



The scale for the perception of artistic sides of the teaching profession: A scale development study

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Abstract

This study aims to develop a measurement tool that can reveal the perceptions of teachers about the artistic sides of their profession. In the study, data were collected from two different groups for exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to determine the construct validity of the scale. There are 442 people in the first study group, consisting of preschool, primary, secondary and high school teachers, and 511 people in the second study group. As a result of EFA, it was determined that the scale had a structure with three factors and 31 items. The variance rate explained by these factors is 67.9%. This construct was validated by CFA. Goodness of fit indices calculated by CFA are as follows: $\chi^2/sd= 3.887$; CFI=.912; TLI=.903, RMSEA=.068; SRMR=0.072. The Cronbach's Alpha internal consistency coefficient of the scale is .96. As a result, a valid and reliable data collection tool has been developed that can give an idea about how teachers perceive the artistic sides of their profession.

Keywords: First keyword; second keyword; third keyword; fourth keyword; fourth keyword

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1. Introduction

Society is the unity of relations that accepts a common culture (culture), spreads in a geographical area and has gained the process of self-continuity (Sağ, 2003). It consists of people who have come together for common purposes in a natural environment with

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certain boundaries, are bound by mutually established rules, and are in cooperation and solidarity (Aslan, 2001). Every society needs moral, conscientious citizens who do not ignore people and their labor who know how to think, are able to reach the right information quickly, learn how to learn, protect the human condition, respect human rights and freedoms, are loyal to its culture and values and have self-confident in order to keep up with the age, to reach the level of contemporary civilization and to continue its existence for a long time. At the same time, no society can survive if it cannot convey its language, aesthetic taste, scientific logic and technical data to its members (Gökalp, 1992). For all these, societies have to develop their individuals and enable individuals to realize themselves, and this development and socialization work is only possible through the education process. Because education is a social formation that includes a selected and experienced environment in order to achieve the most appropriate level of personal development of individuals' social skills (Tezcan, 1981) and it is also one of the basic social institutions created by the society for the regular maintenance of social life according to the rules (Aslan, 2001).. Education; the basic step of technological and economic progress is seen as the driving force of a new social order based on the principles of independence, justice and equality (Eskicumalı, 2003). The most general and important purpose of education in terms of society is to teach them how and under what conditions they will act so that their future generations can continue their lives in a more prosperous and happier way than themselves (Koçer, 1980). Education shapes the spirit and character and brings values to the individual and the nation. It is clear that education plays a critical role in terms of individuals and society. It can be said that teachers, who are indispensable in every aspect of education, come to mind at the point where the phenomenon of complex, multidimensional and life-long education is mentioned.

Teaching profession is a theoretical and practical profession based on science and art, and should not be perceived as statistical success by transferring knowledge to students only through methods and techniques. Although the appearance of teaching profession, which has a long history, is not based on scientific facts, it has always existed on the basis of raising people and directing the society with exemplary attitudes and behaviors, love and compassion.

Many studies have been conducted in the literature on whether teaching is a science or an art. (Eisner,1983; Dawe 1984; Rubin 1985; Ornstein, 1985, Mennitt 2019; Lindley, 1970; Pestel,1990 Hestenes:1979, Gage, 1984; Büyükdüvenci, 1986, Frymier, 1991), Although emphasizing the scientific aspect of teaching has become more popular until today, the artistic side of the profession has never been overlooked. While teaching leads the way with scientific knowledge and professional practices in the process of protecting the social and psychological health of the society, development, change and progress of the society, the inclusion of the artistic and aesthetic dimension, that is, emotions, sensations and intuitions, increases the attractiveness and power of teaching.

It can be said that the artistic and aesthetic dimension of teaching emphasizes the hidden features that take the profession out of the framework of being perceived as a profession only. If the aspect of the teaching profession that explains concrete facts is science, the aspect that expresses values is art. The artistic side of teaching is related to the practice of the profession. Because, as viewed from the scientific side, teachers are not and should not also be people who only convey information, have routine jobs, take part in working hours by receiving their salaries, and go on with their lives. The teaching profession is not a profession with prescription solutions. It is a unique unduplicated human being who is only one in the world to whom the teacher serves (Can and Yıldırım 2019). The teacher thinks, feels, serves an example, and influences people's souls, by touching their lives. If teaching is shaped with a holistic perspective, individual and creative thinking and reaches an aesthetic dimension, the lives touched by teachers can become beautiful and positive with a satisfying interaction. Such lives can also form a welfare society by taking part in every field. The world which is becoming global and digital day by day, the way to get rid of evil is to seek and know the beautiful. From this point of view, the phenomenon of aesthetics has an important place in our lives. Although aesthetics is a branch of philosophy that deals with many features such as beautiful, pleasant, delicate, emotional, elegant, ostentatious, ugly and sublime, it mostly deals with beauty and the effects of beauty on the human mind and senses. Aesthetics is the knowledge we acquire through our perceptions and senses. Aesthetics is an effort to seek beauty, beauty means peace, it means love. In every aspect of their life, for example, when decorating a dinner plate or coloring a colorless wall, people are always in search of beauty. Art is the expression of the events and beauties that people see, hear, feel and imagine in a way that arouses an aesthetic excitement in people (Çam, 1994). While performing the artistic side of their profession, teachers should consider people with all their dimensions, respect human values, be respectful, loving and tolerant, create an emotional impact, and always use their creativity and imagination to achieve the best in every subject. The art of teaching is the concrete presentation of acquired knowledge and experience with attitudes and behaviors by connecting them with feelings and values.

In today's world, where efforts to develop and become a leader are intensified, countries need people who see problems and find solutions to them (Ünver, 2016). A high civilization is possible with well-educated people in all respects. For the construction of a high civilization, educational purposes must also include aesthetic values. Enriching people's academic development with aesthetic perspectives, that is, catching aesthetics in words and speech, in writing, in drawing, in glance, in posture, in behavior, in clothing, and in environmentalism is among the responsibilities of teachers, because teachers play the biggest role in realizing educational goals. Creating aesthetic awareness and perception and achieving aesthetic gain is possible with aesthetic education, which is the basis of art education. At this point, teachers' aesthetic perception and sensitivity should be strengthened, that is, they should be aestheticized. Aestheticization of teachers can be

possible with the education of art, which is the subject of beauty. What is meant by art education is to raise people who are looking for beauty, who have beauty concerns and aesthetic sensitivity. What is expected from gaining aesthetic awareness is to raise individuals who know their words, speak well, write well, and have tact (Özbal and Aydoğan, 2017). It requires teachers to get educated about emotional skills as well as cognitive processes to express themselves, to connect historical, cultural and literary perspectives, to discover cultural and intercultural common points, to look at artistic products from a multi-dimensional perspective (Karabulut, 2008). For teachers, the education of such skills can be carried out more efficiently with art education, and teachers can reinforce their professional and personal qualities with the attitudes and behaviors they will gain through art education. Teachers, from whom the educational process cannot be considered apart, can gain awareness of the artistry in their identities as teachers. They can learn or develop good speech, good looks, good posture, good behavior, good attitude, good perception of people (Can and Yıldırım, 2019). They can also change their perspective on life and gain aesthetic sensitivity. Such teachers, who have succeeded in acquiring the education of the beauty and integrating it into their lives, will be able to raise good, virtuous, characterful, conscious and measured people in all aspects, which are necessary for the future of societies, by transferring these sensitivities to children. Thus, they will ensure the construction of a more civilized, more understanding, and more naive society. At this point, the aim of the study was determined as to develop a data collection tool that can reveal whether the teachers in the education system approach their profession from a different perspective, that is, to develop the scale for the perception of artistic sides of the teaching profession.

2. Method

This study is an effort to develop a measurement tool that can reveal the perceptions of teachers about the artistic sides of their profession. The study focused on developing a scale using quantitative data based on EFA and CFA. Details about the study are presented below:

2.1. Participants

In the study, the data were collected from two different groups for EFA and CFA to determine the construct validity of the scale. The data was collected in the 2020-2021 academic year from the teachers working in different public pre-school, primary, secondary and high schools in Tokat, Ordu, Rize and İstanbul provinces of Turkey. In the study, it was planned to reach at least 10 times as many participants as the number of items in the sample size for both EFA and CFA. In this framework, usable data were collected from 442 teachers for EFA and 511 teachers for CFA. Table 1 and table 2 below show the demographic characteristics of the participants.

Table 1 Demographic characteristics of the EFA participants

Demographic Variables		n	%
Gender	Female	216	49.2
	Male	221	50.3
	Unanswered	2	0.5
	Total	437	99.5
Age	30 years and under	69	15.7
	31-40 years old	210	47.8
	41-50 years old	118	26.9
	51 years and older	41	9.4
	Unanswered	1	0.2
Total	438	99.8	
Branch	Pre-school teacher	45	10.3
	Class Teacher	98	22.3
	Branch Teacher	294	67.0
	Unanswered	2	0.5
	Total	437	99.5
Educational Status	Associate degree	3	0.7
	Bachelors degree	369	84.1
	Master Degree	66	15.0
	Unanswered	1	0.2
	Total	438	99.8
Graduated Faculty	Faculty of Education	324	73.8
	Other	114	26.0
	Total	439	100.0
School Type	Kindergarten	32	7.3
	Primary school	121	27.6
	Secondary School	123	28.0
	High school	159	36.2
	Unanswered	4	0.9
	Total	435	99.1
Professional Seniority	0-5 Years	47	10.7
	6-10 Years	122	27.8
	11-19 Years	158	36.0
	20 Years and Over	111	25.3
	Unanswered	1	0.2
Total	438	99.8	

When Table 1 is examined, it is seen that the rate of men and women in the gender variable are almost equal to each other. In the branch variable, the rate of branch teachers is the highest (67%). Majority of the teachers (84.1%) have bachelor's degree, at

the same time the majority of them (73.8%) graduated from the faculty of education. The participants work in high schools (36.2%) and have 11-19 years (36.0%) professional experience mostly.

Table 2 Demographic characteristics of the CFA participants

Demographic Variables		n	%
Gender	Female	407	75.1
	Male	135	24.9
	Total	511	100.0
Age	30 years and under	113	20.8
	31-40 years old	228	42.1
	41-50 years old	146	26.9
	51 years and older	53	9.8
	Total	509	99.6
Branch	Pre-school teacher	59	10.9
	Class Teacher	91	16.8
	Branch Teacher	392	72.3
	Total	511	100.0
Educational Status	Associate degree	19	3.5
	Bachelors degree	444	81.9
	Master Degree	77	14.2
	Total	510	99.8
Graduated Faculty	Faculty of Education	358	66.1
	Other	182	33.6
	Total	509	99.6
School Type	Kindergarten	32	5.9
	Primary school	112	20.7
	Secondary School	242	44.6
	High school	156	28.8
	Total	511	100.0
Professional Seniority	0-5 Years	106	19.6
	6-10 Years	126	23.2
	11-19 Years	158	29.2
	20 Years and Over	152	28.0
	Total	511	100.0

When Table 2 is examined, it is seen that the rate of women in the gender variable is higher (75.1%). In the branch variable, the rate of branch teachers is the highest (72.3%). Majority of the teachers (81.9%) have bachelor's degree, at the same time the majority of

them (66.1%) graduated from the faculty of education. The participants work in secondary schools (44.6%) and have 11-19 years (29.2%) professional experience mostly.

2.2. Scale Development Process

As a result of the literature review and readings, the scale was designed as a data collection tool that can be used to measure teachers' perceptions of the artistic sides of the teaching profession. At the end of the studies, an item pool of 42 items was created in the first stage. These items were examined, and no items that had close meanings or were parallel to the content of other items were identified. After this process, a 42-item draft form was obtained. The draft form consisting of 42 items was submitted to expert opinion for content validity (2 from educational administration, 1 from basic education, 1 from English language education, 1 from mathematics and science education), and the statements were rearranged in line with the suggestions received. Afterwards, the scale was presented to the opinions of 3 teachers in terms of features such as intelligibility and easy answerability. Taking these opinions into account, a 38-item pilot application scale was obtained and the scale was made ready for pre-application. The scale, which has five-point likert type response options, is answered with "1-Strongly Disagree, 2-Disagree, 3-Moderately Agree, 4-Agree and 5-Strongly Agree". Seven questions determining the demographic variables of the participants and instructions containing information about the research were added to the first page of the measuring tool created by the researchers.

2.3. Data Analysis

The SPSS 23.0 package program and MPlus 7.4 program were used in the analysis of the data. EFA, using SPSS 23.0 package program, was used to determine the construct validity of the scale for the perception of artistic side of the teaching profession, and then CFA, using MPlus 7 program, was applied to determine whether the aforementioned construct is a valid construct. After the structure of the scale was formed, the normality of the distribution was examined and the skewness and kurtosis coefficients were examined in determining the normality of the distribution. It was observed that these values ranged from +1 to -1. For the reliability of the scale, item total correlation, Cronbach's Alpha internal consistency coefficient and item average scores of the lower and upper 27% groups were examined.

3. Results

3.1. Validity and reliability studies

The pilot form of the scale was applied to 442 teachers, and the validity study was carried out on 439 data obtained. Kaiser Meyer Olkin (KMO) value and Bartlett Test of Sphericity results were examined to determine whether the data were suitable for factor

analysis. In the first analysis, the KMO value was .96 and the Bartlett Test of Sphericity ($\chi^2= 17329.217$; $p<.01$) was found to be significant. KMO is the index value that compares the magnitude of the observed correlation coefficients with the partial correlation coefficient. The KMO values, which can take values between 0 and 1, are shown below (Büyüköztürk, Çokluk and Köklü 2019).

0.5 to 0.6 → low

0.6 to 0.7 → weak

0.7 to 0.8 →medium

0.8 to 0.9 → good

over 0.9 → excellent

The obtained values are shown in Table 3.

Table 3. KMO and Barlett Sphericity Test

Kasier-Meyer-Olkin (KMO)	.969
Bartlett Test of Sphericity Chi-Square Value	17329.217
Df	703
P	.000

As seen in Table 3, the KMO value of the sample consisting of 439 teachers was determined as .969 in terms of size. Based on the value ranges mentioned above, the KMO value of .969 is at an “excellent” level and it can be concluded that the data structure is suitable for factor analysis ($\chi^2=17329.217$; $p<0.00$).

In order to test the construct validity of the data collection tool, firstly, EFA was performed. While performing EFA, maximum likelihood estimation analysis and varimax rotation were used. For the items to remain in the scale, two different points were taken into consideration. The first is that the factor load values of each item must be greater than .32. The second one is that when the same items are collected under the different factors, the difference between these factor loads of the items must be at least .10 (Büyüköztürk, 2014). In determining the number of factors as a result of EFA, the eigenvalues of the possible factors, the contribution of the eigen-values to the total variance explained and the line plot (scree plot) were used. As a result of EFA, it was determined that the eigenvalues of the scale were gathered under 4 factors greater than 1. The variance value explained by these 4 factors regarding the scale is 67,635%. In social sciences, variance rates ranging from 40% to 60% are found sufficient in multifactorial scales (Dunteman, 1989; Gorsuch, 1983). Although there were 4 factors with eigenvalues greater than one, in the continuation of the exploratory factor analysis, in the first rotation, items (28, 29, and 31) with factor loadings below .32 and linking the same factor by having the difference between load values more than .10 were removed from the scale. In the second rotation, items (23, 8) with factor loadings below .32 and linking the same factor by having the difference between load values more than .10 were removed from the scale. In the third rotation, items (1, 2) with factor loadings below .32 and linking the

same factor by having the difference between load values more than .10 were removed from the scale. At the end, according to the EFA result, the scale turned into a structure consisting of 31 items with 3 factors.

Within the scope of the reliability studies of the scale for the perceptions of artistic sides of the teaching profession, firstly, the internal consistency of the sub-dimensions of the scale was determined with the Cronbach's Alpha Internal Consistency Coefficient. Afterwards, item-total correlations of each item were calculated. In addition, within the scope of reliability studies, the significant differentiation state of the answers of the lower and upper 27% groups to the scale items was tested with the t-test.

Based on the analyzes for validity and reliability studies; The items remaining in the scale, the dimensions and eigenvalues of these items, Cronbach's alpha values, the results of the item total analysis and the t-test results of the scores of the upper and lower 27% groups are given in Table 4.

Table 4. Validity and reliability studies of the scale for the perceptions of artistic sides of the teaching Profession

Item No.	Scale Items	Item Loads and Dimension Cronbach's Alpha Values			Item Total Correlation	Lower-Upper 27% Groups t-Test	
		1 α=.97	2 α=.96	3 α=.85		t	p
I25	Teachers should know how to address whom in which environment.	.842			.815	13.2212	.000
I19	Teachers should know how to act in formal settings	.824			.735	12.30583	.000
I27	Teachers must pronounce words correctly and clearly while speaking	.821			.525	12.2061	.000
I26	Teachers should have a good command of Turkish to speak fluently	.809			.797	12.85079	.000
I21	Teachers should know how to greet in their daily life.	.799			.782	12.25188	.000
I16	Teachers should use their gestures and facial expressions effectively.	.791			.79	12.9058	.000
I17	Teachers should know how to adjust their tone of voices	.776			.803	11.59597	.000
I14	Teachers should know how to dress in formal situations	.774			.787	13.05417	.000
I18	Teachers should know how to behave in environments outside the school (at cinema, theatre, restaurant, etc.).	.774			.782	14.49899	.000
I11	Teachers should always pay attention to their appearance.	.750			.770	14.90537	.000
I20	Teachers should know how to greet and bid farewell to state officials in official settings.	.748			.759	12.91368	.000
I12	Teachers should always pay attention to their personal care	.747			.773	10.80178	.000
I24	Teachers should always be a good speaker	.710			.816	13.8685	.000
I13	Teachers should have the knowledge of reading body language to be more effective in their profession.	.699			.765	13.30041	.000
I15	Teachers should capture grace in their attitudes and behaviors.	.695			.812	14.68	.000

I10	The clothes worn by the teachers should be clean and harmonious.	.694	.804	12.43462	.000
I37	Teachers can develop their ability to look at life from multiple perspectives through arts education.	.852	.788	18.88725	.000
I38	Teachers can contribute to their productivity with artistic activities.	.829	.762	16.91179	.000
I34	Arts education for teachers increases their sensitivity towards the environment.	.811	.807	17.32807	.000
I33	Arts education for teachers increases their communication skills.	.793	.789	17.95568	.000
I35	Arts education for teachers in various fields can improve their creativity.	.775	.735	18.15711	.000
I32	Teachers can gain critical thinking skills through art education	.750	.811	18.48254	.000
I22	Teachers can get rid of the professional stress they experience with the pleasure and peace of artistic activities.	.717	.718	16.50555	.000
I38	Teachers can contribute to their productivity with artistic activities.	.646	.716	14.1703	.000
I6	Teachers should be able to play any musical instrument	.785	.636	14.14349	.000
I7	Teachers should be able to draw pictures to attract students' attention.	.712	.615	12.09086	.000
I4	Teachers should be a good ready pen.	.634	.619	14.49889	.000
I3	Teachers must be able to perform at least one of Turkish traditional crafts	.632	.619	13.77545	.000
I5	Teachers should be interested in dramatic or rhythmic (theatre, cinema, dance, etc.) arts.	.604	.697	15.95178	.000
I9	Teachers need fashion knowledge to dress well.	.351	.436	11.15089	.000
I30	Teachers should be concerned about beauty in all areas inside and outside the school.	.324	.746	12.98806	.000

*p<.001

**The scale was administrated to the participants in Turkish.*

As can be seen in Table 4, by removing seven items during EFA, 31 items remained in the scale. According to this criterion, the factor loadings of all remaining items are above the accepted limit ($> .32$). After removing the seven items, the total variance explained by the remaining 31 items in the three-dimensional structure was 67.9%.

The Cronbach's alpha internal consistency coefficients of the scale sub-dimensions were .85 for the first dimension, .97 for the second dimension, and .96 for the third dimension. Values between .60 and .80 for Cronbach's alpha indicate that the scale is highly reliable, while values between .80 and 1 indicate a high degree of reliability (Kayış, 2010). Thus, it is understood that all of the scale dimensions show a self-consistent structure.

As seen in Table 3, the item-total correlations of the items in the scale vary between .81 and .43. Positive and high item-total correlation values indicate that the items exemplify similar behaviors and the internal consistency of the scale is high. Büyüköztürk states that items with an item-total correlation value of .30 and higher distinguish people well (2014).

Within the scope of the reliability analysis of the scale, the differences between the item average scores of the lower and upper 27% groups, which were formed according to the total scores of the test, were examined. In the analysis, the difference between the lower and upper 27% groups of all items is significant at the $p < .00$ level. This is a proof that the scale can make a reliable measurement.

Finally, to test the reliability of the scale, it was examined whether the three dimensions suggested and the total score obtained from the scale were significantly related. For this, Pearson correlations were calculated and the results are given in Table 5 below.

Table 5 Coefficients of Scale Dimensions

Boyutlar		1	2	3
1. First Dimension	r	1	.599**	.656**
	p	.000	.000	.000
2. Second Dimension	r	.599**	1	.671**
	p	.000	.000	.000
3. Third Dimension	r	.656**	.671**	1
	p	.000	.000	.000

Table 5 shows that positive correlation coefficients are statistically significant ($p = .00$; $p < .01$). This situation can be put forward as a proof that all the dimensions and the scale measure a similar structure.

After all these procedures, it was decided that the scale for the perception of artistic sides of teaching profession showed a valid and reliable structure with 31 items and three dimensions.

3.1. Naming the dimensions

Within the scope of the development studies of the scale for the perceptions of artistic sides of the teaching profession, the last three dimensions, obtained as a result of the analyzes, were named. The dimension, which consists of 7 items, was named as "Artistic Interests and Skills" because the items it contains are related to artistic talents and interests. The dimension consisting of 16 items was named as "Physical and Behavioral Aesthetics" since the items it contains are related to the positive and beautiful behaviors of teachers and being careful about appearance. The dimension consisting of 8 items was named as "Need for Art Education" since the items include opinions about art education.

3.2. Confirmatory Factor Analysis

The final version of the 31-item scale, which was collected under three factors as a result of EFA, was reapplied to a different sample group and CFA was conducted with the data obtained. The values obtained by confirmatory factor analysis are shown below in table 6

Table 6 Values obtained by confirmatory factor analysis

Fit Index	Acceptable Value	Observed Value
Chi-Square/Degree of Freedom	0 - 5	3.387
SRMR	< 0.08	0.072
TLI	> 0.90	0.903
CFI	> 0.90	0.912
RMSEA	< 0.08	0.068

According to Table 6, CFI and TLI values greater than 0.90 and 0.90, RMSEA and SRMR values less than 0.08, and χ^2/sd values between 0-5 indicate that the model is at an acceptable level (Bentler & Bonett, 1980; Byrne, 2010; Kline, 2011) ($\chi^2/sd=3.887$, CFI=.912, TLI=.903, RMSEA=.068, SRMR=0.072). Since there was a high correlation between some items related to the same factor in the model, the error measures of the items were linked. As a result of the model, it was seen that the factor loads of each item were significant. The model obtained as a result of confirmatory factor analysis is given in Figure 1.

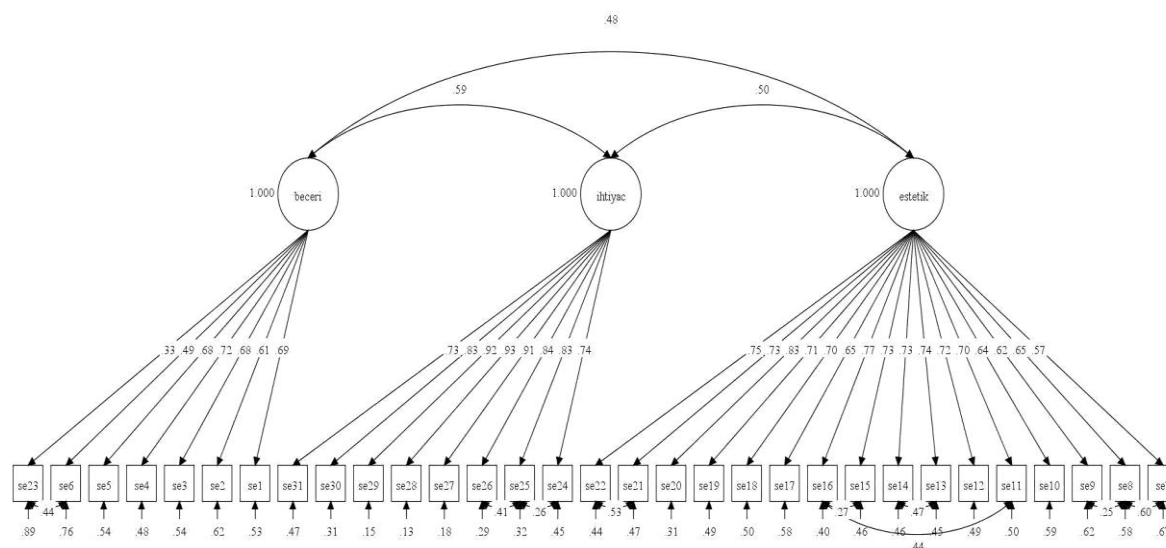


Figure 1. The scale for the perception of artistic side of the teaching profession

4. Conclusion and Recommendation

In this study, it is aimed to develop a valid and reliable scale that can reveal the level of teachers' perceptions whether their work is artistic from different perspectives. The relevant literature was reviewed to develop the scale called "The Scale for the Perception of Artistic Sides of Teaching Profession". In this way, the expressions about which aspects of teaching can be perceived as artistic were made into scale items.

Exploratory factor analysis was applied on the scale draft created with the opinions of experts and teachers. As a result of factor analysis, it was determined that the items included in the scale were collected in three independent factors. These factors are; artistic interests and skills, behavioral and physical aesthetics, art education needs.

While the Cronbach's alpha internal consistency coefficient for the artistic interest and skills dimension was .85, these values were determined as .97 for the behavioral and physical aesthetics dimension and .96 for the art education need dimension. The fact that the four-dimensional structure obtained explains 67.9% of the total variance shows that the scale for the perception of artistic sides of teaching profession is a valid and reliable tool that can reveal the level of perception of teachers about whether their work is artistic from different perspectives. Variance rates ranging from 60% are considered sufficient (Büyüköztürk et al. 2019).

The Cronbach's Alpha internal consistency coefficient of the scale is .96. The item-total correlations of the items in the scale vary between .81 and .43, and the difference between the lower and upper 27% groups of the items is significant.

Confirmatory factor analysis was applied to the 31-item structure of the scale, which was collected under three factors as a result of EFA. Other goodness-of-fit values calculated by CFA show that the model is a valid model. Thus, it was decided that the structure in question was confirmed. According to the CFA, the factor loading values of the items in the scale for the perception of artistic sides of teaching profession ranged from .93 to .33. With this developed measurement tool, it is thought that teachers' perception levels of the artistic sides of their profession can be measured and comparisons can be made in terms of different demographic variables. It is thought that the results obtained with the scale developed in this research can be a source for in-service training studies carried out by the Ministry of National Education.

References

- Aslan, K.A. (2001). Social bases of the education. *Balıkesir University the Journal of Social Sciences Institute*, 5, 16-30
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588–606.
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2nd ed.). (Multivariate applications series; Multivariate applications book series). New York, Routledge.
- Büyükdüvenci, S. (1986). Education as science and art. *Ankara University Journal of Faculty of Educational Sciences (JFES)*, 19 (1), 79-84.
- Büyüköztürk, Ş. (2014). *Data Analysis Handbook for Social Sciences (20th ed)*. Ankara, Pegem Akademi Publishing.
- Büyüköztürk, Ş, Çokluk, Ö & Köklü, N. (2019). *Statistics for Social Sciences*. Ankara, Pegem Akademi Publishing.
- Can, N., Yıldırım, N. (2019). Teaching profession and aesthetics. Ed.: G. Bedir, V. Yar Yıldırım (Ed), in *Artistic Variables of the Teaching Profession* (p. 45-70.). Ankara, Pegem Akademi Publishing.
- Çam, N. (1994). *Art, Painting and Architecture in Islam*, Ankara, Electronic Communication Agency.
- Dawe, A.H. (1984). Teaching: a performing art. *The Phi Delta Kappan*, 65(8), 548-552.
- Dunteman, G.H. (1989). *Principal components analysis*. Thousand Oaks, CA: Sage Publications.
- Eisner, E.W.(1983). The art and craft of teaching. *Educational Leadership*. 40(4), 4-13.
- Eskicumalı, A. (2003). Education and social change: The role of education in Turkey's change process, 1923-1946. *Boğaziçi University Journal of Education*, 19 (2), 15-29.
- Frymier, J. (1991). Can we standardize teaching?. *The High School Journal*, 74 (3), 133-137.
- Gage, N. (1984). What do we know about teaching effectiveness?. *The Phi Delta Kappan*, 66 (2), 87-93.
- Gorsuch, R.L. (1983). *Factor Analysis*. Hillsdale, NJ: Lawrence Erlbaum. Orig. ed. 1974.
- Gökalp, Z. (1992). *Social and Cultural Foundations of Education (2nd ed)*. İstanbul, MEB Publishing.
- Hestenes, D. (1979). Wherefore a science of teaching?. *The Physics Teacher*, 17, 235-242.
- Karabulut, N . (2010). The Functions of Emotional Intelligence on Art Teacher Education. *Journal of Institute of Fine Arts*, 0 (21) , 81-85.
- Koçer, H.A. (1980). *Education History 1*. Ankara, Ankara University Faculty of Education Publications.
- Lindley, A.D. (1970). Teaching Is a Science, Not an Art. *The English Journal*, 59 (7), 960-963.
- Mennitt M.T. (2019). *Teaching as an art and a science: Student engagement and the classroom experience in secondary math & science classrooms*. (Doctoral Thesis). Access address: https://ir.stthomas.edu/caps_ed_lead_docdiss/126
- Ornstein, A.C. (1985). Considering Teacher Effectiveness. *The Clearing House*, 58(9), 399-402.

- Özbal, N, Aydoğan, İ. (2017). An Investigation on Aesthetic Requirements and Formation in Education. *Kırıkkale University Journal of Social Sciences*, 7 (2), 249-260.
- Pestel, C.B. (1990). Teaching Is Not an Art, It Is a Science. *Journal of Chemical Education*, 67 (6), 490.
- Rubin, L. J. (1985). *Artistry in teaching*. New York, Random House.
- Tezcan, M. (1981). Introduction to Sociology of Education (2nd ed), Ankara, Ankara University Faculty of Education Publications.
- Ünver, E. (2016). “Why and How Art Education Should Be”. *İdil*, 5 (23), 865-878.

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