Testing the Mediating Role of Existential Meaning on the Link between Religiosity and Satisfaction with Life: A Study on Turkish Muslim University Students

Dindarlık ve Hayat Memnuniyeti Arasındaki İlişkide Varoluşsal Anlamın Aracı Rolünün Test Edilmesi: Müslüman Türk Üniversite Öğrencileri Üzerine Bir Araştırma

Muhammet Enes VURAL

Dr., Recep Tayyip Erdoğan Üni., İlahiyat Fakültesi, Din Psikolojisi ABD
Ph.D, Recep Tayyip Erdogan University, Faculty of Theology, Department of Psychology of Religion
Rize/Turkey

muhammet.vural@erdogan.edu.tr | **ORCID ID**: 0000-0003-0297-3765

Ali AYTEN

Prof. Dr., Marmara Üniversitesi, İlahiyat Fakültesi, Din Psikolojisi ABD
Prof., Marmara University, Faculty of Theology, Department of Psychology of Religion
Istanbul/Turkey

aliayten@marmara.edu.tr   **ORCID ID**: 0000-0002-2787-2429

Abstract

This study aims to test the mediating role of meaning in life in the relationship between religiosity and life satisfaction. The sample of the study recruited from 256 Turkish Muslim undergraduates from two different universities in Turkey. Participants were recruited through random sampling technique. The mean age of the sample, which consisted of 144 (56.3%) women and 112 (43.8%) men, was between the ages of 20-40 and was 23 (SD= 0.2065). The Multidimensional Existential Meaning Scale, Short Religiosity Scale, and Satisfaction with Life Scale are utilised in this study. Correlation analysis revealed that there is a positive correlation between religiosity, meaning in life, and satisfaction with life. Furthermore, path analysis showed that meaning in life played a partial mediating role in the effect of religiosity and life satisfaction.

Keywords: *Psychology of Religion, Mental Health, Meaning in life, Existential Meaning, Religiosity, Satisfaction with Life, Structural Equation Modelling.*

Öz

Bu çalışma, dindarlık ile yaşamdan memnuniyet arasındaki ilişkide anlamın yaşamdaki aracı rolünü test etmeyi amaçlamaktadır. Araştırmanın örneklemi, Türkiye'deki iki farklı üniversiteden 256 Müslüman Türk lisans öğrencisinden alınmıştır. Katılımcılar tesadüfi örnekleme tekniği ile seçilmiştir. 144 (%56,3) kadın ve 112 (%43,8) erkekten oluşan ve 20-40 yaş aralığında olan örneklemin yaş ortalaması 23 (SD= 0,2065)'tür. Bu çalışmada Çok Boyutlu Varoluşsal Anlam Ölçeği, Kısa Dindarlık Ölçeği ve Yaşamdan Memnuniyet Ölçeği kullanılmıştır. Korelasyon analizi, dindarlık, hayatın anlamı ve hayattan memnuniyet arasında pozitif bir ilişki olduğunu ortaya koymuştur. Ayrıca, yol analizi, hayattaki anlamın, dindarlık ve hayattan memnuniyetine etkisinde kısmi aracı faktör olarak rol oynadığını göstermiştir.

Anahtar Kelimeler: *Din Psikolojisi, Ruh Sağlığı, Hayatın Anlamı, Varoluşsal Anlam, Dindarlık, Hayat Memnuniyeti, Yapısal Eşitlik Modellemesi.*

Introduction

The relationship between religiosity and mental health is one of the most frequently studied topics in different psychology sub-disciplines, particularly in the psychology of religion and spirituality. Although there is not a long history of interest in the subject, it is possible to say that there is considerable literature about it (Koenig, 2016). In particular, the positive

psychology's highlighting on character strengths and virtues (Peterson - Seligman, 2004) and their role on individual and social health has provided an opportunity to study and explore possible relationships between religion, spirituality and mental health (both positive negative indices of mental health) within psychology and its sub-fields. Findings from numerous studies indicated that religiosity is related to mental health indices in particular satisfaction with life (Abu-Raiya - Ayten, 2020; Khan vd., 2013; Munawar - Tariq, 2018; Perveen vd., 2017). On the other hand studies also showed that religion gives instruments providing meaning especially when individual search meaning in traumatic conditions such as natural disasters, bereavement, accidents (Pargament, 1997; Park, 2005; Park - Folkman, 1997). Therefore, the fact that meaning and purpose sense has positive relations with both religiosity (Francis - Hills, 2008; Krok, 2014; Lewis Hall - Hill, 2019; Park - Yoo, 2016) and mental health (Bahadır, 2011; Çamur, 2014; Homan - Boyatzis, 2010; Krause, 2003; Krok, 2014; Krok, 2018; Park, 2007; Sørensen vd., 2019; Steger - Kashdan, 2013; Steger vd., 2011; Ulu, 2018).

The findings of the many other studies revealed that meaning in life is generally found to be positively correlated with positive indicators of psychological health such as well-being, life satisfaction and happiness (King vd., 2006; Park, 2016; Park vd., 2010; Netzer, 2018; Shrira vd., 2011; Sørensen vd., 2019; Steger - Frazier, 2005; Steger, 2013; Steger vd., 2011). Findings of the numerous studies have brought to mind these questions: How does the relationship between religiosity and mental health emerge? Are there any factors mediating this relationship? If so, what are they? Based on these questions, which constitute the starting point of the study, meaning in life is considered as a potential mediating factor in the relationship between life satisfaction (as a positive index of mental health), and religiosity.

In several research, meaning in life was studied as mediating factor on the link between religiosity and well-being. Chamberlain and Zika (1988), in their study with 188 housewives showed that meaning in life was a mediator on the link between intrinsic religiosity and satisfaction with life. Steger and Frazier (2005), in their study found that meaning in life was the mediating variable on the relationship between religiosity and well-being. In a recent study done by Krok (2014), it was found that personal meaning and presence of meaning appeared as a partial mediator between religiosity and cognitive dimension of well-being (i.e. life satisfaction). In the current study, meaning in life is conceptualised as the sense of understanding about individual's everyday life, finding life objectives, and the sense of being valued (George - Park, 2017). The main objective of this research is to contribute to the current

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literature by providing data from Muslim sample and utilising a different instrument assessing the meaning in life as a multi-dimensional existential level. Meaning, the tool that has been utilised is *The Multidimensional Existential Meaning Scale (MEMS)* which was developed by George & Park (2017). This study also aimed at adopting *MEMS* within Turkish Muslim sample by using explanatory and confirmatory factor analyses. In order to determine the mediating roles of existential meaning and its sub-dimensions, structural equation modeling technique was used. In the current research based upon the aims of study and the findings of previous studies these following hypotheses were constructed:

Hypothesis 1: Religiosity correlates positively with life satisfaction.

Hypothesis 2: Religiosity correlates positively with meaning in life.

Hypothesis 3: Meaning in life correlates positively satisfaction with life

Hypothesis 4: Meaning in life mediates the relationship between religiosity and life satisfaction.

Method

Participants

Data were collected from 256 Muslim undergraduates from two different universities in Turkey. Participants were recruited through random sampling technique. Demographics information was as follows: 56.3% (N= 144) are females and 43,8% (N=112) are males. Their ages ranged from 20 to 40 years with mean age of 23.1 years (SD=0,2065). The income statements of the participants were as follows: 14.5% (N=37) are in the low, 75.8% (N=194) are in the middle, 9.4% (N=24) are in the high income group.

Measures

Demographics. Applicants stated their sex, age, status of their family income.

Meaning in life. Meaning in life was measured by The Multidimensional Existential Meaning Scale (MEMS; George & Park, 2017). The original MEMS was developed by George and Park (2017) to point out conceptual difficulties and vagueness in meaning in life literature. The MEMS which has a tripartite view of meaning consists of a multidimensional structure. Accordingly, the scale consists of three subscales: comprehension (MEMS-C), purpose (MEMS-P) and mattering (MEMS-M). Each item is measured along a 7-point Likert scale, ranging from 1=very strongly disagree to 7=very strongly agree. The

scores acquired as a result of 3 samples were consistent, $\chi^2(87)=216.64$; $p<0.001$, CFI=0.952, RMSEA=0.075, SRMR=0.040 (George - Park, 2017). In the present study, the MEMS translated into Turkish by experts who are fluent in both languages. The items showed a very good internal consistency in the study. It was found that Kaiser-Mayer-Olkin parameter and Bartlett test were enough to show suitability of data for factor analysis [*KMO*= .93; χ^2=2662,44; *p*=000]. Confirmatory factor analysis was applied for the construct validity of the scale, and 13 items were found to be consistent in three dimensions consistent with the original form, χ^2=290,938, SD=86, RMSEA=.097, NFI= .90, CFI=.92, IFI=.92, GFI=.86. Cronbach's α for the entire scale was .93. In detail, Cronbach's α for MEMS-C was .86, for MEMS-P was .92, and for MEMS-M was .80.

Religiosity. Participants completed the Short Religiosity Scale (SRC; Ayten, 2009). The scale entails of two subscales, *ideological (belief)–consequential (effect)* and *intellectual (knowledge)-ritualistic (worship)*. Each item is rated along a five-point Likert scale, ranging from 1 to 5. In that study, the psychometric values of the scale acquired by Ayten (2009) are as follows: Kaiser-Mayer-Olkin parameter was .830, Bartlett's Test of Sphericity score was χ^2=2325.27; *p*=000; Cronbach's alphas in that study was also acceptable (α=.851). In this study, a Cronbach's coefficient (α) of .71 was found for the entire scale.

Satisfaction with life. Participants' life satisfaction was calculated by the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). The SWLS is composed of 5 items. Items on the SWLS include, "My life is close to my ideal", "The conditions of my life are excellent", "I am satisfied with my life", "So far I have gotten the important things I want in life", and "If I could live my life over, I would change almost nothing". Participants were requested to indicate their degree of agreement with each item on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Higher scores on this scale mean a greater sense of life satisfaction. Scale was adopted to Turkish by Ayten (2012). He found that Kaiser-Mayer-Olkin parameter and Bartlett test were enough to show suitability of data for factor analysis [KMO= .81; χ^2=323,367; p=000]. Cronbach's alphas in that study was acceptable, α=.81. In the current study, a Cronbach's coefficient (α) of .85 was found for this scale.

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Procedure

The survey included measures for meaning in life, religiosity, and satisfaction with life, as well as demographic questions such as gender, age, income state, and faculty. The survey form was randomly distributed to undergraduate students, and received by hand. All data of the current study

were collected 4th and 10th March 2019. Missing and incorrectly filled questionnaires were left out of assessment. Finally, 256 questionnaires were analysed. Analysis of Moment Structure 21 (AMOS) was utilized to test study hypotheses and conduct confirmatory factor analysis of MEMS. Descriptive statistics, explanatory factor analysis and bivariate correlations were conducted with the help of Statistical Package for Social Sciences (SPSS), package version 24.

Results

Factor Analyses of the Multidimensional Existential Meaning Scale (MEMS)

In order to determine the instrument's factorial validity for Turkish Muslims, researchers tested whether the three-factor structure of MEMS suggested by George and Park (2017) fits for this sample. The reliability and factorial validity of scale was determined by Explanatory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). The MEMS consists of 3 subscales. Therefore, the items were analysed by using the principal components technique and oblique rotation factor analysis technique in EFA. The Kaiser-Mayer-Olkin (KMO) parameter and Bartlett's test showed data suitability for factor analysis [KMO= .93; χ^2=2662,44; p=000]. As a result of CFA, it was observed that the MEMS consisted of 13 items and 3 sub-scales and it was largely in accord with the original form (except for items 2 and 12). Three factors explained 62% of the total variance. Reliability coefficients were found to be satisfactory for MEMS total and subscales. Cronbach's alpha coefficient for the whole scale was found to be .93, indicating high reliability for the total scale scores. For the subscales, Cronbach's α for MEMS-C was .86, for MEMS-P was .92, and for MEMS-M was .80.

In order to test the internal consistency and accuracy of the scale, the confirmatory factor analysis, which is one of the structural equation models, was performed through the AMOS software. Firstly, researchers examined model fit and standardized regression weights with utilizing maximum likelihood estimation. Standardized factor loadings (i.e., standardized regression weights) indicated that three-factor model of the MEMS was an acceptable and all standardized regression weights were found to be significant (p<.005). Correlation coefficients between subscales revealed that all of the correlations are significant (p<.005).

Table 1. Descriptive Statistics, Reliability Statistics, and Confirmatory Factor Analytic Findings for the Multidimensional Existential Meaning Scale (MEMS)

Scale/Item	M	SD	Corrected Item-Total r	α	Standardized Regression Weights MEMS-C	MEMS-P	MEMS-M
Comprehension (MEMS-C)	5.72	1.28		.86			
Item 1	5.91	1.53	.717		.899	~	
Item 7	5.61	1.36	.715		.795	~	
Item 8	5.32	1.33	.640		.783	~	
Item 10	5.20	1.46	.680		.794	~	
Item 14	4.87	1.50	.640		.701	~	
Purpose (MEMS-P)	5.38	1.15		.92			
Item 3	5.92	1.54	.743		~	.832	
Item 5	5.80	1.42	.715		~	.859	
Item 6	5.67	1.47	.777		~	.902	
Item 9	5.91	1.32	.795		~	.887	
Item 12	5.32	1.55	.754		~	.764	
Mattering (MEMS-M)	5.22	1.24		.80			
Item 2	5.75	1.15	.185		~	~	.163
Item 4	4.83	1.93	.586		~	~	.655
Item 11	4.85	1.77	.644		~	~	.782
Item 13	5.58	1.54	.764		~	~	.834
Item 15	5.09	1.77	.691		~	~	.859
Factor Inter-correlations							
Comprehension (MEMS-C)					~	.789**	.710*
Purpose (MEMS-P)					.789**	~	.709*
Mattering (MEMS-M)					.710*	.709*	~

Model Fit Statistics	
χ^2	290.938
df	86
$\chi^{2/df}$	3.38
GFI	.862
AGFI	.808
NFI	.893
RFI	.870
IFI	.922
TLI	.904
CFI	.922
SRMR	.058
RMSEA	.097

Note: N=256. MEMS-C=Comprehension, MEMS-P=Purpose, MEMS-M=Mattering.
**$p<.001$ *$p<.005$

In the structural equation model based on confirmatory factor analysis, the model fit indices of the subscales are in acceptable range and significant.

For example, chi-square emerged significant (χ^2=290,938, *df*=86, p<.001). Minimum value of the discrepancy function divided by degrees of freedom (chi-square to degrees of freedom ratio) was less than 5 ($\chi^{2/df}$=3.38). Goodness of fit index (GFI) was more than .850 (GFI=862). Normal fit index (NFI) and comparative fit index (CFI) are more than .850 (NFI=893, CFI=922). Also, root mean square error of approximation came out more than .08 (RMSEA=.09), the standardized root mean residual was less than .08 (SRMR=.058). According to Schermelleh-Engel, Mossbrugger & Müller (2003), RMSEA value between 0.08 and 1 is an indication of acceptable goodness and a greater than 1 is an indication of unacceptable goodness. As a consequence, the results of the structural equation model based on confirmatory factor analysis have excellent or acceptable adequacy of fit values.

Means, Standard Deviations, And Bivariate Correlations of the Main Variables of the Study

Table 2 provides the means and standard deviations and correlation coefficients for the study variables. As a predicted, correlation coefficients revealed that religiosity was significantly positively correlated with life satisfaction (*r*=,301; p<.01), MEMS (*r*=,353; p<.01), MEMS-P (*r*=,338; p<.01), MEMS-C (*r*=,297; p<.01) and MEMS-M (*r*=,307; p<.01). Also significant positive correlation is observed between satisfaction with life and MEMS (*r*=,483; p<.01), MEMS-P (*r*=,441; p<.01), MEMS-C (*r*=,473; p<.01) and MEMS-M (*r*=,383; p<.01). As a conclusion, religiosity is related positively with general meaning in life, its all subscales and life satisfaction (p<.01).

Table 2. Correlations among the total scores of the religiosity, existential meaning, purpose, comprehension, mattering, and life satisfaction

Variable	SRC	MEMS	MEMS-P	MEMS-C	MEMS-M	SL
SRC (*M*=4.24; *SD*=,363)	1					
MEMS (*M*=5.44; *SD*=1,09)	,353[**]	1				
MEMS-P (*M*=5,72; *SD*=1,28)	,338[**]	,904[**]	1			
MEMS-C (*M*=5.38; *SD*=1,15)	,297[**]	,904[**]	,760[**]	1		
MEMS-M (*M*=5.22; *SD*=1,24)	,307[**]	,869[**]	,649[**]	,675[**]	1	
SL (*M*=4.26; *SD*=1,33)	,301[**]	,483[**]	,441[**]	,473[**]	,383[**]	1

Note: N=256. SRC= Short Religiosity Scale, MEMS=Multidimensional Existential Meaning Scale, MEMS-P=Purpose, MEMS-C=Comprehension, MEMS-M=Mattering, SL=Satisfaction with Life. [**]p<0.01

Structural Model

In order to estimate the links between the exogenous variable (religiosity), and the endogenous variables (meaning in life and satisfaction with life) structural equation model was utilised. Findings of the structure model designated that the model fit of the data were satisfactory ($x^{2/df}$ = 2.33 ≤ 3; GFI=0.85 ≥ 0.85, CFI=0.86 ≥,0.85; and RMSEA=0.07≤ 0.08).

Findings of structural model analysis indicated that religiosity effected positively on meaning in life (β=.363, p<.001) and satisfaction with life (β=.190, p<.005). The findings also showed that meaning in life effected positively on satisfaction with life (β=.506, p<.001). According to ΔR^2 values religiosity explained 13% of the variance of meaning in life. Furthermore, two variables (religiosity and meaning in life) together explained 36% of the variance of satisfaction with life among Turkish Muslims.
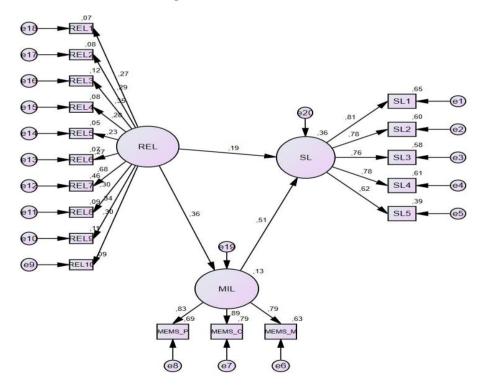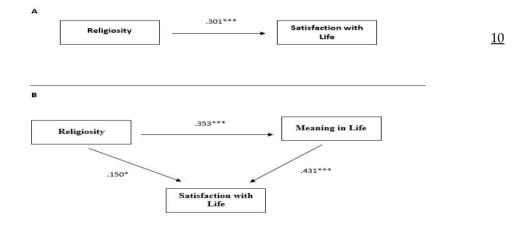
Figure 1. Path model of the relations among religiosity, meaning in life and satisfaction with life. Correlations, factor loadings, path coefficients and squared multiple correlations are shown.

Testing the Mediating Role of Meaning in Life

To evaluate whether the conditions for mediation were met, researchers separately assessed each necessary relation (see Table 2 for correlation coefficients). Satisfying the first requirement of mediation, religiosity was positively related to life satisfaction. Satisfying the second requirement, religiosity was also positively related to meaning in life. Finally, satisfying the third requirement, meaning in life was also positively related to satisfaction with life. In order to investigate the mediating role of meaning in life on the link between religiosity and satisfaction with life path analysis was completed to test the statistical significance of indirect effects (Kline, 2015; Schumacker - Lomax, 2015). The path coefficients from religiosity (β=.30, p<.001) to satisfaction with life was statistically significant in the direct model. Findings of indirect model designated that the path coefficient from religiosity (β=.15, p<.001) to satisfaction with life was condensed, but still significant (p<.05). Thus, meaning in life might be accepted as a mediator on the link between religiosity and satisfaction with life (see Figure 2).

(A) Diagram of a direct effect between religiosity and satisfaction with life. (B) Diagram of a mediation design. (Religiosity is hypothesized to employ an indirect effect on satisfaction with life through meaning in life).
*Note. * p< 0.05; ***p< 0.001*

Figure 2. Findings of Path Analysis for the links among main variables of the study

Discussion and Conclusion

Researchers intended to achieve two main goals in the current study. The first aim was to test the suitability of The Multidimensional Existential Meaning Scale (MEMS) for using with Turkish Muslim sample. On the other hand, the second aim was to analyse the patterns of links between religiosity, meaning in life and satisfaction with life among Turkish Muslim. Furthermore, the current study aimed to contribute and fill the gap that exist in the literature concerning the links between religiosity, meaning and life satisfaction with outside Judeo-Christian samples especially among Muslim samples. Findings from confirmatory factor and reliability analyses of MEMS revealed that all items of the measurement provided their intended measures and that three-factor model of meaning in life seems to show good fit to the data. As a conclusion, utilising of MEMs within Turkish Muslim sample was valid and reliable.

In the study, bivariate correlation coefficients indicated that there were significant correlations between religiosity, meaning in life and satisfaction with life. Furthermore, three sub-scales of MEMS (Purpose, Comprehension, and Mattering) were also positively correlated with religiosity and satisfaction with life (see Table 2). These findings supported hypotheses (H_{1-3}) of the current study that religiosity correlate positively with meaning in life and satisfaction with life, and meaning in life has positive correlation with life satisfaction. Findings from path analysis revealed that meaning in life partially mediated the link between religiosity and satisfaction with life (see Figure 2). These findings of mediation test supported the H_4 study hypothesis that *meaning in life mediates the relationship between religiosity and life satisfaction.*

Previous studies especially with the samples recruited from relatively religious societies indicated that there is a very strong correlation between religiosity and satisfaction with life, and that religiosity is one of the main predictors of the well-being (Ayten, 2013; Gull - Dawood, 2013; Khan vd., 2013; Munawar - Tariq, 2018; Okulicz-Kozaryn, 2010; Perveen vd., 2017; Yeniaras - Akarsu, 2017; Koenig, 2016). Previous studies also showed that religiosity has related positively with meaning and purpose in life (Francis - Hills, 2008; Lewis Hall - Hill, 2019; Krok, 2014; Park - Yoo, 2016). In consistent with previous research the findings of the current study also indicated that religiosity has positively related with life satisfaction and meaning in life. This might be explained religiosity gives to the individual positive coping mechanisms such as positive reappraisal, cognitive control, social support, the notion of spiritual maturity etc. in his dealing with adversities of life, and

motivates individual towards virtues which are basically bringing meaning and purpose in life, positive emotions, acceptance, and wellness such as gratitude, humility, helping and forgiveness etc. These explanations raised that how religiosity provide positive effects on mental health in general and well-being in particular.

The mediating factors of the link between religiosity and satisfaction with life have been studied empirically within both Judeo-Christian and non-Judeo-Christian samples. In this juncture, religious coping (Ayten - Yıldız, 2016; Yıldırım vd., 2021), locus of control (Clark vd., 2018), prosociality (Ayten - Korkmaz, 2020), forgiveness (Abu-Raiya - Ayten, 2020), volunteering (Mollidor vd., 2015), hope (Nell - Rothmann, 2018) and death anxiety (Aghababaei vd., 2016) were studied as mediating factors by numerous researchers from different countries. In the current study researchers attempted to contribute to previous literature by considering existential meaning as a possible mediating factor on the link between religiosity and life satisfaction. In consistent with several existing studies (Krok, 2014; Steger - Frazier, 2005) meaning in life was found as a mediator on the relationship between religiosity and life satisfaction in the present study. Findings of the study contributed to current literature by providing data from Muslim sample and utilising a different instrument assessing meaning in life as a multi-dimensional existential level. That is The Multidimensional Existential Meaning Scale was developed by George & Park (2017) very recently and utilized in a few studies. The findings of the study might be explained in such a way whereby religiosity provides life satisfaction by bringing the sense of coherence and understanding about individual's everyday life, providing life objectives and a sense of being valued for his/her existential being.

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