

The Scale of Ideational and Social Contribution of Art to Politics: A Validity and Reliability Study

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Abstract

The aim of the study is to develop a valid and reliable scale in order to determine the ideational and social contribution of art to politics. The 5 point likert scale was applied to a total of 891 university students studying in different departments of a state university. As a result of exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), it was found that the scale consisted of twelve items and was collected under two sub-factors. Factor loads of the scale items were found to range between .571 and .818. In addition, the variance rate explained by two factors was calculated as 58.397%. The χ^2/df value of the scale was calculated as 1,944. Other concordance index values were calculated as CFI= .962, TLI= .952, RMSEA= .066, SRMR= .0546. The Cronbach-Alpha internal consistency coefficient was calculated as .893 for the overall scale; .862 for the first sub-factor and .842 for the second sub-factor. Item-total score correlation values of the scale items ranged between .538 and .655. These results show that SISCAP can be used as a valid and reliable measurement tool.

Keywords: Art, Politics, Ideational and social contribution, Validity, Reliability

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INTRODUCTION

Art, which gives a great acceleration to the development of our rapidly developing society and illuminates the society by developing social, cultural and political values, is an important communication tool that determines one's view of life in the face of the negative. An individual who cannot express his/her feelings and thoughts' self-realization effort and desire to self-expression visually brought together individual to art (Demirel, 2019). With the discovery of art, people have tried to find the truth in science and beauty in art by beginning a new quest every passing day (Erbay, 1997). Art that associates one's self-expression still with aesthetic attitude since ancient ages contributes to the individual in many ways such as understanding of life styles of people, determining of social, cultural and political structure of societies, and evaluating with an artistic style of interpersonal relations (Ünver, 2002). Art that teaches to think events realistically enables the individual to achieve spiritual satisfaction and overcome the difficulties through the emotional relaxation caused by the art. For this reason, art as an intuitive line of reasoning balances the conflict between reason and emotion and guides the person in making healthier decisions. Society's value judgments, personal perceptions and expectations are shaped by art, and art plays an important role in continuation of cultural accumulations of societies.

The scientific, economic and cultural development of societies leads to the people living in that community to a mentality that thinks, researches and produces by taking into consideration not only the present or the past but also the future of the society (Ünver, 2002). Therefore, people who can think critically, understand what they read and listen to, and evaluate events from their own perspectives can contribute to the artistic and cultural development of society. The way to do this is to relate the rights and truths to the values that they create in their free world (Örnek, 2011; Özden, 2008). Therefore, many states support art for economic, social, political or ideological reasons (Kovancılar & Kahriman, 2007). Politics, which has public to thank for its existence and continuity, determines the direction and structure of politics by associating people's behavior with the artistic demands and aspirations of society due to the expectations, demands and needs of the society (Akyüz, 2009; Terzi, 2008). Therefore, art is accepted as a supportive field of mental production that contributes to the vision of politics and makes it more understanding and develops it, changes its perspective (Örnek, 2011).

According to Platon, politics, which is considered as art in practice and science in theory, is defined as the art of governing with the consent of people (Altıntop, 2016). According to him, art should be independent from all kinds of politics and therefore from any purpose other than itself (Kreft, 2009). Because art requires the existence of individuals who are self-determined and make an inference by examining the artist's intention from his/her own point of view (Özden, 2008). Therefore, art as a similar to democratic edifice draws attention to the distinction between looking and seeing. Rather than being a problem-solving art, politics, which has the characteristic of steering, is to govern the people from a certain world view in order to influence the opinion of people (Birinci, 2008 cited by Akyüz, 2009). Every individual living in society has a different world view. This difference requires people to maintain values such as respect, love and tolerance towards each other in a democratic society. In this context, art is accepted as one of the important factors that push people who sympathize with the same cultural values but have different ideological views to live together in a free and democratic social structure.

While politics is an area of activity to improve people's living standards; art is an autonomous activity influenced by the material conditions of the existence of the individual (Korkmaz, 2018; Baynes, 2008, p. 31 cited by Korkmaz, 2018). Although this autonomy means that art should be independent of politics, it can make significant contributions to politics, especially ideationally and socially, as art has an impact on the individual's own inner world. For this reason, it is thought that young people, who constitute an important part of the society in order to develop creative thinking and to maintain social order by making healthy decisions, should be made conscious about the contributions of art to politics. In this direction, it is aimed to carry out the study with university students. Indeed, the course contents of Undergraduate Programs of Teacher Training of The Council

of Higher Education is examined; it seems that the education sociology course is taught as a common course in all discipline fields such as social sciences teaching, science teaching, primary school teaching and mathematics teaching. With the content of this course, it is aimed to raise consciousness and awareness for pre-service teachers about politics and education concepts within the social structure. On the other hand, different courses such as museum education, art and aesthetics, human rights and democracy education have been added to all discipline areas as professional teaching knowledge and general culture elective courses in order to raise awareness of art and politics. Therefore, teacher training undergraduate programs focus on an understanding of education that enhances teacher candidates' consciousness and awareness about art and politics. In this regard, the research is limited to university students studying in education faculties.

It is aimed to develop a valid and reliable scale about the contribution of art to politics in terms of social values such as solution of social problems, creating awareness, expressing people's perspectives in a universal language or reflecting social values or ideational such as associating the free world of artists with social values. As a result of the literature review, no type of scale that measures the ideational and social contribution of art to politics was found. Therefore, considering the contribution of the research to the field, it is thought that it will make important contributions to the literature.

METHOD

Research Model

The research is a descriptive study in the general survey model. The reason for this is to describe an existing situation as it exists, to make evaluations in accordance with standards and to reveal the relations between events (Çepni, 2007; Karasar, 2009).

Study Group

The research was conducted with 891 university students studying in different departments of a public university. In this context, the scale of ideational and social contribution of art to politics was initially applied to 284 university students studying in the departments of social sciences teaching (f = 65), science teaching (f = 85) and primary school teaching (f = 134) departments, and the pre-screening study of the scale was conducted. In the second stage, the scale was applied to 392 university students studying in the departments of psychological counseling and guidance (f=85), Turkish teaching (f=89), mathematics teaching (f=95), primary school teaching (f=41) and computer and instructional technologies (f=82) and Explanatory Factor Analysis (EFA) was performed for the remaining items in the scale. In the third stage, the scale was applied to 215 university students studying in the departments of primary school teaching (f=103), music teaching (f=64) and art teaching (f=48) and the Confirmatory Factor Analysis (CFA) was performed.

Scale Development Stages

The validity of the scale of ideational and social contribution of art to politics (SISCAP) was examined in two ways: content and construct validity. Scale development stages are presented in Figure 1.

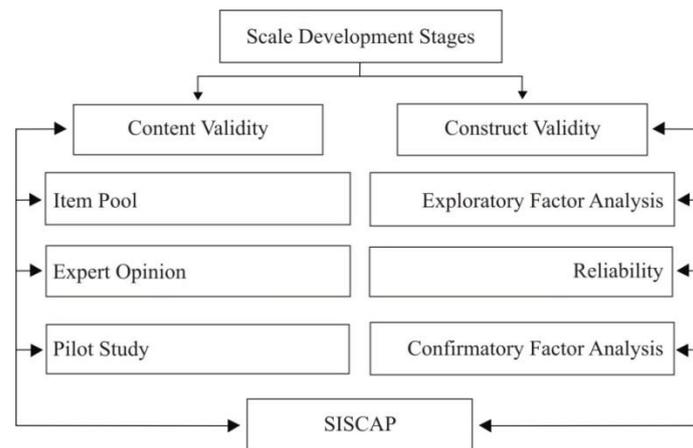


Figure 1. Scale Development Stages

In the process of scale development, the literature review guides the creation of scale items by defining the theoretical definition of the structure to be measured and contributes to the validity of the content (Hinkin, Tracey & Enz, 1997; Schwab, 1980 cited by Hinkin, Tracey & Enz, 1997). According to Schriesheim & Hinkin (1993), content validity is the minimum psychometric requirement for measurement competence and is defined as the first step in the structural validity of a new measurement. Therefore, in the content validity stage, a pool of items was created to determine the ideational and social contributions of art to politics. The results of the research carried out by Demirel & Altıntaş (2012) were used in creating the item pool. In addition, 46 students studying in the final year of the university have written an composition about whether art contributes to politics. These compositions were analyzed by content analysis and 25 scale items were compiled. These items were evaluated by a total of 4 academicians who are domain experts of art education, political science and public administration, assessment and evaluation in education and computer and instructional technologies education in terms of intelligibility and measuring competence. In accordance with expert opinions, five (5) items were excluded from the measurement tool, considering that they measured the same judgment, including multiple judgments, and were insufficient to measure the situation. As a result, a measuring instrument consisting of 20 items was obtained. The scale was developed as a 5-item rating scale ranging from “not agree at all (1)”, “disagree (2)”, “slightly agree (3)”, “quite agree (4)” and “completely agree (5)”. The pilot study of the scale was conducted on 284 university students. After the elimination of the scale items, the scale was re-applied to 392 university students and exploratory factor analysis (EFA) was performed. According to Büyüköztürk (2013), if the item total correlation of an item is less than .20, it should not be included in the scale. As a result of the analysis, 7 items with total item correlation less than .20 were excluded from the scale and a scale consisting of 13 items was obtained. After the AFA, the scale was re-applied to 215 university students and the Confirmatory Factor Analysis (CFA) was performed. In the last stage, the reliability of the scale was tested with Cronbach’s Alpha internal consistency coefficient (α) and item total score correlation.

FINDINGS

Exploratory Factor Analysis (EFA)

AFA is a common data reduction analysis to explain a large portion of the total variance between scale items using latent factors that define similarities between variables (Comrey & Lee, 1992 cited by Xiao & Dew, 2011). In the exploratory factor analysis, the Kaiser-Meyer-Olkin (KMO) test is used to determine whether the data set is suitable for the sample size. Kaiser (1974) stated that KMO value of 90 and above is perfect for the sample size. The Bartlett sphericity test reveals whether the relationships between variables are significant ($p < .001$) (Mishra, Sharma, Sharma, Singh & Thakur, 2016). As a result of the EFA, KMO sample measurement and bartlett test results obtained from the scale of ideational and social contribution of art to politics are presented in Table 1.

Table 1. KMO Sample Measurement and Bartlett Test Results

KMO Sample Measurement Competence	.915		
Bartlett Sphericity Test χ^2 (Chi-Square) Value	2027.366	df = 66	p = ,000*

When Table 1 is examined, KMO coefficient is found to be .915 and Bartlett test results are found to be chi-square ($\chi^2=(66) = 2027.366$; $p < .001$). The analysis shows that the data set is suitable for factor analysis and the sample size is sufficient. After the suitability of the sample size was tested, the factor number of the scale was determined. In exploratory factor analysis, the number of factors is determined by taking into account the factors with eigenvalues greater than 1 (Büyüköztürk, 2013; Can, 2014; Çokluk, Şekercioğlu & Büyüköztürk, 2012; Hinkin, 1998; Hinkin, Tracey & Enz, 1997; Shen, Hu & Sun, 2016; Tezbaşaran & Yiğit, 2015; Yang, Yu & Chen, 2013). On the other hand, it is important to determine the rate of variance explained by each item in the scale (Hinkin, Tracey & Enz, 1997). The explained variance rate should be more than 30% (Büyüköztürk, 2013). Information about the eigenvalue and variance percentages of the scale is presented in Table 2.

Table 2. Factors and Explained Variances of the Scale

Factors	Rotated Variance Values		
	Eigenvalue	Variances Explained %	Total Variance
Social Contribution	3.541	29.507	29.507
Ideational Contribution	3.467	28.890	58.397
Explained Total Variance Ratio			%58.397

As a result of EFA, two factors with eigenvalues greater than 1 were determined. The first factor explained 29.507% of the total variance and the second factor explained 28.890% of the total variance. The total variance for the scale items was found to be 58.397%. After determining the eigenvalue and variance percentages, factor load values of the scale items were examined in order to explain the relationship of the items with the factors. Factor load is a measure of how much the variable contributes to the factor. Therefore, high factor loadings indicate that the dimensions of the factors are better calculated by the variables (Yong & Pearce, 2013). A factor load value of .45 or higher on a scale is considered a good criterion for selection (Büyüköztürk, 2013). Therefore, the limit for factor load values of the items in the SISCAP was determined as .45. Factor structure of the scale is presented in Table 3.

Table 3. Factor Structure of the Scale

Factors	Items	Factor Loads	
		Social	Ideational
Factor 1: Social Contribution			
Q8(1)	Artist is the mirror of society	.818	
Q7(2)	The artist sheds light on society with his ideas	.792	
Q11(3)	Art is effective in creating social consciousness	.735	
Q9(4)	Art ensures the formation of universal fraternity language	.720	
Q13(5)	The artist solves social problems within the framework of the universal nature of art	.652	
Q10(6)	Art regulates broken relationships between people	.643	
Factor 2: Ideational Contribution			
Q2(7)	Art contributes to politics in the phase of thought		.766
Q4(8)	Artistic-minded creative minds give great meaning to country politics		.746
Q3(9)	Art balances the conflict between the politician's world view based on logic and the emotional view of the artist		.733
Q1(10)	All units in politics need art		.721
Q5(11)	The pluses that a person with artistic spirit will bring to the rigidity of politics cannot be ignored		.714
Q6(12)	By following the artist, political minds can achieve perfection in different fields (economy, education, architecture, technology, social space)		.571

The 12th item with a factor load value below .45 was excluded from the scale. Factor load values were found to be between .643 and .818 for the first factor and .571 and .766 for the second factor. Comrey & Lee (1992 cited by Tekin & Polat, 2016) state that factor load values of .70 and above are excellent in factor analysis, factor load values between .63 and .70 are very good and factor load values between .55 and .62 are good. The first factor in the scale is called “social contribution” because it reflects social values such as solving social problems, creating consciousness or expressing people’s perspectives using a universal language. The second factor was called as “ideational contribution” because it consists of expressions about how different perspectives arising from the emotional structure of art and artists affect ideationally politics.

Confirmatory Factor Analysis (CFA)

After the EFA, the scale, which consisted of 12 items and was found to be collected under two factors, was reapplied to 215 university students and confirmatory factor analysis (CFA) was performed. The suitability of the model was tested with the standard goodness of fit criteria proposed for chi-square (χ^2), χ^2/df , CFI, TLI, RMSEA and SRMR in different sources (Barrett, 2007; Kline cited by Çokluk et al., 2012; Hooper, Coughlan & Mullen, 2008; Hu & Bentler, 1999; McDonald & Ho, 2002; Schermelleh-Engel, Moosbrugger & Müller, 2003). As a result of DFA, χ^2/df value was calculated as 1.944. Other goodness of fit indices were found as CFI= .962, TLI= .952, RMSEA= .066, SRMR= .0546. These fit indices show that the scale consisting of two factors is validated as a model. Path Diagram of the scale is presented in Figure 2.

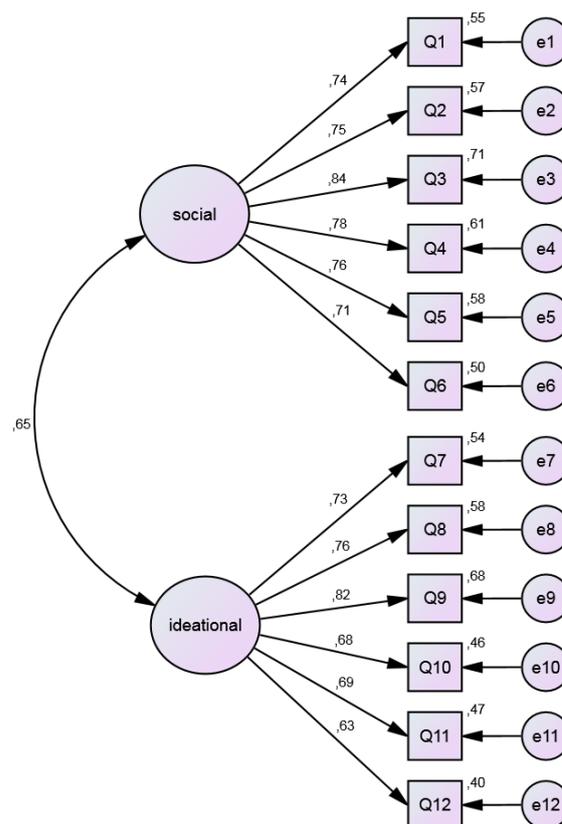


Figure 2. The Scale of Ideational and Social Contribution of Art to Politics’ Path Diagram

After the exploratory and confirmatory factor analysis, the reliability of the scale, which was determined to consist of two sub-factors, was conducted. The alpha (α) coefficient developed by Cronbach is used for the reliability of a scale using Likert type rating (Tezbaşaran, 2008). The Cronbach-Alpha reliability coefficient is a measure of the internal consistency between test scores of

the scale, and values of .70 and above are considered sufficient for test reliability (Özdamar, 1999). The reliability results of the scale are presented in Table 4.

Table 4. Reliability Results of the Scale

Factors	Number of items	Cronbach's Alpha Internal Consistency Coefficient (α)
Social Contribution	6	.862
Ideational Contribution	6	.842
SISCAP-TOTAL	12	.893

When Table 4 is examined, alpha (α) value of 12 items in the scale was calculated as .893. In addition, Cronbach's alpha internal consistency coefficient was calculated as .862 for the first factor and .842 for the second factor. In addition to the reliability of the scale, the discrimination of each item in the scale was examined by item total correlation. "Item-total correlation explains the relationship between the scores obtained from test items and the total score of the test. The fact that the item total score correlation is positive and high indicates that the internal consistency of the test is high" (Büyüköztürk, 2013). Some limit values are taken as criterion for item-total score correlation. Some limit values were determined as criteria for item-total score correlation. These; are the follows: "very good item for $r \geq .40$ "; "good item for $.30 \leq r \leq .39$ "; "item that should be corrected for $.20 \leq r \leq .30$ " and "item that should be excluded from the scale for $r \leq .20$ " (Büyüköztürk, 2013). The item total score correlation results of the scale are presented in Table 5.

Table 5. Item Total Score Correlation Results of the Scale

İtem No	Item Total Correlation	İtem No	Item Total Correlation
Q8 (1)	.565	Q2 (7)	.560
Q7 (2)	.641	Q4 (8)	.632
Q11 (3)	.655	Q3 (9)	.637
Q9 (4)	.590	Q1 (10)	.582
Q13 (5)	.654	Q5 (11)	.621
Q10 (6)	.585	Q6 (12)	.538

The item-total score correlation values of the items in the scale ranged between .538 and .655. The item-total correlation of each item in the scale was found to be over .40, which is considered as a very good item. These results show that the internal consistency of the scale is high.

DISCUSSION AND CONCLUSION

In this study, a valid and reliable measurement tool has been developed to determine the ideational and social contribution of art to politics. The scale consists of a total of 12 items. As a result of exploratory and confirmatory factor analysis, it was determined that the scale was collected in two factors. The first factor was called social contribution (6 items) and the second factor was called ideational contribution (6 items). In the exploratory factor analysis, the suitability of the sample size was determined by the Kaiser-Meyer-Olkin (KMO) test. The relationship between the variables was evaluated by Bartlett sphericity test. KMO coefficient was calculated as .915 and Bartlett test was found to be chi-square ($\chi^2 = (66) = 2027.366$; $p < .001$). When the literature is examined, KMO value greater than .50 is sufficient for the sample size; 90 and above is considered to be perfect (Field, 2000; Kaiser, 1974). In some studies, it was emphasized that the KMO value should be between .60 and .70 for sample size (Netemeyer, Bearden et al. 2003 cited by Taherdoost, Sahibuddin & Jalaliyoon, 2014). The limit value for the sample size was accepted as .50 in the scale development studies of Hadi, Abdullah & Sentosa (2016); Devarajoo & Chinna (2017)'s scale development studies were accepted as .60. When the studies are compared with the results of the research, it is seen that .915 KMO coefficient value is an excellent sample size.

It was determined that the total variance explained in the scale development study was 58.397%. According to Scherer (1988), it is considered that variance ratios between 40% and 60% are ideal in factor analysis. Factor load values of scale items were also examined. In this context, factor

load value limit was determined as .45 and 12th item with factor load below .45 was excluded from the scale. When the literature is examined, Floyd & Widaman (1995) emphasize that factor loads should be above .30 or .40. Comrey and Lee (cited by 1992 Tekin & Polat, 2016) agree that the factor load values are .45/suitable, .55/good, .63/very good and .70 and above/excellent values. While Santor, Haggerty, Lévesque, Burge, Beaulieu, Gass & Pineault (2011) accept the limit value for factor load as .40 in the scale development studies; Bakır Ayğar & Uzun (2017) accept .45. When the studies are compared with the results of the research, it is seen that .45 factor load value is suitable for factor analysis. The two-factor structure of the scale was tested by confirmatory factor analysis. Accordingly, χ^2/df value was calculated as 1.944. Other concordance index values were found as CFI= .962, TLI= .952, RMSEA= .066, SRMR= .0546. When the literature is examined, it is emphasized that CFI \geq .95 and TLI \geq .90, .05 < RMSEA \leq .08 and .05 < SRMR \leq .10 are acceptable values (Hooper, Coughlan & Mullen, 2008; Hu & Bentler, 1999; Schermelleh-Engel, Moosbrugger & Müller, 2003). Therefore, it was determined that (SISCAP) was confirmed as a model.

The reliability of the scale was tested with Cronbach's Alpha internal consistency coefficient (α) and item total score correlation. The alpha (α) value of the scale was calculated as .893. The reliability of the social contribution sub-factor in the scale was calculated as .862 and the reliability of the ideational contribution sub-factor was .842. In addition to the reliability of the scale, the discrimination of each item in the scale was examined. The item-total score correlation values of the items in the scale were found to be above .40 which is considered as a very good item. When the literature was examined, It was seen that Baethge, Goldbeck-Wood & Mertens (2019) determined the limit value for item total score correlation as .30; Albayrak & Gülnar (2018), on the other hand, determined as .40. When the studies are compared with the research results, it is seen that the scale of ideational and social contribution of art to politics is a scale that has both valid and reliable results. Therefore, it can be said that the scale developed is an effective scale that can be used to determine how university students with different worldviews evaluate the contribution of art to politics within the democratic social structure.

REFERENCES

- Akyüz, Ü. (2009), Siyaset ve ahlak. *Yasama Dergisi*, 11, 93-129.
- Albayrak, S. & Gülnar, E. (2018). Cinsiyetçi olayları belirleme ölçeğinin Türkçe formunun geçerlik güvenirlik çalışması. *Social Sciences Studies Journal*, 4(22), 4155-4163.
- Altıntop, C. (2016). Ebû Nasr El- Farabî'nin ideal devlet anlayışı. *Akademia Sosyal Bilimler Dergisi*, 1(2), 48-62.
- Baethge, C., Goldbeck-Wood, S. & Mertens, S. (2019). SANRA-A scale for the quality assessment of narrative review articles. *Research Integrity and Peer Review*, 4(5), 1-7.
- Bakır Ayğar, B. & Uzun, B. (2017). Sosyal Medya Bağımlılığı Ölçeği'nin Geliştirilmesi: Geçerlik ve Güvenirlik Çalışmaları. *Addicta: The Turkish Journal on Addictions*, 5, 507-525.
- Barrett, P. (2007). Structural equation modelling: Adjudging model fit. *Personality and Individual Differences*, 42, 815-824.
- Büyüköztürk, Ş. (2013). *Sosyal bilimler için veri analizi el kitabı* (18nd ed.). Ankara: Pegem Akademi.
- Can, A. (2014). *SPSS ile bilimsel araştırma sürecinde nicel veri analizi* (2nd ed.). Ankara: Pegem Akademi.
- Çepni, S. (2007). *Araştırma ve proje çalışmalarına giriş*. (3rd ed.). Trabzon: Celepler Matbaacılık.

- Çokluk, Ö., Şekercioğlu, G. & Büyüköztürk, Ş. (2012). *Sosyal bilimler için çok değişkenli istatistik: SPSS ve Lisrel uygulamaları*. Ankara: Pegem Akademi.
- Demirel, İ. N. (2019). *Sanat ve estetik değer eğitimi*. Salih Zeki Genç & Adem Beldağ (Ed.). in the *Karakter ve değer eğitimi* (p. 267-278). Ankara: Pegem Akademi.
- Demirel, I. N. & Altintas, O. (2012). Relationship between art and politics. *Procedia-Social and Behavioral Sciences*, 51, 444-448.
- Devarajoo, C. & Chinna, K. (2017). Depression, distress and self-efficacy: The impact on diabetes self-care practices. *PLoS ONE*, 12(3), 1-16.
- Erbay, M. (1997). *Plastik sanatlar eğitimi' nin gelişimi* (1nd ed.). İstanbul: Boğaziçi Üniversitesi Yayınları.
- Field, A. (2000). *Discovering statistics using SPSS for windows*. London–Thousand Oaks–New Delhi: Sage publications.
- Floyd, F. J. & Widaman, K. F. (1995). Factor analysis in the development and refinement of clinical assessment instruments. *Psychological Assessment*, 7, 286-299.
- Hadi, N., Abdullah, N. & Sentosa, I. (2016). An easy approach to exploratory factor analysis: Marketing perspective. *Journal of Educational and Social Research*, 6(1), 215-223.
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, 2(1), 104-121.
- Hinkin, T. R., Tracey, J. B. & Enz, C. A. (1997). Scale construction: Developing reliable and valid measurement instruments. *Journal of Hospitality & Tourism Research*, 21(1), 100-120.
- Hooper, D., Coughlan, J. & Mullen, M. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53-60.
- Hu, L. & Bentler, P. M. (1999). Cut off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39, 31–36.
- Karasar, N. (2009). *Bilimsel araştırma yöntemi*. (20nd ed.). Ankara: Nobel Yayın Dağıtım.
- Korkmaz, F. D. (2018). Sanat siyaset ilişkisi bağlamında politik imge. *Journal of Arts*, 1(2), 25-38.
- Kovancılar, B. & Kahriman H. (2007), Devlet-Sanat İlişkisi: Sanat Desteklerinin Dayandığı Argümanlar. *Finans Politik & Ekonomik Yorumlar*, 44, 21-33.
- Kreft, L. (2009). *Sanat ve siyaset, kültür çağında sanat ve kültürel politika* (Trans. M. Tüzel). (2nd ed.). İstanbul: İletişim Yayınları.
- McDonald, R. P. & Ho, R. H. (2002). Principles and practice in reporting structural equation analyses. *Psychological Methods*, 7, 64–82.
- Mishra, S., Sharma, M., Sharma, R. C., Singh, A. & Thakur, A. (2016). Development of a scale to measure faculty attitude towards open educational resources. *Open Praxis*, 8(1), 55–69.
- Örnek, Ü. (2011). Sanat ve siyaset. It has been taken from <http://blog.milliyet.com.tr/siyaset-ve-sanat/Blog/?BlogNo=320553> on 31.10.2019.

- Özdamar, K. (1999). *Paket programlar ile istatistiksel veri analizi* (Çok değişkenli analizler) (2nd ed.). Eskişehir: Kaan Kitabevi.
- Özden, Y. (2008). *Öğrenme ve öğretme* (8nd ed.). Ankara: Pegem Akademi.
- Santor, D. A., Haggerty, J. L., Lévesque, J-F., Burge, F., Beaulieu, M-D., Gass, D. & Pineault, R. (2011). An overview of confirmatory factor analysis and item response analysis applied to instruments to evaluate primary healthcare. *Healthcare Policy*, 7, 79-92.
- Scherer, R. F. (1988). Dimensionality of coping: Factor stability using the ways of coping questionnaire. *Psychological Report*, 62(3), 763-770.
- Schriesheim, C. & Hinkin, T. R. (1993). Influence Tactics Used by Subordinates: A Theoretical and Empirical Analysis and Refinement of the Kipnis, Schmidt, and Wilkinson Subscales. *Journal of Applied Psychology*, 75(3), 246-257.
- Shen, M., Hu, M. & Sun, Z. (2016). Development and validation of brief scales to measure emotional and behavioural problems among Chinese adolescents. *BMJ Open*, 7, e012961.
- Schermelleh-Engel, K., Moosbrugger, H. & Müller, F. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8(2), 23-74.
- Taherdoost, H., Sahibuddin, S. & Jalaliyoon, N. (2014). Exploratory Factor Analysis; Concepts and Theory. *Advances in Applied and Pure Mathematics*. 375-382. It has been taken from <https://pdfs.semanticscholar.org/1bd8/bbd66524ccf605c879982cd35ef3a3d52160.pdf> on 27.10.2019.
- Tekin, A. & Polat, E. (2016). A scale for e-content preparation skills: Development, validity and reliability. *Eurasian Journal of Educational Research*, 62, 143-160.
- Terzi, S. (2008). 12 Eylül 1980 sonrası sanat-siyaset ilişkisi ve plastik sanatlara etkisi. Yayınlanmamış Yüksek Lisans Tezi, Dokuz Eylül Üniversitesi Eğitim Bilimleri Enstitüsü, İzmir.
- Tezbaşaran, A. (2008). *Likert tipi ölçek hazırlama klavuzu*. Türk Psikologlar Derneği.
- Tezbaşaran, E. & Yiğit, R. (2015). A study on developing attitude scale towards nurses. *Hasan Ali Yücel Eğitim Fakültesi Dergisi*, 12-2(24), 69-80.
- Ünver, E. (2002), *Sanat eğitimi*. (1. bs.). Ankara: Nobel Yayın Dağıtım.
- Xiao, J. J. & Dew, J. (2011). The financial management behavior scale: Development and validation. *Journal of Financial Counseling and Plannin*, 22(1), 43-59.
- Yang, C. L., Yu, C. H. & Chen, C. H. (2013). Development and validation of the postpartum sleep quality scale. *Journal of Nursing Research*, 21(2),148–154.
- Yong, A. G. & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, 9(2), 79-94.