate professor, elderly/professor and young/research assistant. In the study, the age and title factor was seen in the last place by the students. This shows that students give less importance to age and title factor than other factors. Terry (2015), in his study on students' course satisfaction, concluded that the age and title of the instructors are not important, and that understanding students' feelings and thoughts is a more important factor in academic success.

In the study, simulation cards were prepared for the students. Simulation cards were used to predict the preference of an instructor by students. According to the results obtained, university students chose the simulation card as the first choice, which is middle-aged, a faculty member, a good scientist, being understanding, being objective in evaluation, and being female. In Ladyshevsky's (2013) research on students' satisfaction with the lesson, it was stated that features such as objectivity, democratic attitude, actively involving students in the lesson, and dynamism are the characteristics that a lecturer should have. University students chose the simulation card as the second choice for the lecturers, old and professor, competent in their field, female, understanding, taking into account the interests and needs of the students and using different methods and techniques. Similarly, in Sevim, Akan, and Yıldırım's (2020) study on the ideal qualifications of academics, the qualifications sought in academics were suitability for student level, being experienced and understanding, and addressing all students. Again, university students stated the simulation card as the third choice of the academic staff, young and research assistant, competent in the field, understanding, female, using different methods and techniques and communicating with all of the students. In the scale developed by Kazancı Tınmaz (2018) regarding the pedagogical competencies of instructors, it was stated that democratic attitude and teaching are important in a lecturer. As in the study, it is seen that one of the most sought-after features in an ideal instructor is objectivity. In the study, students were given 3 additional simulation cards regarding the characteristics that an instructor should have, and they were asked to rank these cards in order of importance. According to the results obtained, a young and research assistant, a good scientist, understanding, female, being objective in the evaluation and using the language effectively were the first choice of the students. In parallel with the result obtained from the study, Gravestock and Gregor-Greenleaf (2008) reached a similar conclusion in their study on student course evaluations, stating that a lecturer should have the characteristics of understanding, objective, dynamic and effective communication.

According to the gender and grade level of the participant teacher candidates, the characteristics of the instructor profile were determined, and the results were obtained. Female, male and 1st and 2nd grade students stated that an instructor should have communication, personal characteristics, teaching style, academic status, gender and age, and title, whose importance level is given from high to low. On the other hand, 3rd grade students stated that an instructor should have communication, personal characteristics, teaching style, academic status, age and title, and gender characteristics of which the importance is given from high to low. Feldman (1976, 1997) stated that a superior instructor should have skills such as communication, teaching, and personal characteristics. According to Baker (2014), a lecturer must first be able to establish a healthy communication with all students and actively integrate them into the lesson. In the study, results were obtained regarding the percentage and frequency distributions of the factors that affect the teaching staff of the students in the Elementary Mathematics, Classroom Education and Science Education Department. Students studying in Elementary Mathematics, Classroom Education and Science Education stated five factors that are effective in an instructor in order of priority. Accordingly, an instructor should have field knowledge, understanding, giving importance to students' thoughts, creative and different lecture style skills. Similar to this research, Lyde, Grieshaber and Byrns (2016) in their study, faculty students expect a faculty member to have skills such as field knowledge, communication skills, lecture style, understanding, giving importance to all students, and democratic attitude, in order of priority. The following results were obtained in the study and similar studies. Elderly and professor (Balam, 2006), female, fluent in English, using body language effectively (Poellnitz, 2007; Spooner, Jordan, Algozzine, and Spooner, 1999), understanding (Algozzine et al., 2004; Corsi, 2017; Obenchain, Abernathy and Wiest, 2001), a person who can communicate with students taking into account their interests and needs (Aljubaily, 2010; Gunn, 2021) can be defined as the ideal instructor.

It should be noted that the results are limited in terms of generalizability, as this study was conducted on a voluntary basis on students studying in the Elementary Mathematics Education, Primary Education, and Science Education Department of a state university in an eastern region of Turkey. Comparisons between faculties can be made by conducting similar studies with more participants in a larger study group, on students studying at different faculties of education or different departments of different faculties. In similar studies to be conducted on this subject, it can also be examined whether the ideal instructor profile changes according to different variables. In addition to student evaluation, comparative studies can be carried out by taking the opinions of different stakeholders through multiple evaluations. In line with the results obtained from the research, it is of great importance that the instructors take

into account the wishes and needs of the students while planning the course content. It is thought that educating the instructors in the areas where they are lacking will contribute to the increase of the performance of the faculty members, thus increasing the quality of education. In this sense, studies can be planned to improve the qualifications of the instructors. Within the scope of these studies, providing opportunities for academic staff to develop themselves and creating the necessary environments in universities for this, providing the necessary support for the development of academic staff financially and morally, organizing personal development seminars can be given as examples. It is thought that such studies will be very beneficial in terms of increasing the quality of educational institutions. In universities, student evaluations should be given due importance, and the results should be carefully examined, and instructors should be provided to develop themselves accordingly. As a result, it is thought that revealing the characteristics that the instructors should have from the eyes of the students will contribute to providing feedback to both the instructors and the university administration.

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