

ARAŞTIRMA MAKALESİ | RESEARCH ARTICLE Haziran 2020, 3(1), 61-77 Geliş: 29.05.2020 | Kabul: 22.06.2020 | Yayın: 29.06.2020

# The Construct Validity of the Scale of Audience Perceptions of Media and Religion

# Adem AL\*



#### Abstract

This study is part of a doctoral dissertation (Al, 2019) at the Faculty of Communication, Istanbul University, Turkey, and it intends to introduce the Scale of Audience Perceptions of Media and Religion (SAPMR) and to measure its goodness-of-fit with a separate independent sample by deploying a confirmatory factor analysis (CFA). Data were collected from 150 participants, who ranged in age from 18 to 27 years, to measure whether the scale shows a good model fit. In the CFA, CMIN/DF, RMSEA, CFI, TLI, SRMR, PNFI, and PCFI fit indices were used. The fit indices obtained in the present study showed that CMIN/DF value was below 3, RMSEA value was below .06, SRMR values were below .08, CFI and TLI values were above .95, and finally PNFI and PCFI values are above .5. These results revealed that the SAPMR with six constructs –'Media Ministers and Representation', 'Politics and Religion', 'Secularisation / Alienation from Religion', 'Perception of Religious Productions', 'Decoding in Opposition', and 'Religious Media Literacy'– had a good model fit; namely, its measurement model is well specified.

Keywords: Media and Religion, Exploratory Factor Analysis, Confirmatory Factor Analysis, Model Fit

# İzleyicinin Medya ve Din Algısı Ölçeği'nin Yapı Geçerliliği

#### Öz

İstanbul Üniversitesi İletişim Fakültesi'nde yapılmış olan doktora tezinin (Al, 2019) bir parçası olan bu çalışma, İzleyicinin Medya ve Din Algısı Ölçeği'ni (İMDAÖ) tanıtmayı ve bu ölçeği farklı, bağımsız bir örneklem üzerinde uygulayarak onun uyum düzeyini doğrulayıcı faktör analizi (DFA) yoluyla ölçmeyi amaçlamaktadır. Ölçeğin iyi bir model uyumu gösterip göstermediğini tespit etmek için 18 ile 27 yaş arasında değişen 150 katılımcıdan veri toplanmıştır. Yapılan DFA'da CMIN/DF, RMSEA, CFI, TLI, SRMR, PNFI ve PCFI uyum indekslerinden faydalanılmıştır. Elde edilen uyum indeksleri, CMIN/DF değerinin 3'ün altında, RMSEA değerinin .06'nın altında, SRMR değerlerinin .08'in altında, CFI ve TLI değerlerinin .95'in üzerinde ve son olarak PNFI ve PCFI değerlerinin .5'in üzerinde olduğunu göstermiştir. Bu sonuçlar da altı boyuttan –'Medya Vaizleri ve Temsil', 'Siyaset ve Din', 'Sekülerleşme / Dine Yabancılaşma', 'Dini Yayın Algısı', 'Muhalif Kodaçımlama' ve 'Dini Medya Okuryazarlığı'– oluşan Medya ve Din Algısı Ölçeği'nin iyi bir model uyumuna sahip olduğunu, yani ölçüm modelinin iyi tanımlanmış olduğunu ortaya koymuştur.

Anahtar Kelimeler: Medya ve Din, Açıklayıcı Faktör Analizi, Doğrulayıcı Faktör Analizi, Model Uyumu

**ATIF:** Al, A. (2020). The construct validity of the scale of audience perceptions of media and religion. *Journal of Media and Religion Studies*, **3**(1), s. 61-77.

\* PhD, Instructor, Istanbul University, e-mail: ademal@istanbul.edu.tr | orcid.org/0000-0001-5119-1036



#### Introduction

The Scale of Audience Perceptions of Media and Religion (SAPMR) was developed by Al (2019) to contribute to defining the relationship between media and religion by identifying how young audiences receive religious broadcasts both on television and in new/digital media. The SAPMR, which was created in line with expert opinion and the literature review, was subjected to expert examination for the test of face validity before being applied in the field. The SAPMR was finalised after necessary changes were made to it in accordance with the suggestions of experts and with the results obtained by pre-test application on a pilot sample of 109 randomly selected people.

The SAPMR consists of two main sections. The demographic characteristics of the respondents, the educational status of their parents, the average monthly income of their family, which district of Istanbul they reside in, which province of Turkey they are originally from, and whether they had previously received religious education are included in the first section of the scale. The second section consists of statements in a five-point Likert scale to detect the perceptions of the respondents on the relationship between media and religion.

The initial version of the SAPMR was made up of 58 items, 19 of which were inversely related. After having been applied on the main sample, an Exploratory Factor Analysis (EFA) of the scale was conducted via SPSS 21.0. To extract the common factors from the scale and thus to obtain construct validity, principal factor analysis (PFA) was implemented. As stated in Kaiser's judgmental method, the common factors of the scale were made up by keeping factors with eigenvalues greater than 1. While items with factor loadings smaller than .40 were eliminated from the scale, those with loadings greater than .40 were kept. After obtaining the construct validity of the scale, varimax, as a rotation method, was performed to differentiate the factor each item belongs to. Thus, 35 out of 58 items were left out of the scale, owing to having a factor load smaller than .40, cross-loading on multiple factors, and/or belonging to a factor defined with fewer than three items. Consequently, only 23 items were retained for explorative factor analysis. Eventually, the EFA revealed that the SAPMR developed in the study was composed of 6 constructs and 23 items, eight of which (8, 16, 27, 28, 43, 46, 48, and 53) were inversely related.

Before exploring the results of the EFA, tests were carried out using Bartlett's Test of Sphericity to determine whether the correlation matrix was an identity matrix or not. The test value of  $\chi_2$  of Bartlett's Test of Sphericity and the value of degrees of freedom were found to be at 6772.032 and 253 respectively at the significance level (p<.01), which means that the correlation matrix was not an identity matrix. In addition, to test the sample size validity statistically, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was applied and the KMO value was found to be at .898 (p<.01). Consequently, the sample size was deemed acceptable because the KMO values of both the overall scale and sub-scales were higher than the threshold (.50) for the KMO value (Kaiser, 1974, p. 35; Büyüköztürk, 2004, p. 120). These results signified that the 23 items were ready for factor analysis (See Table 1).

Six factors with eigenvalues greater than 1 were extracted through factor analysis. They were labelled Media Ministers and Representation (6 questionnaire items), Politics and Religion (5 questionnaire items), Secularisation / Alienation from Religion (3 questionnaire items), Perception of Religious Productions (3 questionnaire items), Decoding in Opposition (3 questionnaire items), and Religious Media Literacy (3 questionnaire items). These factors assume eigenvalues 6.480, 2.005, 1.540, 1.296, 1.239, and 1.013 respectively. The percentage of the total variance explained by the six factors is 59.013, which meets the empirical criterion for the total variance in data (Tavşancıl, 2005, p. 48; Dawson, 2017, p. 43). In addition, as suggested by Ferguson and Cox (1993), while determining the factors, the minimum difference in factor loadings for each item was taken as .20 in order to avoid cross-loaded items. As for the fac-



tor loadings, the varimax rotation conducted revealed that factor loadings for the SAPMR ranged from .508 to .857, thus exceeding the .50 cut-off value (Hair et al., 2010). Based on the premise that factor loadings must be greater than .50, this result showed that unidimensionality of each factor had been attained. In other words, the SAPMR has a clear and distinct factor structure with respect to construct validity (See Table 3).

Apropos of the internal consistency of the SAPMR items in each construct, Cronbach's alpha ( $\alpha$ ) was calculated. The Cronbach's  $\alpha$ 's of the six sub-scales are.779, .774, .728, .733, .697, and .700 respectively. The Cronbach's  $\alpha$  of the overall scale is .880 (See Table 1). Although most researchers refer to Nunnally's (1978) .70 reliability criterion, Nunnally assumed that perhaps measures that have only modest reliabilities of .70 or thereabouts can be tolerated providing that a researcher wants to save time and effort in a new area of research (Lance et al., 2006, p. 206). Also, according to Durmuş et al. (2011, p. 89), a Cronbach's alpha value of .60 and above is an acceptable limit in sub-scales with few items (questions or statements). Besides, Özdamar (1999, p. 522) and Uzgören (2012, p. 54) suggest criterion values of a scale's Cronbach's Alpha coefficient as follows:  $.00 \le \alpha < .40$  (not reliable); .40  $\leq \alpha <$  .60 (at low reliability); .60  $\leq \alpha <$  .80 (fairly reliable); and .80  $\leq \alpha < 1.00$  (highly reliable). Accordingly, the calculation of Cronbach's alpha across the SAPMR produced values indicating that the overall scale and all subscales have adequate internal reliability. In addition, the corrected item-total correlation coefficients were computed for each item of the SAPMR in order to further evaluate its homogeneity. The corrected item-total correlation values ranged from .294 to .620 (See Appendix B) being above the minimum recommended level of 0.20 for inclusion of items in a scale and meeting the criterion of item convergent validity of >.30 (Büyüköztürk, 2004, p. 165).

Factors	кмо	α
Media Ministers and Representation	.845	.779
Politics and Religion	.793	.774
Secularisation /Alienation from Religion	.633	.728
Perception of Religious Productions	.676	.733
Decoding in Opposition	.652	.697
Religious Media Literacy	.666	.700
The overall scale	.898	.880

Table 1. Outputs of the KMO and Cronbach's alpha of the SAPMR by EFA

In this study, the Scale of Audience Perceptions of Media and Religion (SAP-MR) which was applied on a sample of 970 and validated by exploratory factor analysis (Al, 2019) will be subjected to a confirmatory factor analysis (CFA) so as to examine its construct validity by measuring its goodness-of-fit with a separate, independent sample.

#### **Literature Review**

The degree to which observed variables represent the latent constructs (or the extent to which the data fit the hypothesized model) is explained by CFA (Das and Sahu, 2018, p. 45). Unlike EFA, CFA typically relies on theoretical expectations to do with the structure of the data. While CFA tests a particular hypothesis as to the nature of the factors, EFA just extracts those factors best replicating the variables under the maximum likelihood conditions (Gorsuch, 1983, p. 129). CFA is broadly utilised to test a theory when the researcher has adequately strong hypotheses about which factors are to be included in the data and which variables are expected to explain each factor (Kieffer, 1999, p. 77).



It cannot yet be said that researchers have fully agreed on the issue of model fit. In addition to the plenitude of fit indices, disagreement both on which indices to report and what the actual cut-offs for a variety of indices should be, causes researchers to be overwhelmed (Hooper et al., 2008). At this point, from among the plethora of fit indices showing the best fit, the researcher should decide on which to choose. While McDonald and Ho (2002) suggest that the CFI, GFI, NFI and the NNFI are the most commonly reported fit indices, Crowley and Fan (1997) state that a variety of indices should be reported since no golden rule is available to assess model fit. Regarding the adequacy indicators, instead of using the most frequently reported fit indices, Hooper et al. (2008) proposed that "Chi-Square statistic, its degrees of freedom and p value, the RMSEA and its associated confidence interval, the SRMR, the CFI and one parsimony fit index such as the PNFI" (p. 56) should be preferred to ascertain the overall model fit.

Absolute fit indices (the Chi-Squared test, RMSEA, GFI, AGFI, the RMR, and the SRMR) indicate how well the suggested theory fits the data. Incremental fit indices (IFI, CFI, and TLI, an overhauled form of the NFI) compare the chi-square value to a baseline model without using the chi-square in its raw form (Hooper et al., 2008). Parsimony fit indices (PRATIO, PNFI, and PCFI) are also calculated to evaluate the fit of the model to data. One shortcoming of normed-fit indices is that the analyst can enhance the fit of a model just by freeing up parameters to be estimated because every one of parameters that the analyst frees removes one constraint on the final solution. In other words, when the data matrix is reproduced, it better fits the sample data matrix. That is why a two-factor model may fit the data better than a model with a single factor thanks to the additional parameter being estimated. In order to make up for this shortcoming, PNFI is examined (Mulaik et al., 1989; Joormann and Stöber, 1997). Accordingly, in the present study, both PNFI and PCFI will be examined to assess model parsimony.

The selection of cut-offs for the goodness-of-fit statistics in this study hinges on previous literature. Bentler and Bonnett (1980) suggested that incremental fit indexes of .90 or greater indicate acceptable model–data fit. However, recent studies have proposed that the generally used criterion of .90 or higher should be raised to .95 or higher (Marsh et al., 2004). Even though designating a particular cut-off value for a fit index is difficult since it may not work equally well with diverse conditions like sample sizes and estimators, a cut-off value close to .95 for the maximum likelihood (ML)-based TLI and CFI; a cut-off value close to .06 for RMSEA; a cut-off value close to .08 for SRMR (Hu and Bentler, 1999, p. 27); a value not exceeding 3 for CMIN/DF (Hair et al., 2010); and a value greater than or equal to .5 for both PNFI and PCFI (Zhang et al., 2012, p. 1093) will be used in the present study.

### **Research Methodology**

The sample size of the present study was determined based on the guideline proposing that at least 5:1 participant-to-item ratio is sufficient for factor analysis (Gorsuch, 1983; Hatcher, 1994). Accordingly, the sample of the study encompasses 150 participants randomly chosen in Istanbul, Turkey. This study conformed to all procedural ethics regarding the ethical treatment of human participants. The ethics approval was obtained from Research Ethics Review Committee of Istanbul University (Application Number: 2020/36, Approval Date: 06.04.2020, Meeting/Session Number: 5).

The data were collected through the Scale of Audience Perceptions of Media and Religion developed by Al in 2019. The questionnaire was conducted using the paper-based method in face-to-face communication, and it consists of twenty-three questions and six dimensions that are called 'Media Ministers and Representation', 'Politics and Religion', 'Secularisation / Alienation from Religion', 'Perception of Religious Productions', 'Decoding in Opposition', and 'Religious Media Literacy'. Answers were to be given on a five-point scale that ranged from 'strongly disagree' (coded 1), to 'moderately agree' (coded 3), to 'strongly agree' (coded 5). To evaluate the fit of the model to data, CFA was employed using Software Amos 20.0.



### **Respondents' Profile**

As is shown in Table 2, a total of 150 individuals aged 18 to 27 participated in the study. While females (68) constitute 45.3 % of the study sample, males (82) make up 54.7 of it. In addition, no respondents of the questionnaire are primary school graduates. Compared to the respondents with a bachelor's degree, the vast majority of the study sample is made up of those who have a high school diploma.

			Ν	%
	Male		82	54.7
Gender	Female		68	45.3
		Total	150	100.0
Age	18-22		110	73.3
	23-27		40	26.7
		Total	150	100.0
	Primary school graduate		-	-
Educational attain- ment	High school graduate		128	85,3
	Bachelor's degree		22	14,7
		Total	150	100,0

Table 2. Respondents' Demographics

#### Results

As can be seen in Table 3, although the EFA of the SAPMR conducted by Al (2019) yielded standardized regression weights, namely standardized factor loadings, higher than the cut-off factor loading .5 (Hair et al., 2010), item 1 and item 6 in the first construct and item 2 in the second construct displayed low regression weights (.40, .32, and -.35 respectively) in the CFA performed in the current study. This difference might have resulted from the huge gap between the sample sizes (150 versus 970). In addition, the standardized factor loadings obtained in the CFA vary from .32 to .88. Since factor loadings over .30 can be taken as a cut-off in the formation of the factor pattern (Tavşancıl, 2005, p. 48; Tabachnick and Fidell, 2007), it can be said that each questionnaire item measures the factor that it belongs to and that the measurement model with six constructs of audience perceptions of media and religion has a good factor structure.

Table 3. Factor loadings of the SAPMR by EFA and CFA

Factors and Their Items	Factor L	oadings
	EFA	CFA
Factor 1: Media Ministers and Representation		
<b>i1</b> Everyone concerned with or irrelevant to theology speaks on religious broadcasts in the media.	.685	.40
<b>i21</b> Religious representatives in the media disincline the public from religion.	.654	•74
<b>i6</b> In the media, religion is represented by people who are not experts in it.	.642	.32
<b>i22</b> Religious broadcasts in the media have definitely deviated from the core of religion.	.640	.78
<b>i4</b> Religious experts in the media affect the attitude of the youth towards religion negatively.	.561	.79
<b>i16</b> Religious broadcasts in the media do not represent true religion.	.508	.73

Journal of Media and Religion Studies

.724	.88
.707	.77
.670	35
.650	76
.588	•74
.857	.84
.786	.89
.537	.64
.823	.86
.769	.84
.598	.60
.820	.77
.798	.69
.586	.52
.768	.88
.762	.74
1	
	.707 .670 .650 .588 .588 .786 .537 .786 .537 .786 .537 .769 .598 .598 .598 .598 .598

\* reverse coded

In the current study, following fit indexes were used to determine the goodness of the model fit: The CMIN/DF (Relative  $\chi_2$ /df), The Root Mean Square Error of Approximation (RMSEA), The Comparative Fit Index (CFI), Tucker-Lewis Coefficient (TLI), the Standardized Root Mean Square (SRMR), Parsimonious Normed Fit Index (PNFI), and Parsimony Comparative Fit Index (PCFI). As can be observed in Table 4, the results of the CFA of the SAPMR are as follows: The Chi Square value is significant ( $\chi_2 = 289.571$ , df = 224, p= 0.002 < .05). The CMIN/DF, a calculation of the chi-square ( $\chi_2$ ) value divided by the degree of freedom (DF), is 1.293 < 3, thus fulfilling the criteria of goodness of fit. The RMSEA = .044 < .06 (90% Confidence Intervals of the RMSEA = .028 - .058) and the SRMR = .068 ≤ .08 meet the absolute of goodness-of-fit. The CFI = .957 > .95 and the TLI = .951 > .95 meet incremental fit measures. The PNFI = .741 ≥



.50 and the PCFI =  $.847 \ge .50$  meet parsimonious fit measure. These high parsimony indices show that regarding the parameters incorporated in the measurement model, we have a parsimonious model.

As shown in Table 4, all CFAs of constructs except for the P-value that should be greater than .05 yielded a good fit. In other words, the test of the hypothesis that the SAPMR is a six-factor structure produced a probability of less than .05, (the P-value = 0.002), thereby proposing that the fit of the data to the hypothesized model is not entirely adequate. This means that the hypothesis regarding the SAPMR relations should be rejected. However, it is commonly known that both the sensitivity of the Likelihood Ratio Test to sample size and its basis on the central  $\chi_2$ distribution have resulted in problems of fit. In addition, the analysis of covariance structures is based on large sample theory, so large samples become crucial in obtaining of accurate parameter estimates, as well as in the tenability of asymptotic distributional approximations. That is why findings of well-fitting hypothesized models, in which the  $\chi_2$  value approximates the degrees of freedom, have proven to be unrealistic in most SEM empirical research (Jöreskog and Sörbom, 1993; MacCallum et al., 1996; Byrne, 2010, p. 76). In sum, the overall fit analysis for the measurement model in the present study indicates that the hypothesized model, or the measurement model, exhibits a good fit with the sample data.

Goodne	ss-of-fit Indices	Refer- ence Standard		Notes
	Chi square value χ2 (CMIN)		289.571	
	Degree of freedom (DF)		224	
Absolute fit indi- ces	Chi-squared P-value	> .05	.002	
	Relative chi-square (CMIN/DF, or χ2/df)	< 3	1.293	Good fit
	Standardized root mean square residual (SRMR)	≤ .08	.068	Good fit
	Root-mean-square error of approximation (RM- SEA)	< .06	.044	Good fit
Incremental fit	Tucker-Lewis Coefficient (TLI)	≥.95	.951	Good fit
indices	Comparative fit index (CFI)	≥ .95	•957	Good fit
Parsimony fit in-	Parsimonious normed fit index (PNFI)	≥.5	.741	Good fit
dices	Parsimonious compara- tive fit index (PCFI)	≥.5	.847	Good fit

Table 4. Total Goodness-of-fit indices of the CFA of the SAPMR

#### Conclusions

The CFA results of the present study provided additional evidence for the construct validity of the Turkish Scale of Audience Perceptions of Media and Religion developed by Al in 2019. It revealed that the SAPMR with its six constructs –'Media Ministers and Representation', 'Politics and Religion', 'Secularisation / Alienation from Religion', 'Perception of Religious Productions', 'Decoding in Opposition', and 'Religious Media Literacy'– showed a pretty good model fit. Along with this, the findings of it are consistent with those of the study carried out by Al (2019). Hence, the scale is applicable in the field of media and religion to measure the relationship between the two as well as how the viewers perceive this relationship.



# Limitations and future directions

In order to get sound feedback, this questionnaire should be applied to participants in person. That is why online application was not preferred while applying for an ethical report. However, due to the lockdown, health limitations, and the curfew for people, especially for those under the age of 20, during the coronavirus situation in Istanbul, only a limited number of samples could be attained. If a larger sample size that meets the recommended participant-to-item ratio (Hu and Bentler, 1999) of close to 10 participants per item could have been reached, better results for CFA might have been obtained. Therefore, future testing with different samples, particularly for the English version of the SAPMR, which has not been subjected to a CFA yet, is warranted since construct validity assessment is an ongoing process.



### References

- Al, A. (2019). Medyadaki dini içerikli yayınlarla ilgili izleyici algısı araştırması. İstanbul Üniversitesi Sosyal Bilimler Enstitüsü, Yayımlanmamış Doktora Tezi.
- Bentler, P. M., and Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588-606.
- Büyüköztürk, Ş. (2004). Sosyal bilimler için veri analizi el kitabı (4. bs.), Ankara, Pegem A Yayıncılık.
- Byrne, B. M. (2010). Structural equation modeling with AMOS-Basic concepts, applications and programming (2<sup>nd</sup> ed.), New York: Taylor and Francis Group, LLC.
- Crowley, S. L., and Fan, X. (1997). Structural equation modeling: Basic concepts and applications in personality assessment research, *Journal of Personality Assessment*, 68(3), 508-31.
- Das, S., and Sahu, M. K. (2018). Measuring and validating the scale of entrepreneurial orientation: A confirmatory factor analysis approach, *Journal of Entrepreneurship and Management*, 7(3), 42-47.
- Dawson, J. (2017). Analysing quantitative survey data for business and management students, Los Angeles: Sage.
- Durmuş B., Yurtkoru, E. S., Çinko M. (2011). Sosyal bilimlerde SPSS'le veri analizi (4. bs.), İstanbul: Beta Yayınları.
- Ferguson, E., and Cox, T. (1993). Exploratory factor analysis: A users' guide. International Journal of Selection and Assessment, 1, 84-94.
- Gorsuch, R. L. (1983). Factor analysis (2nd ed.), Hillsdale, NJ: Lawrence Erlbaum.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (7<sup>th</sup> ed.), New Jersey: Pearson Educational Inc.
- Hatcher, L. (1994). A step-by-step approach to using the SAS system for factor analysis and structural equation modeling, Cary, NC: SAS Institute Inc.
- Hooper, D., Coughlan, J., Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *The Electronic Journal of Business Research Methods*, 6(1), 53-60.
- Hu, L. T., and Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55. DOI:10.1080/10705519909540118
- Joormann, J., and Stöber, J. (1997). Measuring facets of worry: A LISREL analysis of the Worry Domains questionnaire. *Personality and Individual Differences*, 23(5), 827-837.
- Jöreskog, K. G. and Sörbom, D. (1993). LISREL 8: Structural equation modeling with the SIMPLIS command language, Chicago: Scientific Software International.
- Kaiser, H. F. (1974). An index of factorial simplicity, Psychometrika, 39, 31-36.
- Kieffer, K. M. (1999). An introductory primer on the appropriate use of exploratory and confirmatory factor analysis. *Research in the Schools*, 6, 75-92.
- Lance, C. E., Butts, M. M., Michels, L. C. (2006). The sources of four commonly reported cutoff criteria: What did they really say? *Organizational Research Methods*, 9(2), 202-220.



- Marsh, H. W., Hau, K. T., Wen, Z. (2004). In search of golden rules: Comment on hypothesis-testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu and Bentler's (1999) findings. *Structural Equation Modeling*, 11(3), 320-341.
- MacCallum, R. C., Browne, M. W., Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1, 130-149.
- McDonald, R. P. and Ho, M. H. R. (2002). Principles and practice in reporting statistical equation analyses. *Psychological Methods*, 7(1), 64-82.
- Mulaik, S. A., James, L. R., Van Alstine, J., Bennett, N., Lind, S., Stilwell, C. D. (1989). An evaluation of goodness of fit indices for structural equation models. *Psychological Bulletin*, 105(3), 430-445.
- Nunnally, J. C. (1978). Psychometric theory (2<sup>nd</sup> ed.), New York: McGraw-Hill.
- Özdamar, K. (1999). Paket programlar ile istatistiksel veri analizi 1, Eskişehir: Kaan Kitabevi.
- Tabachnick, B. G., and Fidell, L. S. (2007). Using multivariate statistics (5<sup>th</sup> ed.), New York: Allyn and Bacon.
- Tavşancıl, E. (2005). Tutumların ölçülmesi ve SPSS ile veri analizi (2. bs.), Ankara: Nobel Yayın Dağıtım.
- Uzgören, N. (2012). Bilimsel araştırmalarda kullanılan temel istatiksel yöntemler ve SPSS uygulamaları, Bursa: Ekin Yayınevi.
- Zhang, M. Y., Lee, K. H., Chen, S. C. (2012). Subscriber behaviour in adopting 3G value-added services. African Journal of Business Management, 6(3), 1089-1094.



#### **APPENDIX A**

Below is the measurement model of the SAPMR on which CFA was conducted in the current study.





# **APPENDIX B**

Below is the table showing the item-total statistics of the SAPMR.

		Item-	Total Statistic	s	
	Scale Mean if Item De- leted	Scale Vari- ance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Delet- ed
i1	74,33	190,635	,316	,182	,879
i21	75,16	180,383	,620	,468	,870
i3	76,00	186,084	,392	,276	,877
i17	74,60	186,591	,418	,265	,876
i22	75,07	182,753	,570	,402	,872
i4	75,29	181,998	,540	,346	,873
i5	75,38	184,652	<b>,</b> 475	,372	,874
i9	74,60	182,101	,584	,422	,871
i6	74,88	184,315	,496	,314	,874
i7	75,27	185,424	<b>,</b> 447	,294	,875
i8	76,20	186,286	,368	,444	,878
i10	76,04	181,023	,516	,503	,873
i11	75,06	183,242	,538	,405	,873
i12	75,47	185,001	,438	,382	,876
i23	75,08	182,056	,503	,420	,874
i13	75,26	183,501	,460	,359	,875
i14	74,96	180,499	,591	,492	,871
i18	75,09	185,645	,409	,316	,876
i15	74,20	191,290	,309	,353	,879
i16	75,06	182,994	,510	,332	,873
i19	74,68	188,852	,375	,295	,877
i20	74,10	191,716	,294	,360	,879
i2	74,84	186,858	,399	,275	,877



# APPENDIX C

Below is the Turkish version of the Scale of Audience Perceptions of Media and Religion, which was applied in the present study.

Items 2, 5, 11, 12, 15, 17, 19, and 20 are reverse coded.

(3) Orta derecede katılıyorum

## İzleyicinin Medya ve Din Algısı Ölçeği

Bu bölümdeki soruları, <u>televizyonda ya da internette yayınlanan dini içe-</u> <u>rikli her türdeki yayını</u> dikkate alarak size en çok uyan 5 seçenekten <u>sadece birini</u> işaretleyiniz.

Secenekler: (1) Hiç k	Katıl <u>mı</u> yorum
-----------------------	-----------------------

## (2) Katıl<u>mı</u>yorum

(4) Katılıyorum

1	Medyadaki dini yayınlarda ilgili-ilgisiz herkes konu- şuyor.	1	2	3	4	5
2	Siyasi irade, medyadaki dini yayınları kontrolünde tutmaz.	1	2	3	4	5
3	Medyadaki dini yayınlar, dine bağlılığımı köreltmiş- tir.	1	2	3	4	5
4	Medyadaki din uzmanları, gençlerin dine karşı tutu- munu olumsuz etkilemektedir.	1	2	3	4	5
5	Bir genç olarak, dini içerikli filmleri faydalı buluyo- rum.	1	2	3	4	5
6	Medyada din alanında uzman olmayan kişiler, dini temsil etmektedir.	1	2	3	4	5
7	Yayınların içeriğinin dini olması, izleyicinin değerlen- dirme yapma eğilimini azaltır.	1	2	3	4	5
8	Medyanın etkisiyle daha önceki dini inançlarım zayıf- ladı.	1	2	3	4	5
9	Medyadaki din uzmanları, dine siyaset bulaştırmak- tadır.	1	2	3	4	5
10	Medyada sunulan din, beni dine karşı duyarsızlaştır- maktadır.	1	2	3	4	5
11	Televizyondaki dini yayınların asıl amacı bilgilendir- mektir.	1	2	3	4	5
12	Din içerikli animasyonlar, gençler için faydalıdır.	1	2	3	4	5
13	Programların içeriği dini olunca, izleyiciler analiz be- cerilerini pek kullanmazlar.	1	2	3	4	5
14	Medyadaki dini yayınlarda siyasi iradenin beklentile- ri etkilidir.	1	2	3	4	5
15	Dini programlarda verilen her bilgi, benim için doğ- rudur.	1	2	3	4	5
16	Medyadaki dini yayınlar gerçek dini temsil etmemek- tedir.	1	2	3	4	5
17	Medyadaki dini söylemlerde siyasi iradenin bir etkisi yoktur.	1	2	3	4	5
18	Söz konusu dini program olunca, program izleyicile- rinin içeriğe eleştirel bakışı zayıflar.	1	2	3	4	5

(5) Tamamen Katılıyorum



19	Medyadaki dini yayınlar sayesinde dini farkındalığım arttı.	1	2	3	4	5
20	Dini programlarda sunulan her bilgiyi "kesin doğru" olarak algılarım.	1	2	3	4	5
21	Medyadaki din temsilcileri, halkı dinden soğutmak- tadır.	1	2	3	4	5
22	Medyadaki dini yayınlar kesinlikle özünden sapmış- tır.	1	2	3	4	5
23	Siyasi irade, medyadaki dini söylemleri kontrolünde tutmaktadır.	1	2	3	4	5

### APPENDIX D

Below is the Scale of Audience Perceptions of Media and Religion in English. This English version of the scale has not been subjected to any statistical tests, yet.

Items 2, 5, 11, 12, 15, 17, 19, and 20 are reverse coded.

## The Scale of Audience Perceptions of Media and Religion

You are supposed to circle <u>only one</u> of the 5 options that suit you the most, considering all kinds of religious content broadcasted on television and/or on the Internet. For each statement, please circle the number to indicate your level of agreement.

1 = strongly disagree	<b>2 =</b> disagree	3 = moderately agree
<b>4 =</b> agree	<b>5 =</b> strongly ag	gree

Everyone concerned with or irrelevant to theology speaks on religious broadcasts in the media.	1	2	3	4	5
Political will does not control religious broadcasts in the media.	1	2	3	4	5
Religious broadcasts in the media have blunted my devo- tion to religion.	1	2	3	4	5
Religious experts in the media affect the attitude of the youth towards religion negatively.	1	2	3	4	5
(As a young person) I find religious films useful.	1	2	3	4	5
In the media, religion is represented by people who are not experts in it.	1	2	3	4	5
The religiousness of the content of the broadcasts reduces the viewer's tendency to evaluate.	1	2	3	4	5
Under the influence of the media, my previous religious beliefs have weakened.	1	2	3	4	5
Religious experts in the media involve religion in politics.	1	2	3	4	5
The religion presented in the media makes me insensitive to religion.	1	2	3	4	5
The main purpose of religious broadcasts on television is to inform.	1	2	3	4	5
Religion-themed animations are beneficial for young people.	1	2	3	4	5
When the content of a programme is religious, viewers do not use their skills to analyse it much.	1	2	3	4	5
	on religious broadcasts in the media. Political will does not control religious broadcasts in the media. Religious broadcasts in the media have blunted my devo- tion to religion. Religious experts in the media affect the attitude of the youth towards religion negatively. (As a young person) I find religious films useful. In the media, religion is represented by people who are not experts in it. The religiousness of the content of the broadcasts reduc- es the viewer's tendency to evaluate. Under the influence of the media, my previous religious beliefs have weakened. Religious experts in the media involve religion in politics. The religion presented in the media makes me insensitive to religion. The main purpose of religious broadcasts on television is to inform. Religion-themed animations are beneficial for young peo- ple. When the content of a programme is religious, viewers do	on religious broadcasts in the media.1Political will does not control religious broadcasts in the media.1Religious broadcasts in the media have blunted my devo- tion to religion.1Religious experts in the media affect the attitude of the youth towards religion negatively.1(As a young person) I find religious films useful.1In the media, religion is represented by people who are not experts in it.1The religiousness of the content of the broadcasts reduc- es the viewer's tendency to evaluate.1Under the influence of the media, my previous religious beliefs have weakened.1Religious experts in the media involve religion in politics.1The religion presented in the media makes me insensitive to religion.1Religion-themed animations are beneficial for young peo- ple.1When the content of a programme is religious, viewers do1	on religious broadcasts in the media.12Political will does not control religious broadcasts in the media.12Religious broadcasts in the media have blunted my devo- tion to religion.12Religious experts in the media affect the attitude of the youth towards religion negatively.12(As a young person) I find religious films useful.12In the media, religion is represented by people who are not experts in it.12The religiousness of the content of the broadcasts reduc- es the viewer's tendency to evaluate.12Under the influence of the media, my previous religious beliefs have weakened.12The religion presented in the media makes me insensitive to religion.12The main purpose of religious broadcasts on television is to inform.12When the content of a programme is religious, viewers do to weisers do to12	on religious broadcasts in the media.123Political will does not control religious broadcasts in the media.123Religious broadcasts in the media have blunted my devo- tion to religion.123Religious experts in the media affect the attitude of the youth towards religion negatively.123(As a young person) I find religious films useful.123In the media, religion is represented by people who are not experts in it.123The religiousness of the content of the broadcasts reduc- es the viewer's tendency to evaluate.123Under the influence of the media, my previous religious beliefs have weakened.123The religion presented in the media makes me insensitive to religion.123The main purpose of religious broadcasts on television is to inform.123Religion-themed animations are beneficial for young peo- ple.123When the content of a programme is religious, viewers do123	on religious broadcasts in the media.1234Political will does not control religious broadcasts in the media.1234Religious broadcasts in the media have blunted my devo- tion to religion.1234Religious experts in the media affect the attitude of the youth towards religion negatively.1234(As a young person) I find religious films useful.1234In the media, religion is represented by people who are not experts in it.1234Under the influence of the media, my previous religious beliefs have weakened.1234Religious experts in the media involve religion in politics.1234Under the influence of the media involve religion in politics.1234The religion presented in the media makes me insensitive to religion.1234Religion-themed animations are beneficial for young peo- ple.1234

# MEDIAD Medya ve Din Araştırmaları Dergisi

14	Expectations of political will are effective in religious broadcasts in the media.	1	2	3	4	5
15	Every piece of information given in religious programs is correct for me.		2	3	4	5
16	Religious broadcasts in the media do not represent true religion.	1	2	3	4	5
17	Political will has no influence on religious discourses in the media.	1	2	3	4	5
18	When it comes to the religious programme, the audi- ence's critical view of the content weakens.	1	2	3	4	5
19	My religious awareness has increased thanks to the reli- gious broadcasts in the media.	1	2	3	4	5
20	I perceive every piece of information presented in reli- gious programmes as 'absolutely correct'.	1	2	3	4	5
21	Religious representatives in the media disincline the pub- lic from religion.	1	2	3	4	5
22	Religious broadcasts in the media have definitely deviated from the core of religion.	1	2	3	4	5
23	Religious discourses in the media are under the control of political authorities.	1	2	3	4	5



# İzleyicinin Medya ve Din Algısı Ölçeği'nin Yapı Geçerliliği

# Adem AL

#### Genişletilmiş Özet

İstanbul Üniversitesi İletişim Fakültesi'nde yapılmış olan doktora tezinin (Al, 2019) bir parçası olan bu çalışma, genç izleyici kitlesinin hem televizyondaki hem de yeni/dijital medyadaki din içerikli yayınları nasıl alımladığını ölçmeyi ve medya ile din arasındaki ilişkinin yönünü, kapsamını inceleyerek bu ilişkinin izleyici üzerindeki etkilerini ortaya koymayı amaçlamıştır. Bu doğrultuda, Al (2019) tarafından oluşturulan İzleyicinin Medya ve Din Algısı Ölçeği'nin (İMDAÖ) tanıtılması ve bu ölçeğin farklı, bağımsız bir örneklem üzerinde uygulandıktan sonra model uyum düzeyinin belirlenmesi hedeflenmiştir.

Uzman görüşü ve literatür taraması doğrultusunda oluşturulan İMDAÖ, sahada uygulanmadan önce yüzey geçerliliği testi için uzman incelemesine tabi tutulmuştur. Uzmanların önerileri ve rastgele örneklem yöntemiyle seçilmiş 109 kişilik örneklem üzerinde yapılan ön testten elde edilen sonuçlar doğrultusunda ölçekte gerekli değişiklikler yapılmış ve ölçeğin son hali 970 kişilik ana örneklem üzerinde uygulanmıştır.

İMDAÖ üzerinde açıklayıcı faktör analizi (AFA) yapılmadan önce Al (2019) tarafından verilerin faktör analizine uygun olup olmadığını test etmek amacıyla Bartlett Sphericity testi  $\chi_2$  ile Kaiser-Meyer-Olkin (KMO) katsayıları incelenmiştir. Tüm ölçeğe ait KMO örneklem uygunluk değeri .898 (p<.01), Bartlett Sphericity testi  $\chi_2$  değeri ise 6772.032 (p<.01, sd=253) bulunmuştur. Yapılan AFA sonucunda ise ölçeğin 23 madde ve 6 faktörden (boyuttan) oluştuğu belirlenmiştir. Ölçeğin faktörleri, 'Medya Vaizleri ve Temsil', 'Siyaset ve Din', 'Sekülerleşme / Dine Yabancılaşma', 'Dini Yayın Algısı', 'Muhalif Kodaçımlama' ve 'Dini Medya Okuryazarlığı' olarak adlandırılmıştır. Her bir faktörün eigen değeri 1'in üzerinde olup tüm faktörler tarafından açıklanan toplam varyans ise %59.013 olarak bulunmuştur. Ayrıca, faktörlere ait maddelerin faktör yükleri, .508 ile .857 arasında dağılım göstermiştir. Sonuç olarak elde edilen bu bulgular, İMDAÖ'nün yapı geçerliliğine sahip olduğunu göstermiştir.

Son olarak, İMDAÖ'nün içsel tutarlılık düzeyini test etmek için Al (2019) tarafından güvenirlik analizi yapılmıştır. Yapılan analizde, faktörlere ait Cronbach Alpha değerleri, .697 ile .779 arasında dağılım göstermiştir. Ölçeğin geneline ait Cronbach Alpha katsayısı ise .880 bulunmuştur. Dolayısıyla, ölçeğin hem genelinin hem de faktörlerinin içsel tutarlılığa sahip olduğu görülmüştür.

Bu çalışmada, İMDAÖ üzerinde yeni bir açıklayıcı faktör analizi (AFA) yapılmaksızın doğrudan ölçeğin 6 faktörlü modelinin iyi bir model uyumu gösterip göstermediğini tespit etmek amacıyla doğrulayıcı faktör analizi (DFA) yapılmıştır. Bu amaçla, 18 ile 27 yaş diliminde olan ve rastgele yöntemle seçilmiş 150 (kadın=82, erkek=68) katılımcıdan veri toplanmıştır. Araştırmanın örneklem büyüklüğünün belirlenmesinde, İstanbul'daki COVİD-19 pandemisi kapsamında alınan sokağa çıkma yasakları etkili olmuş ve bu yüzden örneklem genişliği/madde sayısı oranı olarak 5/1 temel alınmıştır (Gorsuch, 1983; Hatcher, 1994). 5'li likert tipi ölçek, bizzat araştırmacı tarafından yüz yüze iletişimle örneklem üzerinde bire bir uygulanmıştır. Ayrıca, bu çalışma için İstan-



bul Üniversitesi Sosyal Bilimler Etik Kurulu'na başvurulmuş ve alınan onay sonrasında (Başvuru No: 2020/36, Onay Tarihi: 06.04.2020, Toplantı No: 5) etik araştırma ilkeleri gözetilerek katılımcılardan araştırma verileri toplanmıştır.

Elde edilen verilerin analizinde AMOS 20.0 istatistik yazılımı kullanılmıştır. 23 madde ve 6 faktörlü yapıya sahip İMDAÖ üzerinde DFA uygulanarak model uyumu olup olmadığı test edilmiştir. Yapılan DFA'da ki-kare uyum testi (CMIN/DF), RMSEA, CFI, TLI, SRMR, PNFI ve PCFI uyum indekslerinden faydalanılmıştır. Bu uyum indeksleri için temel alınan eşik değerler şu şekildedir: CMIN/DF için <3 (Hair et al., 2010), RMSEA için <.06, CFI için ≥.95, TLI için ≥.95, SRMR için <.08 (Hu and Bentler, 1999), PNFI ve PCFI için ≥.5 (Zhang et al., 2012). Her bir uyum indeksi için elde edilen değerler, CMIN/DF için 1.293, RMSEA için .044, CFI için .957, TLI için 0.951, SRMR için .068, PNFI için .741 ve PCFI için .847 olarak hesaplanmıştır. Ayrıca bu çalışmada, standardize edilmiş faktör yükleri de incelenerek, her bir gözlenen değişkenin kendi gizil değişkenini temsil etme derecesi test edilmiştir. Elde edilen standardize edilmiş faktör yükleri .32 ile .88 arasında bir dağılım göstermiştir. Modeldeki iki gözlenen değişkenin (madde 2 ve madde 6) kendi gizil değişkenini düşük düzeyde temsil ettiği, diğer gözlenen değişkenlerin ise kendi gizil değişkenini orta ya da yüksek düzeyde temsil ettiği bulunmuştur.

Sonuç olarak bu araştırmada, Al (2019) tarafından geliştirilen İzleyicinin Medya ve Din Algısı Ölçeği>nin farklı ve bağımsız bir örneklem kullanılarak doğrulayıcı faktör analizi yapılmıştır. Ölçeğe ait modelin uyum indeksleri incelendiğinde, CMIN/DF değerinin 3'ün altında çıkması, RMSEA değerinin .06'nın altında çıkması, SRMR değerlerinin .08'in altında çıkması, CFI ve TLI değerlerinin .95'in üzerinde çıkması ve son olarak PNFI ve PCFI değerlerinin .5'in üzerinde çıkması araştırmanın modelinin iyi bir uyuma sahip olduğunu göstermiştir. Bu sonuçlar, araştırmanın verileri kapsamında İzleyicinin Medya ve Din Algısı Ölçeği>nin medya ve din arasındaki ilişkiyi ve bu ilişkinin izleyici tarafından nasıl algılandığını (alımlandığını) ölçmede kullanılabileceğini ortaya koymuştur.

\* Araştırmacının notu: İMDAÖ'nün bu araştırmada uygulanmış Türkçe versiyonu ile bunun İngilizce çevirisi ekte verilmiştir. Bu araştırmada uygulanmış olan ölçeğin 2, 5, 11, 12, 15, 17, 19 ve 20 numaralı maddeleri ters yönlüdür.

#### Çalışmanın Etik İzin Bilgileri

İstanbul Üniversitesi Sosyal ve Beşeri Bilimler Araştırma Etik Kurulu Başkanlığı 06/04/2020 tarih ve 05 sayılı toplantısında alınan karar çerçevesinde çalışma, etik açıdan bir sakınca içermemektedir.

Etik Kurul İzin Bilgileri

**Etik değerlendirmeyi yapan kurul adı:** İstanbul Üniversitesi Sosyal ve Beşeri Bilimler Araştırma Etik Kurulu Başkanlığı

Etik değerlendirme kararı belge tarihi: 19/06/2020

Etik değerlendirme belgesi sayı numarası: 35980450-663.05-100252

Bu makale iThenticate yazılımıyla taranmıştır. İntihal tespit edilmemiştir. This article has been scanned by iThenticate. No plagiarism detected.

Bu çalışmada "Yükseköğretim Kurumları Bilimsel Araştırma ve Yayın Etiği Yönergesi" kapsamında uyulması belirtilen kurallara uyulmuştur. In this study, the rules stated in the "Higher Education Institutions Scientific Research and Publication Ethics Directive" were followed.