

## Relationship Between Religiosity and Happiness in Turkey: Are Religious People Happier?

Özlem YORULMAZ

*Istanbul Üniversitesi, İktisat Fakültesi, Ekonometri Bölümü, yorulmaz@istanbul.edu.tr*

### Abstract

Using World Values Survey data, the relationship between happiness and religiosity with the various socio-economic indicators for individuals living in Turkey were examined in the study. The findings of ordinal logit regression suggest that religious individuals are happier than non-religious individuals. Additionally, multiple correspondence analyses were employed to evaluate the relationship between the categories of happiness levels, income levels, marital status, frequency of praying and frequency of attending a religious service. The existence of particular categories ranging from “infrequently attends religious services, unmarried, and not very happy” to “frequently prays, middle income, married, and very happy” were identified.

**Keywords:** Happiness, Religiosity, Multiple Correspondence Analysis, Ordinal Logit Regression.

**JEL Classification Codes:** C13, I30, J12, Z12.

### Türkiye’de Dindarlık ve Mutluluk Arasındaki İlişki: Dindar İnsanlar daha mı Mutlu?

### Öz

Çalışmada Dünya Değerler Araştırması Anket verileri kullanılarak, Türkiye’de yaşayan bireyler için mutluluk ve dindarlık arasındaki ilişki araştırılmıştır. Sıralı logit regresyon bulguları dindar bireylerin, dindar olmayanlara göre daha mutlu olduğu sonucu göstermiştir. Yanı sıra mutluluk düzeyleri, gelir seviyelerine ilişkin düzeyler, medeni hal, dua etme sıklığı ve dini organizasyonlara katılma sıklığı aralarındaki ilişkiyi değerlendirmek için uygulanan çoklu uyum analizi “orta gelir düzeyi- çok mutlular- sık dua edenler-evliler” ve “sıklıkla dini organizasyonlara katılmayanlar-evli olmayanlar-çok mutlu olmayanlar” gibi özel kategorilerin varlığına işaret etmiştir.

**Anahtar Kelimeler:** Dindarlık, Mutluluk, Sıralı Lojit Regresyon, Çoklu Uyum Analizi.

**JEL Sınıflandırma Kodları:** C13, I30, J12, Z12.

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## 1. Introduction

Happiness is a deep sense of flourishing, not a mere pleasurable feeling or fleeting emotion but an optimal state of being. More than external conditions such as standard of living, a healthy life, access to education and information, and ability to travel, which do influence happiness, inner well-being is the determining factor in happiness (Ricard, 2007). The determinants of happiness have been pursued by researchers in various disciplines since it has been realised that the economy, finance, and medicine world benefit from knowledge of happiness.

The positive effect of religion on the inner well-being of individuals was indicated in the studies of Koenig, McCullough, and Larson (2001), and Idler (2009). Numerous studies have addressed the question of whether religious or non-religious individuals are happier, and it has been found that religion promotes happiness because it provides a resource for dealing with negative life experiences and fears, increases social connectedness, and gives individuals a sense of purpose (Routledge 2012). Inglehart and Baker (2000) found that religiosity determines the happiness of a nation and that the development of a nation changes neither its values nor its happiness. Salsman, Brown, Brechting, and Carlson (2005) concluded that the feeling of social support explains the relationship between religiosity and happiness. Koenig, McCullough, and Larson (2001) found the positive impact of religion on happiness because of satisfaction with belonging and the creation of a life purpose. In the study of Ellison (1991), it was found that subjective and private grounds of religiosity decrease the attendance of religious services on well being to an insignificant level. Krause (2005) emphasised that attending religious services may promote sense of belonging and participation with a church friendship enhance life satisfaction. In line with the literature, Kreuger et al. (2009) concluded that highest level of positive emotions is associated with involving religious activity. Okulicz-Kozaryn (2010) defined religiosity under two topics: social religiosity and individual religiosity. Social religiosity corresponds to participating in a religious organisation and spending time with people at a church, mosque, or temple. This type of religiosity satisfies “the need to belong”. In contrast, individual religiosity refers to being religious and believing that religion is important in life. Okulicz-Kozaryn (2010) emphasised that some individuals, such as the poor, old, uneducated, lonely, and ill may benefit more from religiosity in terms of happiness. Routledge (2012) pointed out that religious people are happier than non-religious people; nevertheless, religion does not seem a key variable in explaining happiness itself. He indicated that social connections that are a consequence of religious life activities affect happiness. The causality between happiness and religiosity was investigated in the study of Lim and Purnam (2010) by using survey data collected during 2006 and 2007 from the same respondent groups. They obtained that 28 % of individuals who attended a religious service weekly were ‘extremely satisfied’ compared with 19.6 % of respondents who never attended religious

services in United States and concluded that this satisfaction was related with social networks they build by religious services. Individuals with more than 10 friends in religious congregation were almost twice as happy as individuals with no friends in religious congregation. They emphasised that ‘...in terms of life satisfaction, it is neither faith nor communities, per se, that are important, but communities of faith’.

Alongside the effect of religiosity, the effects of various socio-economic and demographic variables on happiness have been investigated in the literature. In Easterlin’s (1974) seminal paper, it was emphasised that the relationship between wealth and happiness is not simple; he determined that, even when income adjusted for inflation increased, the happiness level did not increase for some countries. Furthermore, it was indicated that people’s happiness varied with their level of income; rich people seemed happier than poor people. However, in a 2001 study, he mentioned that the effects of income on happiness depend on standards that change over time because of individuals’ expectations and social comparisons. In line with of Easterlin (1974), Veenhoven (1991) indicated that people with high income levels had high levels of happiness; additionally, he stated that income does not have effect on happiness after a threshold level. Diener et al. (1995) determined that people in rich countries were happier than those in poorer countries because of stable governments and effective legal systems. Oswald (1997) found that economic development buys a small amount of extra happiness for developed countries. Clark et al. (2007) stated that relative income (with a reference group or past income) has an impact on happiness.

It is expected that education might offer a chance of higher job quality and better marriage prospects, which may have an impact on happiness; some studies have found a positive impact of education on happiness (Castriota 2006, Florida et al. 2010). However, Inglehart and Klingemann (2000) did not find a significant effect of education on happiness. Cunado and De Garcia (2012) found indirect effects of education on happiness through income and labour status, meaning that people with a higher education level have higher income levels and a higher probability of being employed and thus report higher levels of happiness. In their study, they controlled for the effect of income, labour status, and various socio-economic variables and found a direct effect of education; however, they emphasised that the direct impact of education on happiness does not depend on the level of education (primary, secondary, or tertiary).

Blanchflower and Oswald (2008) and Caporale et al. (2009) reported that younger and older people are happier than the middle-aged, and the relationship between age and happiness was defined as U-shaped. However, Myers (2000) stated, “Although many people believe there are unhappy times of life – times of adolescent stress, midlife crisis, or old age decline – repeated surveys across the industrialized world reveal that no time in life is notably happiest and most

satisfying”. Stack and Eshleman (1998) used 17 national surveys and found that married people are happier compared to divorced, widowed, separated, and single ones. They indicated that the improvement of health condition and financial situation might be potential reasons for increased happiness after marriage. Soons and Kaljmin (2009) pointed out that marriage is more than cohabitation and that married individuals are happier than unmarried cohabitators, particularly where cohabitation is not socially accepted.

The effects of various socio-economic and demographic variables on happiness for Turkey in the literature were considered by Selim (2008), Ekici and Koydemir (2013), and Dumludag, Gokdemir, and Giray (2015). Selim (2008) found significant effects of health, income, and employment on happiness using the World Values Survey (WVS) for 1990, 1996, and 2001. According to Ekinçi and Koydemir (2013), the impacts of various indicators that represent satisfaction with government and democracy on well-being were prominent. Their study was based on European Values Survey (ESS) data for 2008 and found that democracy and government satisfaction and trust in institutes positively affect well-being. Dumludağ, Gökdemir, and Giray (2015) found that income comparison and socio-economic variables have an impact on life satisfaction levels in Turkey; their study was based on the Life Satisfaction Survey of the Turkish Statistical Institute (2011).

The aim of the current paper is to analyse the relationship between happiness with religiosity and various socio-economic and demographic variables using data from the WVS for individuals living in Turkey in 2011. In this study, religiosity was evaluated from the perspective of both individual and social concepts as defined by Okulicz-Kozaryn (2010) by means of ordinal logit regression and multiple correspondence analyses. To the best of our knowledge, this is the first study that has examined the effect of religiosity on happiness for Turkey and sought for particular categories by way of multiple correspondence analyses.

The paper is organised as follows. Section 2 outlines the data and method. Section 3 reports the findings, and Section 4 contains conclusions.

## **2. Data and Method**

The data used in the empirical study are drawn from sixth wave of the WVS database. The WVS consists of nationally representative surveys conducted in around 100 countries; the last survey for Turkey took place in 2011. The survey involved 1,605 individuals age 18 or above who were residents of private households regardless of language, citizenship, or legal status and was based on multi-stage probability sampling. Respondents were selected randomly through a three-stage sampling approach. In stage one, 134 blocs with 300 household addresses in each bloc were drawn. In the next stage, a fixed number of households were selected randomly from the list of 300 addresses, and in the third

stage, within the households, the individuals to be interviewed were selected with a Kish grid.

Alongside the effect of religiosity on happiness, the effects of marital status, education level, gender, age, and income level were investigated here. Happiness was evaluated using the following question: “Taking all things together, would you say you are ... (V1)”. The answers were defined on a four-item scale [very happy (1), rather happy (2), not very happy (3), not at all happy (4)].

For the evaluation of religiosity, we focused on the answers to four questions separately:

-“How important is religion in your life (V2)?” The answers were given in a four-item scale [very important (1), rather important (2), not very important (3), not at all important (4)].

-“How often do you pray (V3)?” The answers were defined using an eight-item scale [several times a day (1), once a day (2), several times each week (3), only when attending religious services (4), only on special holy days (5), once a year (6), less often than once a year (7), never (8)].

-“How often do you attend religious services (V4)?” The responses were grouped in a seven-item scale [more than once a week (1), once a week (2), once a month (3), only on special holy days (4), once a year (5), less often (6), never (7)].

-“Are you a religious person (V5)?” The responses were defined in a three-scale [a religious person (1), not a religious person (2), an atheist (3)].

Instead of using age values in years, we categorised age into three levels (V6): “18-34 (1)”, “35-54 (2)”, “55 or above (3)”. Income levels (V7) are interpreted with the answers on the income scale that respondents think their household belongs to on a ten-item scale: “Lowest group (1),..., highest group (10). Gender (V8) takes the value of “0” if the respondent is male and “1” if the respondent is female (2). The representation of marital status (V9) is divided into three categories: married (1), living together (2), and otherwise (3). The investigation of the effect of education level (V10) is based on the question “What is the highest education level that you have attained?” The responses are defined on a nine-item scale [no formal education (1),..., university with degree (9)].

To evaluate the relationship between happiness and the aforementioned variables, ordinal logistic regression and multiple correspondence analysis were employed in the study. Brief descriptions of the analyses are given below:

### *Ordinal Logistic Regression*

Ordinal logistic regression is employed to model relationships between the response variable with ordered categories and independent variables, which can be discrete or continuous. The cumulative logit model is defined as follows, where  $J$  is the total number of response categories and the parameters depend on the category  $j$ :

$$\log \frac{\pi_1 + \pi_2 + \dots + \pi_j}{\pi_{j+1} + \dots + \pi_J} = \beta_{0j} + \beta_{1j}x_{1j} + \dots + \beta_{pj}x_{pj} \quad (1)$$

Parameters are estimated by the maximum likelihood estimation method. The effects of independent variables on the dependent variable are defined as probabilities, and odds ratios are described to evaluate the effects of variables. To interpret the goodness of fit, the Pearson chi-square statistic or deviance is used.

### *Correspondence Analysis*

Correspondence analysis provides a statistical visualisation of the pattern of the associations between the levels of categorical variables. In this respect, correspondence analysis can be considered similar to factor analysis, which explores the structure of variables. The steps of correspondence analysis can be summarised very briefly as follows: standardisation of frequencies in a cross-tabulation table, and the representation of entries in the table of relative frequencies in terms of the distances between individual rows and/or columns in a low-dimensional space (Dell, 2015). Various algorithms have been defined in the literature for correspondence analysis; here, joint correspondence analysis is employed.

## **3. Findings**

Firstly, the associations between happiness and religiosity, age, gender, education level, marital status, and income level were investigated using the chi-square and permutation based chi-square independency tests. As can be seen from the cross-tabulations in Appendix I, some of the cells are below 5 and permutation based chi-square test was used as an alternative to Fisher's Exact test (Lombardo, 2014). Test scores are presented in Table 1; as shown, the independency hypothesis of happiness and variables of gender (V8), education level (V10), and age (V6) were not rejected. However, marital status, income level, and variables that represent the level of religiosity are dependent with happiness.

Considering the three significant associations with happiness [religiosity (V2-V3-V4-V5), income level (V7), and marital status (V9)], ordinal logistic regression analysis was employed. Table 2 presents the findings of the ordinal logistic regression; the likelihood ratio chi-square of 67.32 with a p-value of 0.000 indicates that the model is significant. In line with the findings of the chi-square

independency tests, each of the three variables<sup>1</sup> is significant. The ordered logit for praying once a day having a higher level of happiness (i.e., not all happy) is 0.33 less than praying several times a day when the other variables are held constant. The odds ratio can be interpreted as showing that, for praying once a day category, the odds of having high happiness versus total of other happiness categories are 1.38 times greater than praying several times a category. For being married, the odds of high happiness versus combined remaining categories are 0.67 times lower than unmarried. The ordered logit for the second level of income having higher level of happiness is 0.972 less than the lowest income. For the second level of income, the odds of high happiness versus total of other happiness categories are 0.379 times lower than the lowest level. As can be seen from Table 2 the odds ratios increase until the seventh level of income. Contrary to expected, odds ratios start to decrease with the seventh level of income.

Predicted probabilities (Table 3) are easier to evaluate than the odds ratios or coefficients. For the “very happy” category of happiness, the predicted probability of being in the lowest category of variable V3, praying several times a day, is 0.43, whereas that of being in the highest category of the praying variable (never pray) is 0.22. For the “unhappy” category of happiness, as expected, the likelihood of being in the “never praying” category is higher, 0.078, whereas that of being in the category of “praying several times a day” is 0.030. Regarding the predicted probabilities of marital status, being in the unmarried category is 0.05, whereas being in the married category<sup>2</sup> is 0.03. However, for the very happy category of happiness, the predicted probabilities of being in the married and unmarried categories are 0.4 and 0.3, respectively. Considering the very happy category of happiness again, the findings indicate that the likelihood of being in the lowest income group is 0.27, whereas that of being in the highest income level is 0.50.

Overall, the results indicate that increasing income and praying frequency obviously increase happiness and that married people are happier than unmarried people in Turkey.

In the last stage of the evaluation of the relationship between happiness and religiosity, income level, and marital status, correspondence analysis was considered to provide insights. Four religiosity variables were considered. The religiosity variables in Figures 1, 2, 3, and 4 refer to importance of religion in an individual’s life (V2), praying frequency (V3), frequency of attending religious services (V4), and being religious (V5). The first two plots can be considered a

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<sup>1</sup> For the evaluation of religiosity, four variables related to religiosity (V2-V5) were considered in four different logit models. Since the significance of coefficients and their signs were similar, we present only the ordinal logit model with “how often do you pray (V3)?”

<sup>2</sup> Corresponds to married and living together; since the number of respondents for “living together” is 10, we included this category in the married category.

representation of individual religiosity. The third plot represents the social religiosity concept. Figure 1 indicates a striking category that consists of individuals “believing religion is very important, married, and belonging to the income level of 3-4-5 steps”. Similarly, points that correspond to “praying several times a day, married, and belonging the income level of 5-6-7 steps” are in the same category as in Figure 2. There are two categories in Figure 3: the first category consists of individuals “infrequently attending a religious service and unmarried”, and the second category is “rather happy, married, having middle income and attending religious services once a month”. Figure 4 reveals a category that consists of “religious, very happy, married, and having income level of middle to high”. Considering Figures 1-4, it is evident that being atheist, praying infrequently, being unmarried and having a lower income correspond to lower reported happiness levels. Furthermore, individuals who were married and prayed more frequently reported higher levels of happiness. Another striking difference between the plots is the position of the category of the highest level of income; in Figure 1 and Figure 2, it is far away from being very happy and frequently praying and frequently attending religious services. Furthermore, in line with the emphasis of Routledge (2012), individuals with lower incomes pray more frequently.

**Table 1: Independency Tests Between Happiness, Religiosity, and Socio-Economic Indicators**

Happiness	Chi-square	df.+	Sig.	Chi.perm. Sig.++
How important is religion in your life? -V2	71,11	9	0,00*	0,000*
How often do you pray?-V3	61,16	21	0,00*	0,000*
How often do you attend religious services?-V4	32,8	18	0,02*	0,000*
Are you a religious person?- V5	27,27	6	0,00*	0,000*
Age- V6	10,49	6	0,11	-
Income levels-V7	85,24	27	0,00*	0,000*
Gender-V8	4,94	3	0,18	-
Marital Status-V9	24,6	3	0,00*	-
Education level-V10	32,2	24	0,12	0,090

\* represents significance at 5% level, + Degrees of freedom, ++ Permutation based Chi-square test



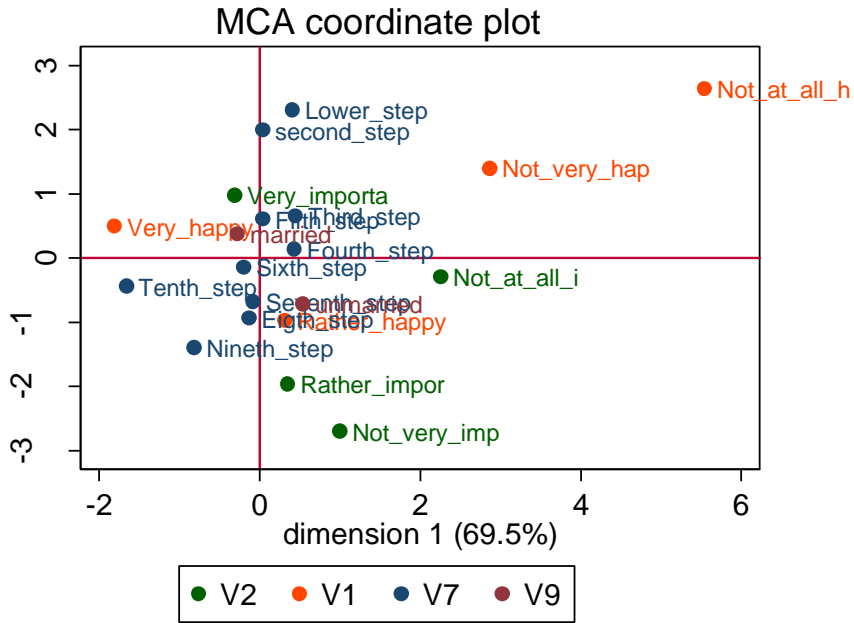
**Table 2: Parameter Estimates of Ordinal Logistic Regression**

<b>Happiness</b>	<b>Coef.</b>	<b>Std.Err.</b>	<b>Sig.</b>	<b>Odds Ratio</b>
<b>How often do you pray ?-V2</b>				
Once a day	0.327	0.147	0.026*	1.386
Several times each week	0.464	0.135	0.001**	1.59
Only on special holy days	0.781	0.271	0.004**	2.184
Once a year	0.844	0.178	0**	2.461
Less often than once a year	0.901	0.438	0.04*	2.701
Never, practically never	0.994	0.424	0.02*	2.619
<b>Marital status- V9</b>				
Married	-0.401	0.105	0**	0.669
<b>Income levels- V7</b>				
Second step	-0.972	0.481	0.04*	0.379
Third step	-0.713	0.361	0.04*	0.471
Fourth step	-0.671	0.344	0.04*	0.513
Fifth step	-0.626	0.311	0.03*	0.536
Sixth step	-0.613	0.285	0.03*	0.542
Seventh step	-0.728	0.317	0.03*	0.483
Eight step	-1.071	0.405	0.008**	0.342
Ninth step	-1.382	0.415	0.001**	0.251

\*,\*\* Refer the significance at 5% level and 1%, respectively. The reference category for frequency of praying is 'several times a day', for marital status 'unmarried', for income level "the lowest income".

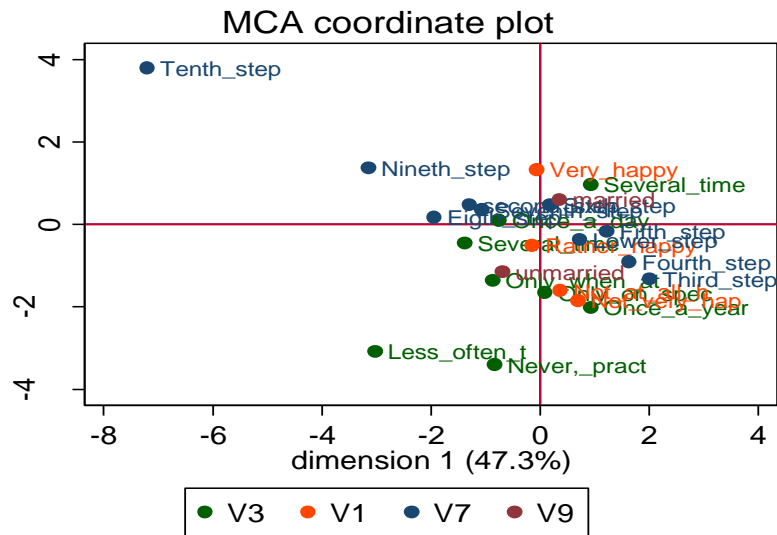
**Table 3: Predicted Probabilities of Categorical Variables**

	<b>V1="very happy"</b>				<b>V1="not at all happy"</b>			
	categories	Margin	Std. Err.	Sig	categories	Margin	Std. Err.	Sig
<b>How often do you pray? - V3</b>	1.000	0.426	0.015	0.000	1.000	0.030	0.004	0.000
	2.000	0.392	0.013	0.000	2.000	0.035	0.004	0.000
	3.000	0.359	0.012	0.000	3.000	0.040	0.005	0.000
	4.000	0.330	0.015	0.000	4.000	0.046	0.006	0.000
	5.000	0.290	0.017	0.000	5.000	0.053	0.007	0.000
	6.000	0.270	0.021	0.000	6.000	0.060	0.008	0.000
	7.000	0.230	0.024	0.000	7.000	0.068	0.010	0.000
	8.000	0.240	0.026	0.000	8.000	0.065	0.013	0.000
<b>Marital Status V9</b>	1.000	0.412	0.014	0.000	1.000	0.033	0.004	0.000
	2.000	0.320	0.018	0.000	2.000	0.049	0.006	0.000
<b>Income Level V7</b>	1.000	0.187	0.024	0.000	1.000	0.082	0.009	0.000
	2.000	0.278	0.021	0.000	2.000	0.032	0.008	0.000
	3.000	0.298	0.176	0.000	3.000	0.045	0.007	0.000
	4.000	0.285	0.145	0.000	4.000	0.048	0.006	0.000
	5.000	0.345	0.012	0.000	5.000	0.037	0.006	0.000
	6.000	0.359	0.012	0.000	6.000	0.035	0.005	0.000
	7.000	0.418	0.014	0.000	7.000	0.029	0.004	0.000
	8.000	0.478	0.015	0.000	8.000	0.022	0.004	0.000
	9.000	0.547	0.023	0.000	9.000	0.017	0.004	0.000



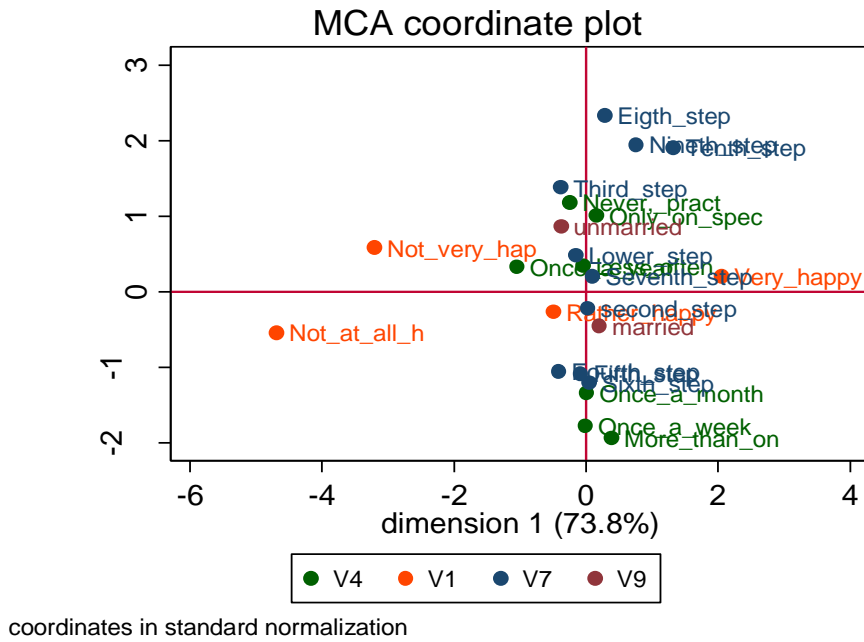
coordinates in standard normalization

**Figure 1: MCA Plot based on V2**

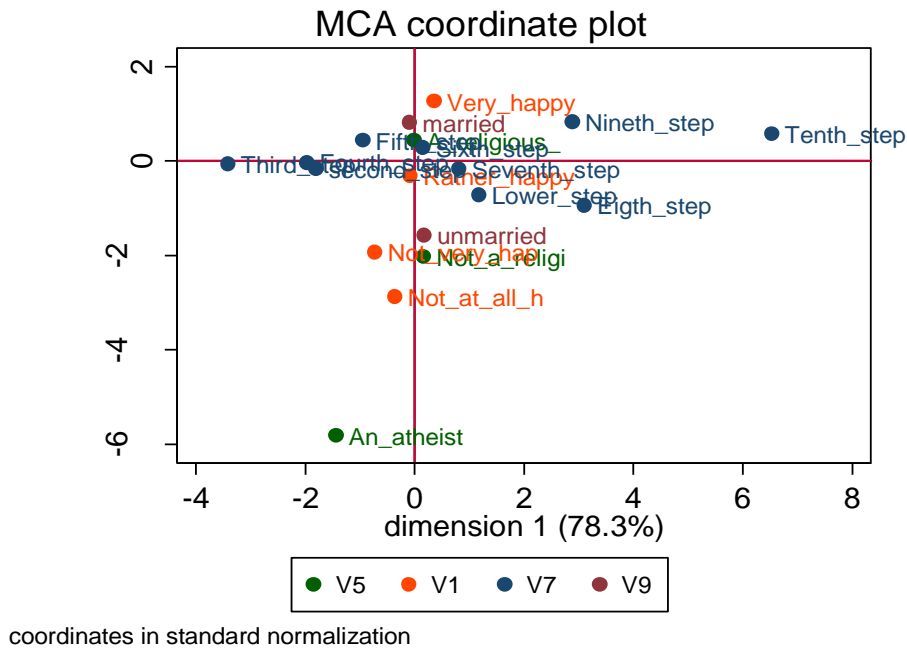


coordinates in standard normalization

**Figure 2: MCA Plot based on V3**



**Figure 3: MCA Plot based on V4**



**Figure 4: MCA Plot based on V5**

#### 4. Conclusion

Recent studies have indicated that religiosity has a positive impact on the happiness of individuals for the reasons of dealing with negative experiences and fears, having a sense of purpose, and satisfying the need to belong. The affect of religiosity on happiness has been explained, particularly with regard to the dimensions of social networks or spirituality in the literature.

The present study investigates the impact of religiosity on happiness among people living in Turkey by using the 2011 WVS dataset. The concept of religiosity is evaluated by taking into account different indicators, such as “frequency of praying”, “frequency of attending religious services”, “importance of religion in individual’s life”, and “being religious or not”. In the study, effects of various socio-economic variables are examined as well. The associations between age, gender, marital status, income and education level with happiness were investigated using the chi-square independency test in the first stage of the analysis. According to the findings of independency tests, marital status and income levels were found significant in explaining happiness. The relationship between the categories of happiness and those of the aforementioned significant variables were evaluated by employing the ordinal logit regression model and correspondence analysis.

In line with the previous studies, the findings reveal that increasing income and praying frequency definitely increase happiness and that married people are happier than unmarried people in Turkey. Religiosity was considered from the perspective of both individual and social concepts as defined by Okulicz-Kozaryn (2010) by taking into account “frequency of praying”, “frequency of attending religious services”, “importance of religion in individual’s life”, and “being religious or not”. Findings of multiple correspondence analysis display that there are two notable categories of individuals: “middle income, married, frequently praying, and very happy” and “infrequently attending religious services, unmarried, and not very happy”. Nevertheless, marriage and having higher income levels have a positive effect on individuals, as well. However, individuals in the highest income level cannot be categorised in the very happy category.

To the best of our knowledge, the relationship between happiness and religiosity has not been studied before for individuals living in Turkey. Due to data limitations, the present study does not yield insights about causality. Future studies might investigate the causality between religiosity and happiness by considering a survey which is designed to follow the same respondents in consecutive years.

## Appendices

### Appendix 1:

Feeling of happiness	Age			Total
	1	2	3	
Very happy	266	238	108	612
Rather happy	368	278	99	745
Not very happy	86	63	37	186
Not at all happy	28	26	8	62
Total	748	605	252	1,605

Feeling of happiness	Sex		Total
	Male	Female	
Very happy	290	322	612
Rather happy	380	365	745
Not very happy	79	107	186
Not at all happy	31	31	62
Total	780	825	1,605

Highest educational level attained	Feeling of happiness				Total
	Very happ	Rather ha	Not very	Not at al	
No formal education	42	32	13	4	91
Incomplete primary sc	20	31	9	3	63
Complete primary scho	180	199	56	11	446
Incomplete secondary	24	13	5	3	45
Complete secondary sc	46	70	14	6	136
Incomplete secondary	13	22	8	2	45
Complete secondary sc	161	243	46	18	468
Some university-level	24	34	12	4	74
University - level ed	102	101	23	11	237
Total	612	745	186	62	1,605

Marital status	Feeling of happiness				Total
	Very happ	Rather ha	Not very	Not at al	
Married	436	466	111	30	1,043
Living together as ma	5	4	1	1	11
Divorced	14	21	7	4	46
Separated	0	3	2	3	8
Widowed	19	34	6	3	62
Single	138	217	59	21	435
Total	612	745	186	62	1,605

RECODE of V57 (Marital status)	Feeling of happiness				Total
	Very happ	Rather ha	Not very	Not at al	
married	441	470	112	31	1,054
unmarried	171	275	74	31	551
Total	612	745	186	62	1,605

Important in life: Religion	Feeling of happiness				Total
	Very happ	Rather ha	Not very	Not at al	
Very important	464	439	118	38	1,059
Rather important	127	236	48	14	425
Not very important	13	45	10	2	70
Not at all important	8	25	10	8	51
Total	612	745	186	62	1,605

How often to you pray	Feeling of happiness				Total
	Very happ	Rather ha	Not very	Not at al	
Several times a day	348	318	81	27	774
Once a day	93	108	24	10	235
Several times each we	97	156	27	12	292
Only when attending r	15	28	12	1	56
Only on special holy	35	76	21	8	140
Once a year	3	12	4	0	19
Less often than once	3	15	3	0	21
Never, practically ne	18	32	14	4	68
Total	612	745	186	62	1,605

How often do you attend religious services	Feeling of happiness				Total
	Very happ	Rather ha	Not very	Not at al	
More than once a week	95	98	16	7	216
Once a week	105	148	26	14	293
Once a month	22	33	7	1	63
Only on special holy	197	212	53	14	476
Once a year	9	21	6	5	41
Less often	34	42	10	4	90
Never, practically ne	150	191	68	17	426
Total	612	745	186	62	1,605

Religious person	Feeling of happiness				Total
	Very happ	Rather ha	Not very	Not at al	
A religious person	544	613	141	46	1,344
Not a religious perso	65	125	41	15	246
An atheist	3	7	4	1	15
Total	612	745	186	62	1,605

Scale of incomes	Feeling of happiness				Total
	Very happ	Rather ha	Not very	Not at al	
Lower step	30	18	9	7	64
second step	19	17	7	2	45
Third step	40	59	26	3	128
Fourth step	71	113	36	12	232
Fifth step	112	138	38	14	302
Sixth step	95	139	23	9	266
Seventh step	105	139	24	9	277
Eighth step	86	76	20	5	187
Nineth step	46	42	3	1	92
Tenth step	8	4	0	0	12
Total	612	745	186	62	1,605



## References

- Blanchflower, D.G., & Oswald, A. J. (2008). Is Well-Being U-Shaped over the Life Cycle?. *Social Science & Medicine*, 66(8), 1733-1749.
- Caporale, G.M., Georgellis, Y., Tsitsianis, N. & Ping, Y.Y. (2009). Income and Happiness across EUROPE: Do Reference Values Matter?., *Journal of Economic Psychology* 30, 42-51.
- Castriota, S. (2006) *Education and Happiness: a Further Explanation to the Easterlin Paradox?* Departmental Working Paper No.246, Tor Vergata University, CEIS.
- Clark, Andrew E., Frijters, P. & Michael A. Shields. (2008). Relative Income, Happiness, and Utility: An Explanation for the Easterlin Paradox and Other Puzzles. *Journal of Economic Literature*, 46(1), 95-144.
- Cunado J., & de Gracia F. P. (2011) Does Education Affect Happiness? Evidence for Spain. *Social Indicators Research*, 108(1), 185-196.
- Dell Statistics Textbook, *Correspondence Analysis*, 2015, <http://documents.software.dell.com/Statistics/Textbook/Correspondence-Analysis> (Available Date: 14.04.2016)
- Diener, E., Diener, M., & Diener, C. (1995) Factors Predicting the Subjective Well-Being of Nations. *Journal of Personality and Social Psychology*, 69(5), 851-864.
- Dumludağ, D., Gökdemir, Ö., & Giray, S. (2015). Income Comparison, Collectivism and Life Satisfaction in Turkey. *Quality & Quantity*. DOI 10.1007/s11135-015-0185-1
- Easterlin, R. (2001), Income and Happiness: Towards a Unified Theory. *The Economic Journal*, 111(473), 465-484.
- Easterlin, R. (1974). *Does Economic Growth Improve the Human Lot?* In: David, Paul A., Reder, Melvin W. (eds.) Nations and Households in Economic Growth: Essays in Honor of Moses Abramovitz. New York: Academic Press Inc.
- Ellison C.H. (1991). Religious Involvement and Subjective Wellbeing. *Journal of Health and Social Behaviour*, 32, 80-99.
- Florida, R., Mellander, C., & Rentfow, P.J. (2010). *The Happiness of Cities*, Working Paper Series – Martin Prosperity Research.
- Idler, E. (2009). *Health and Religion*, in *The New Blackwell Companion to Medical Sociology*, edited by William Cockerham, (pp. 133–59). New York: John Wiley and Sons.
- Inglehart, R., & Baker, W.E. (2000). Modernization, Cultural Change, and the Persistence of Traditional Values. *American Sociological Review*, 65(1), 19-51.

- Koenig, H.G., McCullough, M.E., & Larson, D.B. (2001). *Handbook of Religion and Health*. New York: Oxford University Press.
- Krause N., & Wulff, K.M. (2005). Church-Based Social Ties, a Sense of Belonging in a Congregation, and Physical Health Status. *International Journal for the Psychology of Religion*, 15, 73-93.
- Krueger A. B., Kahneman D., Schkade D., Schwarz N., & Stone A. (2009). *National Time Accounting: The Currency of Life in Measuring the Subjective Well-Being of Nations: National Accounts of Time Use and Well-Being*, Chicago, University of Chicago Press: 9-86.
- Lim C., & Putnam R.D. (2010). Religion, Social Networks, and Life Satisfaction. *American Sociological Review*, 75(6), 914–933.
- Lombardo R. (2014), *Correspondence Analysis: Theory, Practice and New Strategies*, Chichester: Wiley.
- Myers D.G. (2000). The Funds, Friends, and Faith of Happy People. *American Psychologist*, 55(1), 56-67.
- Okulicz-Kozaryn, A. (2010). Religiosity and life satisfaction across nations, *Mental Health, Religion & Culture*, 13(2), 155-169.
- Oswald, A.J. (1997). Happiness and Economic Performance. *Economic Journal* 107, 1815-1831.
- Ricard M. (2007). *Happiness: A guide to Developing Life's Most Important Skill*, New York: L&B.
- Routledge, C. 2012, *Are Religious People Happier Than Non-religious People?* <https://www.psychologytoday.com/blog/more-mortal/201212/are-religious-people-happier-non-religious-people> (Available Date: 14.04.2016)
- Salsman, J.M., Brown, T.L., Brechting, E.H., & Carlson, C.R. (2005). The Link between Religion and Spirituality and Psychological Adjustment: The Mediating Role of Optimism and Social Support. *Personality and Social Psychology Bulletin*, 31, 522–535.
- Selim, S. (2008). Life Satisfaction and Happiness in Turkey. *Social Indicators Research*, 88(3), 531–562
- Soons J.P., & Kalmijn, M. (2009). Is Marriage more than Cohabitation? Well-Being Differences in 30 European Countries. *Journal of Marriage and the Family*, 71(5), 1141–1157.
- Stack S., & Eshleman J.R. (1998). Marital Status and Happiness: A 17-Nation Study. *Journal of Marriage and the Family*, 60(2), 527–536.
- Veenhoven, R. (1991). Is Happiness Relative?, *Social Indicators Research*. 24, 1-34.
- World Values Survey,  
<http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp> (Available Date: 14.04.2016)