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Factors Affecting Attitudes of Prospective Teachers Towards Plastic Arts: An Example of a Faculty of Education in Turkey

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Abstract

This research aims to determine the factors affecting the prospective teachers' attitudes towards plastic arts. The population of the research consists of prospective teachers who study in the 3rd and 4th grades of a Faculty of Education in Turkey. A total of 646 prospective teachers participated in the study. Personal information form and attitude scale were used to collect data. SPSS Package Programme was used for quantitative analyses. T-test and one-way analysis of variance (ANOVA) were used for analyzing the data obtained from personal information form and attitude scale. Results indicated that attitudes of prospective teachers towards plastic arts were affected by the following factors: reading newspapers, liking a field of art, reading books related to art, and their genders. It was also found out that prospective teachers were interested in plastic arts. In line with these results, it is suggested that plastic arts education and related activities should be more frequently included in university education.

Öğretmen Adaylarının Plastik Sanatlara Yönelik Tutumlarını Etkileyen Faktörler: Türkiye'deki Bir Eğitim Fakültesi Örneği

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Öz

Bu araştırma öğretmen adaylarının plastik sanatlara yönelik tutumlarını etkileyen faktörlerini belirlemek amacıyla yapılmıştır. Araştırmanın evrenini Türkiye'deki bir Eğitim Fakültesinde 3. ve 4. sınıfta öğrenim gören öğretmen adayları oluşturmaktadır. Toplam 646 öğretmen adayı araştırmanın örneklemini oluşturmaktadır. Verilerin toplanması amacıyla kişisel bilgi formu ve tutum ölçeği uygulanmıştır. Nicel analizler için SPSS Paket Programı kullanılmıştır. Kişisel bilgi formu ve tutum ölçeğinden elde edilen verilerin çözümlenmesinde t-testi ve tek yönlü varyans analiz testi (ANOVA) kullanılmıştır. Araştırmanın sonucuna göre öğretmen adaylarının plastik sanatlara yönelik tutumlarını belirleyen faktörler şu şekilde belirlenmiştir: gazete okuma durumu, bir sanat dalını sevimeleri, sanatla ilgili kitap okuyup okumama durumları ve cinsiyetleri. Ayrıca öğretmen adaylarının plastik sanatlara yönelik ilgilerinin olduğu sonucu ortaya çıkmıştır. Bu sonuçlar doğrultusunda üniversitelerde plastik sanatlar eğitimine ve etkinliklerine daha çok yer verilmesi önerilmektedir.

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Introduction

People have expressed their emotions and ideas differently since their existence. It may be stated that such emotional expression had a great impact on the occurrence and development of art. It is known that art has many functions in human life. Some of these functions may include the emergence of creativity, expressing emotions, aesthetic taste and pleasure, spiritual relaxation, respect to cultural heritage. Art education and education by means of art are necessary for developing art, protecting its existence, securing its continuity and ensuring artistic awareness. "As a cultural and social being, human is in need of being nourished from different sources. One of these sources is art. It may be stated that art is necessary for ensuring that people think independently and distinctively, meet their psychological needs and express themselves comfortably and for creating a contemporary and progressive society (Oğuz, 2013). Based on the literature review, it was found out that there are quite different definitions of art. According to Read (1984), art is simply associated with the concepts of "plastic" or "visual" but it also includes the concepts of literature and music. According to Pasin (2004), art is an aesthetical relationship between human and objective facts in nature, and it is to learn how to see. Tolstoy defines art as "evoking in oneself a feeling one has once experienced and expressing that feeling by means of movement, sound, lines, colors and word to transmit the same feeling to others." Art is the whole process of creating which continuously evolves and brings innovation. French art scientist Charles Lalo highlighted the indispensability of art in life by saying that "art is not far from or close to life, it must be within the life" (as cited in Erbay, 2000).

In general, art is a spiritual activity that arises from people's efforts of beautifully and effectively expressing their emotions and ideas about nature by means of such tools like line, color, form, sound, word, and rhythm through adopting a personal style (Aytaç, 1981). Individually, art is a tool for a person's emotions, ideas, dreams, creative endeavors, realizing oneself, exploring one's own secret potential, and is a significant cultural dynamic of a society with a holistic nature in terms of promoting and binding societies (Ministry of National Education, 2007). Boydaş (2007) states that art and culture constitute the system of values that unites the citizens of a nation and the seal of sovereignty. He expresses that opinion, technology, etc. may be imported but emotion and art can never be imported. Art is a multifunctional social phenomenon. Art has to discuss and criticize a work of art and history, to reflect the one which is up-to-date and to design the future (Tezcan, 2011). Factors that ensure the acceptance of art by other individuals and societies include the fact that art satisfies, amuses, and entertains people, which allows them to take lessons from life as a result (Alakuş, et. al. 2009). Today, art is generally referred to the plastic arts or visual arts. Achieving originality and creating pleasing connections are the common traits of all arts including plastic and visual arts. Art is the expression of the aesthetical relationship between human and objective facts in the nature (Artut, 2007). Art education is not only an academic branch but a practice, mentality and behavior which fully covers and updates education and training. As a holistic component of basic education and the basis of spiritual education, art education aims to protect and develop creative and reproductive powers of a person during the development of personality harmoniously and holistically (San, 1979). The purpose of art education is not to train artists but to train an individual by means of art, namely aesthetic training of an individual. Art is an activity that creates the conditions which help individuals to reveal their creative powers and allows them to have a personality (Buyurgan & Buyurgan, 2001). Thanks to art education, a person learns the culture of society they live in. People who respect and protect their cultural values, tradition, art and history shall convey the culture to their next generations. Moral and material values have important effects on the formation of a nation, continuation of its existence and its progression on solid basis. Art education makes children and youth familiar with their culture, teaches and endears it, and allows them to grow into individuals who protect and sustain such values (Buyurgan and Buyurgan, 2007).

Thanks to quality art education, students learn both verbal and non-verbal methods that they can use to express their abstract ideas and emotions. Students also learn to trust in their creative intelligences and find out many different solutions to some problems. This attribute teaches students not to be afraid of deciding when there are multiple correct answers, and instills notions and techniques for the effective control of visual images they produce. Students enhance their perceptual, interpretational, and analytical skills (Boydaş, 2007). Art education aims to allow students to think creatively and express themselves. As part of this aim, art education ensures that students can interact within a society and make cultural exchange. Gazi Mustafa Kemal Atatürk, who attaches great importance to art and art education as a requirement for a country, emphasizes this by stating that "a nation devoid of art has lost part of its lifeblood" and "nations without art and artists are condemned to suffer under the governance of other nations." It is a necessity for every individual to take part in artistic activities and to show

interest in art. Thus, art education within formal education is provided under a specific program. Notion of art has been subject to the endeavors of classifying or grouping in under different titles up until today. As a result, art was divided into various branches. One of these branches is the Plastic Arts.

Plastic arts is the name used for referring to all works of arts including painting, sculpture, drawing, etc. which are created by applying materials (plastic in nature) like paint, clay that can be molded or shaped (İşcanoğlu, 2010). Plastic Arts consist of painting, sculpture and architectural arts. It is the name of arts that are expressed in three dimensions (Turani, 1975). In the art of shaping soft bodies, all the arts in the fields of painting, sculpture, engraving, and the art of sculpture, which are suitable for shaping plastic, hard bodies, are called plastic arts. In short, relief works of art are called plastic arts (Arseven, 1983). Plastic arts education aims to improve an individual's skills and creativity and enhance their aesthetical emotions as a self-confident, productive person. In line with this purpose, it entails to equip an individual with material know-how and provide the necessary education (Ateş, 2006). Some departments of faculty of education include art education in their curriculum as either a compulsory or an elective course. All teachers across different disciplines should receive art education. It is considered that if prospective teachers studying at a faculty of education are interested in plastic arts and adopt positive attitudes towards plastic arts, such interest and attitude shall positively affect their professional performances either directly or indirectly. In addition to its general functions, art is also used as a tool by teachers in training and education from time to time. Considering that teachers provide education to individuals who shall train the society, and may possibly guide them, it is important that prospective teachers who shall be the teachers of future adopt positive attitudes towards art, plastic arts (visual arts). Plastic arts education puts excitement, image and any emotion into practice by equipping the students with material know-how, improving their skills for seeing and shaping and training them. It allows students to improve their imagination, protect, care and love nature and works of art, gain insight for recognizing works of art and express what they learn. By changing the behaviors of a person, one should be given the chance to put what they learn into practice in the best possible manner (Erbay, 2000). This study which aims to determine the factors affecting attitudes of prospective teachers towards plastic arts was carried out along with prospective teachers who study at the faculty of education of a public university in northern Turkey. In the literature, attitudes have been defined in many ways. Attitude may be described as a reaction tendency that is adopted by an individual towards a phenomenon or object in their environment (İnceoğlu, 2000). Attitude is the way of choosing a position between positive and negative towards an entity, an object, a person or an incident (Fidan, 1996). In short, attitude is a tendency to give a reaction (Tezbaşaran, 1997). Adopting a functional perspective, Gardner defines attitude as a reaction of an individual towards a specific object or notion based on their belief and ideas (Gardner, 1985). Attitudes consist of mental, emotional and behavioral elements. It is assumed that there is a correlated consistency between these elements in general. According to this assumption, if the things that an individual knows require them to have a positive perspective mentally and if the individual is positive towards that object emotionally, we refer to it behaviorally (İnceoğlu, 2000). In the literature, there are many studies conducted in relation to attitude (Francis & Greer, 1999; Morrel & Ledeerman, 1998; Weinburg, 1995; Howard, 2003; Gazotti, 2000; House & Prison, 1998; Geban et. al., 1992; Lewin et. al. 1991; Coşkun, 2001; Serin, 2001; Ünlü, 2000; Yalvaç & Sungur, 2000; Selçuk, 1997; Yalçın, 1997; Hotaman, 1995).

Considering the papers related to painting education in the literature, the study, conducted by Sever (2005) to analyze the opinions of six grade students of the elementary school regarding painting course by means of mastery learning model indicated meaningful differences between their opinions based on the students' genders, schools, their parents' education status, levels of income, cognitive, psychomotor and affective skills and learning strategies. In Ökten's (2005) study conducted to investigate the creativity levels of 1st level elementary school students in a painting course and creative activities that may be engaged in with these students, Torrence Test of Creative Thinking was implemented and it was found out the gender differences of students did not lead to significant differences in terms of fluency, flexibility, and originality. The study conducted by Kurtuluş (2002) in relation with the place of painting courses in a weekly class schedule of elementary schools and the effects of these courses on students, ensured to determine the changes in the duration of painting course which is a significant component of art education at elementary school and respective attitudes of the students. In her study named creativity in children's paintings and improving them through painting education, Özcan (2002) emphasized that children's paintings were creative, children's creativity could be improved by means of art education, however a sophisticated method should be adopted to improve creativity of children. In a study conducted by Özden (2003) in relation to the fundamental problems experienced in painting education of the second level elementary school teachers, a meaningful difference was found in all factor groups in terms of painting teachers' opinions related to

the problems of painting course based on the institution and district of the institution they work at, and there was not a significant difference in terms of their opinions related to the problems of the painting course based on their genders, seniorities and cities where their faculty of graduation was located. Ayhan (1992) investigated the effect of painting course on other courses in secondary education and stated that children who painted were physically and mentally active, and their mental and physical status kept being active during other courses, too. In a study related to painting education at primary schools and problems encountered, Arısoy (1994) emphasized that many problems were experienced in painting education. It was highlighted that such problems arose from general education understanding, our methods of training teachers, school principals and inspectors, school structures and curriculums. Genç (2002) conducted a study to determine the problems experienced by elementary school painting teachers in practice and to develop solution suggestions. It was emphasized that there were many problems which constituted obstacles for elementary school painting teachers to achieve the projected objectives and behaviors (problems arising from the curriculum, tool-equipment use and availability, socio-cultural structure of the environment as well as physical problems). In her study which aims to investigate various factors determining the perspectives of secondary school-age students in terms of painting course, Bayram (1993) emphasized that attitudes of subjects towards painting course were adversely affected by the problems arising from general education understanding, curriculum, tight schedule, physical structures of schools, underestimation of painting course, parents who are lack of artistic culture. Burçak (2003) emphasized that problems were experienced during the applied parts of the painting course and the course deviated from its aim due to such reasons as a high number of students, lack of painting studio, lack of tools-equipment. In the study conducted by Coşkun (2001) with the aim of investigating the relationship between the attitudes of high school students with different socio-economic levels towards painting course and their school success, it was found out that income levels of families were not meaningfully connected with the school and that there was a meaningful relationship between the attitude towards painting course and school success.

Plastic arts education aims to train people so that they become individuals who are creative, care for aesthetic values, and improve themselves by seeing and exploring. It is important for a society to have people with sophisticated creativity who appreciate works of art, distinguish, evaluate, and interpret their environment (Şenlitürk, 2013). It was intended to determine the factors affecting the attitudes of prospective teachers towards plastic arts by means of practices of the study.

Problem Status

Taking prospective teachers as the basis, the study aims to determine the factors affecting attitudes of prospective teachers in different departments towards plastic arts. Moreover, in line with the information obtained, the problem status was put forward by looking at whether there is a significant difference between variables arising from the analysis of attitudes of prospective teachers towards plastic arts.

Sub-problems of the Study

1. What are the factors affecting attitudes of prospective teachers towards plastic arts?

Method

Descriptive research method was used in this study to determine the factors affecting the attitudes of prospective teachers, who were in their 3rd and 4th years of study at a faculty of education of a university in Turkey, towards plastic arts. The descriptive research model defines a given situation as completely and carefully as possible (Büyüköztürk, Çakmak, Akgün, Karadeniz, & Demirel, 2010). This section covers the research model, population and sample group of the research, role, and characteristics of the researcher, data collection tools, analysis of collected data and process.

Research Model

Survey model was used for conducting this study. Survey models are applied to a population consisting of a large number of -on the whole population or a group, sample or sample group taken from it- in order to reach a general conclusion on the population (Karasar, 1999). The convenience sampling method allows the researcher to take samples from the world around them (Balcı, 2007). The researcher begins to create their sample group, starting from the most accessible responders until they reach the required group size or works on the most accessible situation or sample that will save time and money (Büyüköztürk et al., 2010).

Population and Sample of the Research

The population of the research consists of 716 prospective teachers in total, who were in their 3rd and 4th years of study at the Faculty of Education of a public university in northern Turkey in the 2017-2018 academic year. All students in their 3rd and 4th years at undergraduate programs at the faculty of education were included in the research. The sample group of the research consisted of 646 prospective teachers in total, including 71 prospective teachers from Elementary School Mathematics Teaching, 107 prospective teachers from Science Teaching, 238 prospective teachers from Psychological Counseling and Guidance undergraduate program, 154 prospective teachers from Primary School Teaching and 76 prospective teachers from Turkish Teaching. Moreover, forms and scales of 8 participating prospective teachers were not included in the sample group due to missing answers. Information on other study groups is given in Table 1.

Table 1. Numbers of Prospective Teachers According to Study Groups

Numbers of Prospective Teachers According to Genders	**Male**	**Female**		
	262	384		
Numbers of Prospective Teachers According to GPAs	**0.00-2.49**	**2.50-2.99**	**3.00 and Above**	
	114	260	272	
Numbers of Prospective Teachers According to Newspaper Reading Frequency	**I read every day**	**I read a few times a week**	**I read a few times a month**	**I never read**
	35	114	230	266
Numbers of Prospective Teachers According to Favorite Art Branches	**Painting** **Theater**	**Photography** **Cinema**	**Music** **None**	**Ballet** **Other**
	60 42	84 110	212 29	**4** **3**
Numbers of Prospective Teachers According to Their Status of Reading Books Related to Art	**I read all the time**	**I sometimes read**	**I rarely read**	**I never read**
	45	194	189	215

Data Collection Tools

The conceptual framework of this study was created through a literature review. The data collection tools used in the survey were Scale of Attitude Towards Plastic Arts (Şenlitürk, 2013) and Personal Information Form.

Scale of Attitude Towards Plastic Arts

Scale of Attitude Towards Plastic Arts (Şenlitürk, 2013) and Personal Information Form were used in the study to determine the attitudes of prospective teachers towards plastic arts. Scale of Attitude Towards Plastic Arts consists of 14 items. The scale is in the form of 5 point likert scale. The items that reveal the attitudes towards plastic arts were scaled as 1- I totally agree, 2- I agree, 3- I'm neutral, 4- I don't agree, 5- I strongly disagree. Some expressions in the attitude scale were asked with a negative question pattern (I don't have any skills for plastic arts. I don't like to visit exhibitions on plastic arts.), and were corrected with reverse coding during analysis of data. Variables for Attitudes Towards Plastic Arts and Variables in the Personal Information Form were used to ensure the validity and reliability of the study. Necessary written approval was obtained from Şenlitürk (2013) to use Scale of Attitude Towards Plastic Arts developed thereby. In order to determine the items of the scale, Şenlitürk (2013) asked 20 prospective teachers who were in their 4th year at a Social Sciences Teaching, Primary School Teaching and Turkish Teaching departments at the Faculty of Education of Burdur Mehmet Akif Ersoy University to write compositions. The attitude scale consisting of 29 items were applied to prospective teachers who were in their 4th year. As a consequence of the pilot application, the questions of the attitude scale were analyzed with the help of expert opinions, and the attitude scale used in the actual study was created. Şenlitürk (2013) conducted principal components factor analysis to reveal the structural validity of the scale. As a result, it was found out that the scale had a 4-factor structure. These factors explain 66% of the total variance. Accordingly, it can be said that

the scale can make considerably correct measurements that are fit for the purpose. After obtaining necessary legal permissions, the attitude scale and personal information form were applied to prospective teachers after talking to the academicians to determine a day and hour. The number of female-male prospective teachers participating in the study according to their undergraduate programs are shown in Table 2.

Table 2. Numbers of Female-Male Prospective Teachers According to Undergraduate Programs

	Primary School Mathematics	**Science**	**PCG**	**Primary School**	**Turkish**
Female	45	64	131	98	46
Male	26	43	107	56	30
Total	71	107	238	154	76

Personal Information Form

The personal information form developed by the researcher constituted the preliminary section of the attitude scale. The questions are related to the prospective teachers' ages, genders, grade point average (GPAs), undergraduate programs they are studying, whether they read newspapers, their favorite art branches, and whether they read books related to art.

Analysis of Data

For the collection of data, the researcher applied the attitude scale and personal information form on prospective teachers, who were in their 3rd and 4th years, of all undergraduate programs at the faculty of education of a public university in northern Turkey. For the analysis of data obtained from the attitude scale and personal information form, answers of prospective teachers were evaluated one by one, and Frequency (f) and percentage (%) values were analyzed by using SPSS package program. The items of attitude scale were scored for evaluation. T-test and one-way analysis of variance (ANOVA) were conducted for comparable independent groups after meeting parametric conditions. For general reliability and sub-dimension reliability, Cronbach Alpha internal consistency reliability coefficient was calculated. The findings were interpreted in the significance level of .05.

T- test: It is used to test whether the difference between two unrelated sampling averages is significant. Assumptions, measurements for dependent variable and scores are in interval or ratio scale, and the average of two comparable groups belongs to the same variable. The distribution of measurements for the dependent variable are normal in both groups. Samples, the average scores of which will be compared, are unrelated (Büyüköztürk, 2017). As the independent variable consists of two dimensions in this research, t-test was used for independent groups.

One-Way Analysis of Variance (ANOVA): It is used to test whether the difference between two or more unrelated sample averages is significantly different from zero (Büyüköztürk, 2017). One-way ANOVA was applied where there are three and more independent variables in this research.

Research Ethics

This research was evaluated at the meeting (no:2/2020) by the Ethics Commitee of Social Sciences and Humanities of Recep Tayyip Erdogan University in 21.02.2020 and found ethically acceptable

Findings

This section covers findings and their interpretations.

Normality Values

Table 3. Normality Values

Variable	$\bar{X}$	Sd	Cronbach Alpha	Skewness Value	Kurtosis Value
Sub-dimension of skill	6.26	1.23	.71	.698	1.50
Sub-dimension of attitude	9.59	1.86	.74	.244	-.038
Sub-dimension of following recent developments	14.58	3.39	.83	-.403	-.048
Sub-dimension of exhibition	12.90	3.75	.75	-.023	.603

Based on Table 3, skewness and kurtosis values of the scale of attitude of prospective teachers towards plastic arts were found as (.698, 1.50) for the sub-dimension of skill, as (.244, -.038) for the sub-dimension of attitude, as (-.403, -048) for the sub-dimension of following recent developments, and as (-.23, .603) for the sub-dimension of the exhibition, respectively. It is expressed that these values analyzed meet the normality assumption. The skewness and kurtosis values between +2 and -2 show that the normality assumption is met (George & Mallery, 2003). Upon analyzing the table, considering that the Cronbach Alpha internal consistency reliability coefficient is above .70, and the reliability level stipulated for measurement tools that may be used in research is .70 (Sipahi, Yurtkoru & Çinko, 2008), it may be stated that internal consistency reliability is appropriate.

Findings on the Dimension of Skill

Frequencies and percentages were taken into consideration while obtaining the findings for this dimension. The findings obtained are shown in Table 4 below.

Table 4. Opinions of Prospective Teachers on the Dimension of Skill

	I totally agree		I agree		I'm neutral		I don' t agree		I strongly disagree	
	f	**%**	**f**	**%**	**f**	**%**	**f**	**%**	**f**	**%**
I have skills for plastic arts.	35	5.4	119	18.4	**186**	**28.7**	173	26.7	133	20.5
I don't have any skills for plastic arts.	88	13.6	123	19	**172**	**26.6**	148	22.9	115	17.8

Based on Table 4, item "I have skills for plastic arts;" was answered as "I totally agree," by 35 of the prospective teachers (5.4%), as "I agree," by 119 (18.4%), as "I'm neutral," by 186 (28.7%) as "I don't agree," by 173 (26.7%) and as "I strongly disagree." 133 (20.5%) prospective teachers. For this item, it can be concluded that the prospective teachers are neutral on the opinion of having skills for plastic arts.

For the item "I don't have any skills for plastic arts," frequency and percentage were found with reverse coding. 115 of the prospective teachers (17.8%) answered "I totally agree," 148 (22.9%) answered "I agree," 172 (26.6%) answered "I'm neutral," 123 (19%) answered "I don't agree," and 88 (13.6%) answered "I strongly disagree." For this item, it can be concluded that the students are neutral on the opinion of not having any skills for plastic arts.

Findings on the Dimension of Attitude

Frequencies and percentages were taken into consideration while obtaining the findings for this dimension. The findings obtained are shown in Table 5 below.

Table 5. Opinions of Prospective Teachers on the Dimension of Attitude

	I totally agree		I agree		I'm neutral		I don' t agree		I strongly disagree	
	f	**%**	**f**	**%**	**f**	**%**	**f**	**%**	**f**	**%**
I think necessary interest is not shown in plastic arts in our country.	146	22.6	231	35.7	201	31.1	44	6.8	24	3.7
Plastic arts should be made widespread in our city.	173	26.7	281	43.4	118	18.2	46	7.1	28	4.3
I'm interested in plastic arts.	56	8.6	195	30.1	158	24.4	141	21.8	96	14.8
I think our country is not interested in plastic arts.	144	22.2	252	39	181	28	51	7.8	18	2.7
I like having an interest in plastic arts.	45	6.9	176	27.2	203	31.4	152	23.5	70	10.8

Based on Table 5, to the item "I think necessary interest is not shown in plastic arts in our country;" 146 of the prospective teachers (22.6%) answered "I totally agree," 231 (35.7%) answered "I agree," 201 (31.1%) answered "I'm neutral," 44 (6.8%) answered "I don't agree," and 24 (3.7%) answered "I strongly disagree." For this item, it can be concluded that the prospective teachers think the necessary interest is not shown in plastic arts in our country.

To the item "Plastic arts should be made widespread in our city;" 173 of the prospective teachers (26.7%) answered "I totally agree," 281 (43.4%) answered "I agree," 118 (18.2%) answered "I'm neutral," 46 (7.1%) answered "I don't agree," and 28 (4.3%) answered "I strongly disagree." For this item, it can be concluded that the prospective teachers agree plastic arts should be made widespread in their city.

To the item "I'm interested in plastic arts;" 56 of the prospective teachers (8.6%) answered "I totally agree," 195 (30.1%) answered "I agree," 158 (24.4%) answered "I'm neutral," 141 (21.8%) answered "I don't agree," and 96 (14.8%) answered "I strongly disagree." For this item, it can be concluded that the prospective teachers are interested in plastic arts.

To the item "I think our country is not interested in plastic arts;" 144 of the prospective teachers (22.2%) answered "I totally agree," 252 (39%) answered "I agree," 181 (28%) answered "I'm neutral," 51 (7.8%) answered "I don't agree," and 18 (2.7%) answered "I strongly disagree." For this item, it can be concluded that the prospective teachers think our country is not interested in plastic arts.

To the item "I like having an interest in plastic arts;" 45 of the prospective teachers (6.9%) answered "I totally agree," 176 (27.2%) answered "I agree," 203 (31.4%) answered "I'm neutral," 152 (23.5%) answered "I don't agree," and 70 (10.8%) answered "I strongly disagree." For this item, it can be concluded that the prospective teachers are neutral on whether they like having an interest in plastic arts.

Findings on the Dimension of Current Developments

Frequencies and percentages were taken into consideration while obtaining the findings for this dimension. The findings obtained are shown in Table 6 below.

Table 6. Opinions of Prospective Teachers on the Dimension of Current Developments

	I totally agree		I agree		I'm neutral		I don' t agree		I strongly disagree	
	f	**%**	**f**	**%**	**f**	**%**	**f**	**%**	**f**	**%**
I like reading articles on plastic arts.	19	2.9	96	14.8	123	19	**264**	**40.8**	144	22.2
I like following news on plastic arts from TV, internet, radio, newspaper and magazines.	31	4.7	147	22.7	135	20.8	**226**	**34.9**	107	16.5
I follow developments on plastic arts.	16	2.4	84	13	156	24.1	**259**	**40**	130	20.1
I follow courses on plastic arts in the city I live.	10	1.5	48	7.4	97	15	**301**	**46.5**	190	29.4

Based on Table 6, to the item "I like reading articles on plastic arts;" 19 of the prospective teachers (2.9%) answered "I totally agree," 96 (14.8%) answered "I agree," 123 (19%) answered "I'm neutral," 264 (40.8%) answered "I don't agree," and 144 (22.2%) answered "I strongly disagree." For this item, it can be concluded that the prospective teachers do not like reading articles on plastic arts.

To the item "I like following news on plastic arts from TV, internet, radio, newspaper and magazines;" 31 of the prospective teachers (4.7%) answered "I totally agree," 147 (22.7%) answered "I agree," 135 (20.8%) answered "I'm neutral," 226 (34.9%) answered "I don't agree," and 107 (16.5%) answered "I strongly disagree." For this item, it can be concluded that the prospective teachers do not like following news on plastic arts from TV, internet, radio, newspapers and magazines.

To the item "I follow developments on plastic arts;" 16 of the prospective teachers (2.4%) answered "I totally agree," 84 (13%) answered "I agree," 156 (24.1%) answered "I'm neutral," 259 (40%) answered "I don't agree," and 130 (20.1%) answered "I strongly disagree." For this item, it can be concluded that the prospective teachers do not follow developments in plastic arts.

To the item "I follow courses on plastic arts in the city I live;" 10 of the prospective teachers (1.5%) answered "I totally agree," 68 (7,4%) answered "I agree," 97 (15%) answered "I'm neutral," 301 (46,5%) answered "I don't agree," and 190 (29.4%) answered "I strongly disagree." For this item, it can be concluded that the prospective teachers do not follow courses on plastic arts in the city they live.

Findings on the Dimension of Exhibition

Frequencies and percentages were taken into consideration while obtaining the findings for this dimension. The findings obtained are shown in Table 7 below.

Table 7. Opinions of Prospective Teachers on the Dimension of Exhibition

	I totally agree		I agree		I'm neutral		I don' t agree		I strongly disagree	
	f	**%**	**f**	**%**	**f**	**%**	**f**	**%**	**f**	**%**
I like visiting exhibitions on plastic arts.	78	12	**223**	**34.5**	143	22.1	123	19	79	12.2
I don't like visiting exhibitions on plastic arts.	105	16.2	**229**	**35.4**	155	23.9	95	14.7	62	9.5
I visit exhibitions on plastic arts.	26	4	139	21.5	154	23.8	**201**	**31.1**	126	19.5

Based on Table 7, to the item "I like visiting exhibitions on plastic arts;" 78 of the prospective teachers (12%) answered "I totally agree," 223 (34.5%) answered "I agree," 143 (22.1%) answered "I'm neutral," 123 (19%) answered "I don't agree," and 79 (12.2%) answered "I strongly disagree." For this item, it can be concluded that the prospective teachers like visiting exhibitions on plastic arts.

For the item "I don't like to visit exhibitions on plastic arts," frequency and percentage were found with reverse coding. 62 of the prospective teachers (9.5%) answered "I totally agree," 95 (14.7%) answered "I agree," 155 (23.9%) answered "I'm neutral," 229 (35,4%) answered "I don't agree," and 105 (16.2%) answered "I strongly disagree." For this item, it can be concluded that the prospective teachers like visiting exhibitions on plastic arts.

To the item "I visit exhibitions on plastic arts;" 26 of the prospective teachers (4%) answered "I totally agree," 139 (21,5%) answered "I agree," 154 (23.8%) answered "I'm neutral," 201 (31,1%) answered "I don't agree," and 126 (19.5%) answered" "I strongly disagree." For this item, it can be concluded that the prospective teachers do not visit exhibitions on plastic arts.

Findings on Genders

Four factors -skill, attitude, current developments, exhibition- were used for obtaining the findings on the attitude of prospective teachers towards plastic arts. T-test was conducted for independent groups in order to determine whether the attitude scores of prospective teachers towards plastic arts vary according to gender. The findings obtained were shown in the tables below.

Comparison of the Dimension of Skill According to Gender

Table 8. Comparison of the Dimension of Skill According to Gender

	Gender	N	$\bar{X}$	ss	sd	t	p
Dimension of skill	**Male**	262	6. 21	1.31	644	-.85	.38
	Female	384	6. 30	1.18			

Based on Table 8, no significant difference was found between the scores for the sub-dimension of skill in the attitude scale of prospective teachers towards plastic arts according to their gender (t_{644}= -.85, p=.380). Accordingly, it can be said that gender had no effect on opinions on skills for plastic arts, and male and female prospective teachers have similar opinions on skills for plastic arts.

Comparison of the Dimension of Attitude According to Gender

Table 9. Comparison of the Dimension of Attitude According to Gender

	Gender	N	$\bar{X}$	ss	sd	t	p
Dimension of attitude	**Male**	262	13.36	3.90	644	2.59	.01*
	Female	384	12.59	3.60			

*$p < .05$

Based on Table 9, a significant difference was found between the scores for the sub-dimension of skill in the attitude scale of prospective teachers towards plastic arts according to their gender (t_{644} = -.2.59, p=.01). Looking at this difference, it is seen that males' average scores for the dimension of attitude ($\bar{X}$= 13.36, Ss= 3.90) is significantly higher than females' average scores for the dimension of attitude ($\bar{X}$= 12.59, Ss= 3.60). Based on this finding, it can be said that the attitude of male prospective teachers towards plastic arts is more positive than female prospective teachers.

Comparison of the Dimension of Current Developments According to Gender

Table 10. Comparison of the Dimension of Current Developments According to Gender

	Gender	N	$\bar{X}$	ss	sd	t	p
Dimension of Current Developments	**Male**	262	14.63	3.27	644	.35	.73
	Female	384	14.54	3.49			

Based on Table 10, no significant difference was found between the scores for the sub-dimension of current developments in the attitude scale of prospective teachers towards plastic arts according to their gender (t_{644}= -.35, p=.73). Accordingly, it can be said that gender had no effect on following current developments on plastic arts, and male and female prospective teachers have similar opinions on following current developments on plastic arts.

Comparison of the Dimension of Exhibition According to Gender

Table 11. Comparison of the Dimension of Exhibition According to Gender

	Gender	N	$\bar{X}$	ss	sd	t	p
Dimension of Exhibition	**Male**	262	9.58	1.91	644	-.08	.93
	Female	384	9.60	1.83			

Based on Table 11, no significant difference was found between the scores for the sub-dimension of the exhibition in the attitude scale of prospective teachers towards plastic arts according to their gender (t_{644}= -.08, p=.93). Accordingly, it can be said that gender had no effect on following exhibitions on plastic arts, and male and female prospective teachers have similar opinions on the following exhibitions on plastic arts.

Findings on GPA

Data were reviewed in four factors -skill, attitude, current developments and exhibition- while obtaining the findings towards plastic arts in the research. One-way ANOVA was conducted to determine whether attitude scores of prospective teachers towards plastic arts indicate a significant difference according to their GPAs. GPAs were analyzed in three different values (0.00-2.49, 2.50-2.99, and 3.00 and above). The findings obtained were shown in the tables below.

Comparison of the Dimension of Skill According to GPA

Table 12. Comparison of the Dimension of Skill According to GPA

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of skill	Between Groups	3.12	2	1.56	1.02	.36
	Within groups	979.67	643	1.53		
	Total	982.79	645			

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way analysis of variance- was met ($F(2,643)=1.75$ $p=.17$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of skill in the attitude scale of prospective teachers towards plastic arts did not indicate a statistically significant difference according to their GPA ($F(2, 643) = 1.02$, $p = .36$). According to these results, it can be said that GPA had no effect on the opinions of prospective teachers on skills for plastic arts.

Comparison of the Dimension of Attitude According to GPA

Table 13. Comparison of the Dimension of Attitude According to GPA

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of attitude	Between Groups	44.05	2	22.03	1.57	.21
	Within groups	9002.41	643	14.00		
	Total	9046.46	645			

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met ($F(2,643)=.65$ $p=.53$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of attitude in the attitude scale of prospective teachers towards plastic arts did not indicate a statistically significant difference according to their GPA ($F(2, 643) = 1.57$, $p = .21$). Accordingly, it can be said that GPA had no effect on the attitudes of prospective teachers towards plastic arts.

Comparison of the Dimension of Current Developments According to GPA

Table 14. Comparison of the Dimension of Current Developments According to GPA

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of Current Developments	Between Groups	25.79	2	12.90	1.12	.33
	Within groups	7401.84	643	11.51		
	Total	7427.63	645			

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met ($F(2,643)=39$ $p=68$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of current developments in the attitude scale of prospective teachers towards plastic arts did not indicate a statistically significant difference according to their GPA ($F(2, 643) = 1.12$, $p = .33$). Accordingly, it can be said that the GPA had no effect on whether prospective teachers follow current developments on plastic arts.

Comparison of the Dimension of Exhibition According to GPA

Table 15. Comparison of the Dimension of Exhibition According to GPA

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of Exhibition	Between Groups	12.08	2	6.04	1.74	.18
	Within groups	2228.03	643	3.47		
	Total	2240.11	645			

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met ($F(2,643)=.43$ $p=.65$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of the exhibition in the attitude scale of prospective teachers towards plastic arts did not indicate a statistically significant difference according to their GPA ($F(2, 643) = 1.74$, $p = .18$). Accordingly, it can be said that GPA had no effect on whether prospective teachers follow exhibitions on plastic arts.

Findings on Undergraduate Programs

Data were reviewed in four factors -skill, attitude, current developments, and exhibition- while obtaining the findings towards plastic arts in the research. The research was carried out with five undergraduate programs including Turkish Teaching, Science Teaching, Primary School Teaching, Mathematics Teaching and Psychological Counseling and Guidance. One-way analysis of variance was conducted to determine whether attitude scores of prospective teachers towards plastic arts indicated a significant difference according to the undergraduate programs they study. The findings obtained were shown in the tables below.

Comparison of the Dimension of Skill According to Undergraduate Programs

Table 16. Comparison of the Dimension of Skill According to Undergraduate Programs

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of skill	Between Groups	11.89	4	2.97	1.96	.10
	Within groups	970.90	641	1.52		
	Total	982.79	645			

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met ($F(4,641)=2.67$ $p=.06$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of skill in the attitude scale of prospective teachers towards plastic arts did not indicate a statistically significant difference according to the undergraduate programs they study ($F(4,641) = 1.96$, $p = .10$). According to these findings, it can be said that license programs had no effect on opinions of prospective teachers on skills for plastic arts.

Comparison of the Dimension of Attitude According to Undergraduate Programs

Table 17. Comparison of the Dimension of Attitude According to Undergraduate Programs

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of attitude	Between Groups	99.08	4	24.77	1.78	.13
	Within groups	8947.38	641	13.96		
	Total	9046.66	645			

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met ($F(4,641)=.38$ $p=.82$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of attitude in the attitude scale of prospective

teachers towards plastic arts did not indicate a statistically significant difference according to the undergraduate programs they study($F(4,641) = 1.78$, $p = .13$). According to these findings, it can be said that license programs had no effect on the attitudes of prospective teachers towards plastic arts.

Comparison of the Dimension of Current Developments According to Undergraduate Programs

Table 18. Comparison of the Dimension of Current Developments According to Undergraduate Programs

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of Current Developments	Between Groups	53.80	4	13.45	1.17	.32
	Within groups	7373.83	641	11.50		
	Total	7427.63	645			

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met ($F(4,641)=.47$ $p=.76$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of current developments in the attitude scale of prospective teachers towards plastic arts did not indicate a statistically significant difference according to the undergraduate programs they study ($F(4,641) = 1.17$, $p = .32$). According to these findings, it can be said that license programs had no effect on whether prospective teachers follow current developments on plastic arts.

Comparison of the Dimension of Exhibition According to Undergraduate Programs

Table 19. Comparison of the Dimension of Exhibition According to Undergraduate Programs

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of Exhibition	Between Groups	.87	4	.22	.06	.99
	Within groups	2239.24	641	3.49		
	Total	2240.11	645			

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met ($F(4,641)=1.59$ $p=.18$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of exhibition in the attitude scale of prospective teachers towards plastic arts did not indicate a statistically significant difference according to the undergraduate programs they study ($F(4,641) =.06$, $p = .99$). According to these findings, it can be said that license programs had no effect on whether prospective teachers follow exhibitions on plastic arts.

Findings on Newspaper Reading Frequency

Data were reviewed in four factors -skill, attitude, current developments and exhibition- while obtaining the findings towards plastic arts in the research. Data on newspaper reading frequency were obtained with four options including “I read every day,” “I read a few times a week,” “I read a few times a month” and “I never read.” One-way analysis of variance was conducted to determine whether the sub-dimensions of skill, attitude, exhibition and current developments in the attitudes of prospective teachers towards plastic arts indicate a significant difference according to their newspaper reading frequency. The findings obtained were shown in the tables below.

Comparison of the Dimension of Skill According to Newspaper Reading Frequency

Table 20. Comparison of the Dimension of Skill According to Newspaper Reading Frequency

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of skill	Between Groups	12.19	3	4.06	2.69	.04*
	Within groups	970.60	642	1.51		
	Total	982.79	645			

**p< .05*

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met (F(3,642)=1.50 p=.480). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of skill in the attitude scale of prospective teachers towards plastic arts indicated a statistically significant difference according to their newspaper reading frequency (F(3,642) = 2.69, p = .04). According to the results of Scheffe test conducted to determine the range of the levels of difference between them, no difference was identified. This may have resulted from the fact that Scheffe test is more conservative. Accordingly, it can be said that the newspaper reading frequency had no effect on the sub-dimension of skill in the attitude scale of prospective teachers towards plastic arts.

Comparison of the Dimension of Attitude According to Newspaper Reading Frequency

Table 21. Comparison of the Dimension of Attitude According to Newspaper Reading Frequency

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of attitude	Between Groups	61.25	3	20.41	1.46	.23
	Within groups	8985.21	642	14.00		
	Total	9046.46	645			

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met (*F*(3,642)=.58 *p*=.71). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of attitude in the attitude scale of prospective teachers towards plastic arts did not indicate a statistically significant difference according to their newspaper reading frequency (*F*(3, 642) = 1.46, *p* = .23). Accordingly, it can be said that the newspaper reading frequency had no effect on the dimension of attitude in the attitude scale of prospective teachers towards plastic arts.

Comparison of the Dimension of Current Developments According to Newspaper Reading Frequency

Table 22. Comparison of the Dimension of Current Developments According to Newspaper Reading Frequency

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of Current Developments	Between Groups	109.94	3	36.65	3.22	.02*
	Within groups	7317.70	642	11.40		
	Total	7427.63	645			

**p< .05*

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met (*F*(3,642)=.66 *p*=.58). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for following current developments in the attitude scale of prospective teachers towards plastic arts indicated a statistically significant difference according to their

newspaper reading frequency ($F(3, 642) = 3.22$, $p = .02$). According to the results of Scheffe test conducted to determine the range of the levels of difference between them, no difference was identified. This may have resulted from the fact that Scheffe test is more conservative. Accordingly, it can be said that the newspaper reading frequency had no effect on the prospective teachers' attitude of following current developments on plastic arts.

Comparison of the Dimension of Exhibition According to Newspaper Reading Frequency

Table 23. Comparison of the Dimension of Exhibition According to Newspaper Reading Frequency

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of Exhibition	Between Groups	61.09	3	20.36	6.00	.000*
	Within groups	2179.02	642	3.39		
	Total	2240.11	645			

*$p < .05$

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met ($F(3,642)=1.110$ $p=.41$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of the exhibition in the attitude scale of prospective teachers towards plastic arts indicated a statistically significant difference according to their newspaper reading frequency ($F(3,642) = 6.00$, $p = .000$). According to the results of the Scheffe test conducted to determine the range of the levels of difference between them, scores for the sub-dimension of the exhibition of prospective teachers, who chose the option of "I never read," towards plastic arts were found to be significantly higher than the attitude scores of prospective teachers who chose the option of "I read a few times a month" (Md = .64, SD =.17). Accordingly, it can be said that the newspaper reading frequency had no effect on the prospective teachers' attitude of following exhibitions on plastic arts.

Findings on Favorite Art Branch

Data were reviewed in four factors -skill, attitude, current developments, and exhibition- while obtaining the findings towards plastic arts in the research. Data on the favorite art branch were obtained with ten options including sculpture, painting, photography, music, ballet, literature, theater, cinema, none and other. One-way analysis of variance was conducted to determine whether the sub-dimensions of skill, attitude, exhibition, and current developments in the attitudes of prospective teachers towards plastic arts indicate a significant difference according to their favorite art branch. The findings obtained were shown in the tables below.

Comparison of the Dimension of Skill According to Favorite Art Branch

Table 24. Comparison of the Dimension of Skill According to Favorite Art Branch

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of skill	Between Groups	7.93	6	1.32	.87	.52
	Within groups	974.86	639	1.57		
	Total	982.79	645			

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met ($F(6,639)=1.01$ $p=.420$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of skill in the attitude scale of prospective teachers towards plastic arts did not indicate a statistically significant difference according to their favorite art branch ($F(6, 639) = .87$, $p = .52$). According to these results, it can be said that favorite art branches had no effect on the opinions of prospective teachers on skills for plastic arts.

Comparison of the Dimension of Attitude According to Favorite Art Branch

Table 25. Comparison of the Dimension of Attitude According to Favorite Art Branch

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of attitude	Between Groups	312.96	6	52.16	3.82	.00*
	Within groups	8733.50	639	13.67		
	Total	9046.46	645			

**p< .05*

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met (F(6,639)=.58 p=.74). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of attitude in the attitude scale of prospective teachers towards plastic arts indicated a statistically significant difference according to their favorite art branch (F(6,639) = 3.82, p = .00). According to the results of the Scheffe test conducted to determine the range of the levels of difference between them, scores for the sub-dimension of the attitude of prospective teachers, who chose the art branch of cinema, towards plastic arts were found to be significantly higher than the attitude scores of prospective teachers who chose the art branch of painting (Md = 2.56, SD =.59). According to the results of another Scheffe test conducted scores for the sub-dimension of attitude of prospective teachers, who chose the favorite art branch of music, towards plastic arts were found to be significantly higher than the attitude scores of prospective teachers who chose the art branch of painting (Md = 2.08, SD =.54). Accordingly, it can be said that the newspaper reading frequency affected the sub-dimension of attitude in the attitude scale of prospective teachers towards plastic arts.

Comparison of the Dimension of Current Developments According to Favorite Art Branch

Table 26. Comparison of the Dimension of Current Developments According to Favorite Art Branch

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of Current Developments	Between Groups	349.24	6	58.21	5.26	.00*
	Within groups	7078.39	639	11.08		
	Total	7427.63	645			

**p< .05*

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met (F(6, 639)=.50 p=.85). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for following current developments in the attitude scale of prospective teachers towards plastic arts indicated a statistically significant difference according to their favorite art branch (F(6,639) = 5.26, p = .00). According to the results of the Scheffe test conducted to determine the range of the levels of difference between them, scores for the sub-dimension of following current developments of prospective teachers, who chose the art branch of cinema, towards plastic arts were found to be significantly higher than the attitude scores of prospective teachers who chose the art branch of painting (Md = 2.22, SD =.54). According to the results of another Scheffe test conducted, scores for the sub-dimension of following current developments of prospective teachers, who chose the favorite art branch of cinema, towards plastic arts were found to be significantly higher than the attitude scores of prospective teachers who chose the art branch of photography (Md = 1.75, SD =.48). In the analyses conducted, scores for the sub-dimension of following current developments of prospective teachers, who did not choose any art branches, towards plastic arts were found to be significantly higher than the scores of prospective teachers who chose the art branch of painting (Md = 2.94, SD =.73). Moreover, scores for the sub-dimension of following current developments of prospective teachers, who did not choose any art branches, towards plastic arts were found to be significantly higher than the attitude scores of

prospective teachers who chose the art branch of photography (Md = 2.47, SD =.69). Accordingly, it can be said that the newspaper reading frequency had no effect on the sub-dimension of following current developments in the attitude scale of prospective teachers towards plastic arts.

Comparison of the Dimension of Exhibition According to Favorite Art Branch

Table 27. Comparison of the Dimension of Exhibition According to Favorite Art Branch

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of Exhibition	Between Groups	37.55	6	6.26	1.82	.09
	Within groups	2202.56	639	3.45		
	Total	2240.11	645			

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met ($F(6,639)=1.104$ $p=.36$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of the exhibition in the attitude scale of prospective teachers towards plastic arts did not indicate a statistically significant difference according to their favorite art branch ($F(6, 639) = 1.82$, $p = .09$). Accordingly, it can be said that the favorite art branch before the university had no effect on the sub-dimension of exhibitions in the attitude scale of prospective teachers towards plastic arts.

Findings on Whether They Read Books Related to Art

Data were reviewed in four factors -skill, attitude, current developments and exhibition- while obtaining the findings towards plastic arts in the research. Data on whether they read books related to arts were obtained with four options including “I read all the time,” “I sometimes read,” “I rarely read” and “I never read.” One-way analysis of variance was conducted to determine whether the sub-dimensions of skill, attitude, exhibition and current developments in the attitudes of prospective teachers towards plastic arts indicate a significant difference according to whether they read books related to art. The findings obtained were shown in the tables below.

Comparison of the Dimension of Skill According to Whether They Read Books Related to Art

Table 28. Comparison of the Dimension of Skill According to Whether They Read Books Related to Art

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of skill	Between Groups	13.91	5	2.78	1.84	.10
	Within groups	968.87	640	1.51		
	Total	982.79	645			

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met ($F(3,642)=2.16$ $p=.093$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of skill in the attitude scale of prospective teachers towards plastic arts did not indicate a statistically significant difference according to whether they read books related to arts ($F(5, 645) = 1.84$, $p = .10$). According to these results, it can be said that whether they read books related to arts had no effect on the sub-dimension of skill in the attitude scale of prospective teachers towards plastic arts.

Comparison of the Dimension of Attitude According to Whether They Read Books Related to Art

Table 29. Comparison of the Dimension of Attitude According to Whether They Read Books Related to Art

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of attitude	Between Groups	277.99	3	92.66	6.78	.00*
	Within groups	8768.48	642	13.66		
	Total	9046.46	645			

*$p < .05$

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met ($F(3,642)=.85$ $p=.47$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of attitude in the attitude scale of prospective teachers towards plastic arts indicated a statistically significant difference according to whether they read books ($F(3, 642) = 6.78$, $p = .00$). According to the results of the Scheffe test conducted to determine the range of the levels of difference between them, attitude scores of prospective teachers, who do not read any books related to arts, towards plastic arts were found to be significantly higher than the attitude scores of prospective teachers who regularly read books ($M_d = 1.78$, $SD = .60$). According to the results of the Scheffe test again, attitude scores of prospective teachers, who do not read any books related to arts, were found to be significantly higher than the attitude scores of prospective teachers who sometimes read books ($M_d = 1.50$, $SD = .37$). After the analyses conducted, no differences were found between other fields. Accordingly, it can be said that the whether they read books related to arts had no effect on the scores for the sub-dimension of attitude in the attitude scale of prospective teachers towards plastic arts.

Comparison of the Dimension of Current Developments According to Whether They Read Books Related to Art

Table 30. Comparison of the Dimension of Current Developments According to Whether They Read Books Related to Art

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of Current Developments	Between Groups	722.50	3	240.83	23.06	.00*
	Within groups	6705.132	642	10.44		
	Total	7427.63	645			

*$p < .05$

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met ($F(3,642)=.39$ $p=.40$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for following current developments in the attitude scale of prospective teachers towards plastic arts indicated a statistically significant difference according to whether they read books ($F(3, 642) = 20.06$, $p = .00$). According to the results of the Scheffe test conducted to determine the range of the levels of difference between them, scores for following current developments of prospective teachers who do not read any books related to arts, were found to be significantly higher than the scores of those who regularly read books ($M_d = 2.62$, $SD = .53$). According to the results of the Scheffe test again, scores for following current developments of prospective teachers, who do not read any books related to arts, were found to be significantly higher than the scores for following current developments of prospective teachers who sometimes read books ($M_d = 2.40$, $SD = .32$). According to the results of Scheffe test again, scores for following current developments of prospective teachers, who do not read any books related to arts, were found to be significantly higher than the scores for following current developments of prospective teachers who rarely read books ($M_d = 1.84$, $SD = .32$). Accordingly, it can be said that whether they read books related to arts had no effect on the scores

for the sub-dimension of following current developments in the attitude scale of prospective teachers towards plastic arts.

Comparison of the Dimension of Exhibition According to Whether They Read Books Related to Art

Table 31. Comparison of the Dimension of Exhibition According to Whether They Read Books Related to Art

	Source of variance	Sum of squares	sd	Mean Squares	*F*	*p*
Dimension of Exhibition	Between Groups	44.81	3	14.94	4.37	.00*
	Within groups	2195.03	642	3.42		
	Total	2240.11	645			

*$p < .05$

Based on Levene's test, it was found out that assumption of homogeneity of variance -an assumption of one-way ANOVA- was met ($F(3,642)=1.74$ $p=.16$). As a result of analyses carried out after meeting the assumption of homogeneity of variance, it was found that scores for the dimension of the exhibition in the attitude scale of prospective teachers towards plastic arts indicated a statistically significant difference according to whether they read books ($F(3, 642) = 4.037$, $p = .00$). According to the results of the Scheffe test conducted to determine the range of the levels of difference between them, scores for the dimension of the exhibition of prospective teachers, who do not read any books related to arts, were found to be significantly higher than the scores of prospective teachers who sometimes read books ($M_d = .54$, $SD = .18$). Accordingly, it can be said that whether they read books related to arts had no effect on the scores for the sub-dimension of the exhibition in the attitude scale of prospective teachers towards plastic arts.

Conclusion and Suggestions

This section of the study covers research results and suggestions offered accordingly.

Conclusion

The factors affecting attitudes of prospective teachers, who were studying at the faculty of education of a state university in northern Turkey, towards plastic arts were determined in the research. The population of the research consists of prospective teachers who were in their 3rd and 4th years at the Faculty of Education of a state university in the north of Turkey in 2017-2018 academic year. Personal information form and attitude scale were applied to prospective teachers. The questions in the attitude scale were analyzed in the dimensions of skill, attitude, current developments, and exhibition. In the attitude scale, two questions were asked regarding the level of prospective teachers' attitudes towards skills for plastic arts. The prospective teachers indicated moderately that they have skills for plastic arts. In the attitude scale, five questions were asked regarding the level of prospective teachers' attitudes towards plastic arts. It can be concluded that the prospective teachers generally agree to the opinions that the necessary interest is not shown in plastic arts in our country, plastic arts should be made widespread in their city, they are interested in plastic arts, and our country is not interested in plastic arts. Moreover, it was concluded that prospective teachers generally agree moderately to the opinion that they like having an interest in plastic arts.

Öztürk's (2012) research titled "Review of Attitudes and Opinions of Special Education Teachers towards Visual Arts Course" aims to review and determine the attitudes and opinions of special education teachers towards the course of visual arts. The population of the research, which was conducted in accordance with the survey model, consists of all teachers working at public and private elementary schools, special education institutions, special education centers and rehabilitation centers in the provincial center and districts under Trabzon Provincial Directorate of National Education. "Semi-structured interview form," personal information form covering demographic characteristics of teachers and "questionnaire" with the scale of attitude towards the course of Visual Arts were used in this research, the sample group of which consisted of 170 special education teachers. SPSS Programme was used for quantitative analyses. As a result of analyses carried out, it was concluded that the special education teachers have positive attitudes towards the course of Visual Arts. However, some differences were found out according to variables and sub-dimensions of attitude which are effective on the attitudes of teachers towards this course. Hızal's (2017) research titled "Review of Attitudes of Pre-school Teachers towards Visual

Arts and Art Activity" covers the review of attitudes of pre-school teachers towards visual arts and art activity. The survey method, one of the descriptive research methods based on qualitative approach, was used as the pattern of the research. The study group of the research consists of 171 pre-school teachers working in schools under the Ministry of National Education in Trabzon and its districts in the 2014-2015 academic year. Attitude Scale of Pre-school Teachers Towards Arts and Art Activity developed for data collection was used in the research. SPSS program for interpretation of data, descriptive statistical processes for data analysis, exploratory factor analysis in psychometric processes of the scale, and comparative statistical techniques were used. In consequence of the research, the ones with the highest attitude values towards arts and art activity turned out to be the pre-school teachers working in pre-school classes. Considering their programs of graduation, it was seen that teachers that graduated from the child development department had the highest attitude values, while teachers that graduated from pre-school education department had the lowest attitude values. It was seen that the attitude of teachers that graduated from child development department towards art activity was significantly high. The score of teachers that studied visual arts to conduct art activities was found to be higher than those who did not. No significant difference could be found between teaching experience and attitude towards art activities. It was found that the number of female teachers is much higher than male teachers. In the analysis conducted, no significant difference was found between the attitude of female and male teachers towards art activities.

In the attitude scale, four questions were asked regarding the level of prospective teachers' attitudes towards following current developments on plastic arts. It was concluded that prospective teachers generally do not agree to the opinions that "I like reading articles on plastic arts," "I like following news on plastic arts from TV, internet, radio, newspapers and magazines," "I follow developments on plastic arts," and "I follow courses on plastic arts in the city I live." In the attitude scale, three questions were asked regarding the level of prospective teachers' attitudes towards visiting exhibitions on plastic arts. It was concluded that prospective teachers generally agree to the opinion that "I like visiting exhibitions on plastic arts," while they generally they do not agree to the opinion that "I don't like visiting exhibitions on plastic arts" and "I visit exhibitions on plastic arts."

In the research titled "Review of Attitudes of Prospective Teachers towards Plastic Arts" conducted by Şenlitürk (2013), prospective teachers stated that they participated in exhibitions on plastic arts. Moreover, it was revealed that the students are not interested in plastic arts and do not follow current developments. According to genders, it was concluded that female prospective teachers visit exhibits more; and that elementary school mathematics teaching, pre-school education and science teaching departments had opinions on skills for plastic arts and followed exhibitions.

In the current research, no significant difference was found between the genders of prospective teachers and their attitude towards plastic arts in the dimensions of skill, current developments and exhibition, while there is a significant correlation in the dimension of attitude. It was concluded that the attitude of male prospective teachers towards plastic arts was higher than female prospective teachers. Çatıkkaş's (2014) research titled "Review of Prospective Teachers' Self-Efficacy in Art Education" aims to determine the self-efficacy perceptions of prospective teachers towards art education. A valid and reliable measurement tool was developed for this purpose. The research model of field screening, one of the descriptive research methods, was used in the research. The sample group of the research consists of 137 prospective teachers studying in a painting education department. The researcher developed the "Self-Efficacy Scale for Art Education" as a measurement tool to determine the efficacy perceptions of prospective teachers towards art education. In consequence of the research, it was revealed that there was no significant difference in the self-efficacy scores of prospective teachers according to gender, while there was a significant difference according to the high schools they graduated from and universities they were studying at.

We found no significant difference between the GPA of prospective teachers and their attitudes towards plastic arts in the dimensions of skill, current developments, and exhibition. Based on the analysis of data, it was concluded that the GPA had no effect on the determination of attitudes of prospective teachers towards plastic arts. No significant difference was found between the undergraduate programs of prospective teachers and their attitude towards plastic arts in the dimensions of skill, current developments and exhibition. Based on the analysis of data, it was concluded that the undergraduate programs had no effect on the determination of attitudes of prospective teachers towards plastic arts. In Gökhan's (2007) research titled "Plastic Arts Education in Elementary Schools in Turkey and Related Suggestions," it was concluded that the scope of the curriculum should be extended in terms of arts education by increasing course hours; and additionally, a course that takes its purpose only from art should

definitely be included in the education-training process, especially in pre-schools and elementary schools, with an understanding of education through art.

Our results indicated no significant difference between the newspaper reading frequency of prospective teachers and their attitude towards plastic arts in the dimensions of skill, attitude and current developments, while there is a significant correlation in the dimension of exhibition. Surprisingly, it was concluded that scores for the sub-dimension of the exhibition of prospective teachers, who chose the option of "I never read," towards plastic arts were significantly higher than the attitude scores of prospective teachers who chose the option of "I read a few times a month," and those who never read follow exhibitions on plastic arts. No significant difference was found between the favorite art branches of prospective teachers and their attitude towards plastic arts in the dimensions of skill and exhibition, while there is a significant correlation in the dimensions of attitude and current developments. Scores for the sub-dimension of the attitude of prospective teachers, who chose the favorite art branches of cinema and music, towards plastic arts were found to be significantly higher than the attitude scores of prospective teachers who chose the art branch of painting. Therefore, it was concluded that the newspaper reading frequency affected the sub-dimension of attitude in the attitude scale of prospective teachers towards plastic arts. Scores for the sub-dimension of following current developments of prospective teachers, who chose the art branch of cinema, towards plastic arts were found to be significantly higher than the attitude scores of prospective teachers who chose the art branches of painting and photography. Surprisingly, it was concluded that scores for the sub-dimension of following current developments of prospective teachers, who did not choose any art branches, towards plastic arts were significantly higher than the scores of prospective teachers who chose the art branches of painting and photography. In Cam's (2015) research titled "Evaluation of Secondary School Students' Opinions on Art Education and Necessity of Art (Example of Antalya Province)," it was concluded that students attach importance to the issues regarding art education and necessity of art, such as the fact that art supports creativity, develops imagination exercises the body in a more coordinated manner, and that art education should be given by the experts of the course.

The results showed no significant difference between whether prospective teachers read books related to art and their attitude towards plastic arts in the dimensions of skill, while there is a significant correlation in the dimensions of attitude, current developments and exhibition. Scores for attitude towards plastic arts of prospective teachers, who do not read any books related to arts were found to be significantly higher than the attitude scores of prospective teachers who regularly and sometimes read books. Scores for following current developments of prospective teachers, who do not read any books related to arts, were found to be significantly higher than the scores for following current developments of prospective teachers who regularly or sometimes read books or do not read any books. Scores for the exhibition dimension of prospective teachers, who do not read any books related to arts, were found to be significantly higher than the scores of prospective teachers who sometimes read books. It was concluded that scores for the attitude, current developments and exhibition dimensions of those who do not read any books related to arts were surprisingly high.

Related research in literature found out significant differences in the correlation between attitude towards the course and success in terms of gender variable in their studies (Francis & Greer,1999, Selçuk, 1997; Üstüner & Sancar, 1999; Weinburgh, 1995). Several researchers, however, found out that it did not vary significantly (Morrell & Ledeerman, 1998; Orhun,1999; Serin, 2001; Saracaloğlu & Kaşlı, 2001; Yalvaç & Sungur, 2000; Yetim 2002). Significant correlations between attitude and academic success have also been found Aksakary, 1981;Boran & Oruç, 1994; Coşkun, 2001; Çapar, 2001; Geban et al.,1992; Hotaman, 1995; House & Prison, 1998; Lewin et al., 1991; Selçuk, 1997; Serin, 2001; Tepe, 1999; Ünlü, 2000; Üstüner & Sancar, 1999; Uzuntiryaki, 1998; Yalçın, 1997; Yalvaç & Sungur, 2000).

Suggestions

Taking quantitative results into consideration, the following suggestions were developed for this research, in which the attitude levels of prospective teachers towards plastic arts were reviewed in terms of variables.

- In order to increase the interest of prospective teachers towards plastic arts, works of plastic arts can be placed in the educational environment they study, and they can be directed to plastic arts through advertisement posters and designs to attract their attention to participating in activities at the university. Restricted elective courses on plastic arts may be added to the curriculum of all departments of faculty of education at universities, or

training classes on plastic arts can be opened. Prospective teachers can be encouraged to visit exhibitions on plastic arts. Moreover, conferences or seminars in this field can be organized at universities.

- In order to increase the interest towards plastic arts in our country and our cities, more projects on plastic arts can be organized, and training classes on plastic arts can be given by experts. Public and local administrations can support projects featuring works of plastic art in the landscape design of environmental and public buildings. Public and local administrations can support events of plastic arts, and open plastic art galleries for organizing such events.
- In order to ensure prospective teachers to follow current developments and events on plastic arts, universities can announce them with posters and handouts, or by issuing newspapers or magazines.
- Elective courses on plastic arts can be included in the curriculum of secondary schools where prospective teachers study before university, and they can be encouraged to take these courses. Moreover, workshops can be established for prospective teachers to perform applications.

In addition to the suggestions developed by the researcher considering quantitative findings, the following suggestions beneficial for the researchers are offered:

- Different research methods can be used to determine factors affecting the attitudes of prospective teachers towards plastic arts. Their opinions can be determined through interviews.
- A more detailed research covering all departments and the year of studies of this state university in northeastern Turkey can be conducted on this issue.
- Research can be conducted in different universities by using a wider population and setting a larger sample group.

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