RELIGIOSITY AND TOLERANCE IN MENA COUNTRIES: A MULTILEVEL ANALYSIS

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ABSTRACT

Tolerance is an awareness of the diversity of race, religion, language, life styles, choices, and values and accepting these natural diversities of human beings. The concept of tolerance is an essential component of modern society and democracy. The present study investigates the effects of religiosity and various socioeconomic variables on nine different tolerance topics for Middle Eastern and Northern African (MENA) countries using the latest Worlds Values Survey (WVS) database. A polychoric principal component analysis was employed on tolerance variables to reduce dimensionality. Using two deduced tolerance components, a multilevel analysis was performed. The findings reveal that religiosity has a negative effect on social tolerance; however, it has no convincing effect on racial and religious tolerance. In contrast, the education level of an individual has no effect on social tolerance, while education has a positive effect on racial and religious tolerance.

Keywords: Polychoric principal components, tetrachoric correlation, multilevel analysis, tolerance, religiosity

1. Introduction

A modern society comprises individuals who have different cultural backgrounds, adopt different lifestyles, and espouse different religious, moral, and political beliefs, and tolerance is accepted as a core psychological underpinning of democracy (Lee, 2014). Tolerance has an important role to provide social stability and harmony (Ho and Chan, 2009); it is a necessity of social evolvement and a healthy and liveable society. Tolerance is respect, acceptance, and appreciation of the rich diversity of our world's cultures, ways of being, universal human rights, and fundamental freedoms of others (UNESCO, 2003).

Tolerance is neither built into our behaviour, in the way that physiological needs like hunger and thirst are, nor a universal value practised by everyone. As the basis of democratic culture, in which truth is relative and differences are legitimate, tolerance is incompatible with totalitarian regimes, which advocate a single belief system. And yet, in a world that aspires to peace and where democracy is on the rise, it is still not a universal fact. On the contrary, we are witnessing a strong resurgence of racism, xenophobia, extreme forms of nationalism, religious fanaticism, and all kinds of social exclusion and discrimination(UNESCO, 1997).

The determinants of tolerance are classified into four groups by Hazama (2011), namely authoritarianism, contact, competition, and education. In the study of Hazama (2011), authoritarianism was defined as an important characteristic embedded in the individual who is inclined to intolerance and prejudice. Stenner (2005) emphasised that racial, social, and political intolerances arise from authoritarianism. The effect of the 'contact' concept has been considered in a limited number of studies, one of these studies belongs to Persell, Green, and Gurevich (2001). They proposed that intra-community socialisation has a minor negative effect on tolerance, whereas inter-correlation socialisation has a positive effect on tolerance. The effect of competition was exemplified by Hazama (2011) considering competition over scarce resources between the majority and minorities and the intolerance of the majority to minorities. The effect of education has been widely considered in the studies of tolerance. Generally, the positive effect of education has been emphasised. Coenders and Scheepers (2003) argued that education reduces ethnic prejudice and promotes awareness of universal values. Similarly, Chzhen (2013) found that educational attainment has a positive effect on the higher levels of tolerance towards out-groups.

Lee (2014) defined social and political tolerance in his study. Social tolerance is related to people's willingness to accept disliked others in their daily lives; however, political tolerance is related to people's willingness to extend citizen rights and liberties to members of disliked groups. In the study by Nevitte and Cohrane (2006), social tolerance is defined as moral tolerance indicating how well individuals accept different lifestyles and behaviours (homosexuality, abortion, divorce, etc.). It was emphasised that social tolerance is related to religion. Verbakel and Jaspers (2010) mentioned that religion has shaped the identities and cultures of societies, and particularly, religious people are influenced by their religious ancestors. Religion is a predominant component of social tolerance since religion determines how an individual thinks and lives. Religious people adopt the values of their religion, and religious values are usually intolerant; therefore, social tolerance is negatively affected (Vermeer, 2012). Karpov (2002) found that intolerance is primarily associated with theocratic orientations in both Poland and the United States. Spierings (2014) evaluated the relationship between orthodoxy and Muslim attitudes in MENA countries and concluded that religious attitudes have no convincing effect on political tolerance. In the study of Siegel (2015), the relationship between security and religious tolerance was examined for a subset of MENA countries and concluded that an individual's sense of security decreases his/her tolerance to others.

The present study aims to investigate the relationship between tolerance and religiosity in MENA countries using the latest WVS. Tolerance has been evaluated in consideration of nine diversity topics; language, religion, race, immigration, addiction to alcohol, addiction to drugs drugs, homosexuality, suffering from AIDS, and living together without marriage. Employing polychoric principal component analysis, the number of tolerance indicators are reduced to two components. Using these obtained components, the effects of religiosity, social status, education level, age, and marital status has been studied using multilevel analysis.

To the best of our knowledge, previous studies have not considered tolerance in such extensive topics, and the effects of religiosity and various socioeconomic variables on tolerance for MENA countries have not previously been studied.

2 Data, Method, and Findings

This study aimed to investigate the effects of religiosity and several socioeconomic variables on various tolerance variables using data sourced from the sixth WVS (2010-2014) for MENA countries. The WVS surveys are conducted face-to-face with individuals aged over 18. Quota sampling was employed by local research groups in each country, first classifying their country into regions and then randomly selecting respondents within the regions, adjusting for gender and ethnic representativeness. The number of respondents exceeds 1,000 in each country. Data from 17 MENA countries[1] were considered variables for the purposes of analysis including:

- Religiosity. Religiosity was evaluated using the following question: 'Are you a religious person'? The responses were defined in a three-point scale [a religious person (1), not a religious person (2), an atheist (3)].
- Age. Age values were categorised into three levels: 18–34 (1), 35–54 (2), or 55 or above (3).
- Social class. Individuals described themselves as belonging to the 'Upper class (1)', 'Upper middle class (2)', 'Lower middle class (3)', 'Working class (4)' or 'Lower class (5)'.
- Marital status. It is divided into two categories: married and living together (1) and otherwise (2).
- Education level. The investigation of the effect of education level is based on the question 'What is the highest education level that you have attained'? The responses are defined on a nine-item scale [from no formal education (1) to university with degree (9)].
- Tolerance of diversity. This concept is evaluated by a question that investigates the willingness of respondents to live as neighbours of people who are of a different race (T1), of a different religion (T2), immigrants (T3), drug users (T4), heavy drinkers (T5), sufferers of AIDS (T6), homosexuals (T7), unmarried couples living together (T8), and those who speak different languages (T9). The answers were evaluated on a two-item scale, as mentioned (1) and not mentioned (2), for the nine aforementioned diversities.

Initially, correlations between the nine aforementioned tolerance indicators are evaluated through a tetrachoric correlation coefficient. The tetrachoric correlation coefficient is used to estimate correlation between two dichotomous variables, which are displayed in Table 1. In the table, there are strong correlation coefficients between the variables, T1, T2, T3, T9 and T4, T5, T6, T7, T8.

To facilitate evaluating the tolerance variables, polychoric principal components analysis was employed. As is known, multivariate normality is one of the assumption of principal component analysis and is best

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[1] The 17 MENA countries and the years of conducted surveys are listed in Appendix-I.

employed with continues data. Kolenikow and Angeles (2009) proposed several procedures in the case of discrete data. Their approach is based on polychoric correlation matrix with pairwise deletion.

Table 1 Tetrachoric Correlation Coefficients between Tolerance Variables.

	T4	T1	T6	T3	T7	T2	T5	T8	T9
T4	1								
T1	-0.0517	1							
T6	0.6188	0.31248	1						
T3	0.1067	0.57604	0.28707	1					
T7	0.6347	0.12413	0.5776	0.16787	1				
T2	0.0879	0.6014	0.30723	0.48632	0.21452	1			
T5	0.7879	0.09845	0.6017	0.15885	0.60661	0.21165	1		
T8	0.5432	0.2049	0.4639	0.2478	0.5728	0.32056	0.58034	1	
T9	-0.0626	0.6486	0.28836	0.54916	0.1324	0.6338	0.0754	0.28205	1

Employing polychoric principal components analysis, it was found that the first two components contain 96% of the variation of the nine variables. The first component explains 62%, and the second component explains 34% of the variation. The first component (PC1) is strongly related to T4, T5, T6, T7, and T8, which means that these variables vary together. This principal component is primarily related to the addiction to drugs and alcohol, being a sufferer of AIDS, homosexuality, and living together without marriage. The other component (PC2) primarily corresponds to diversity of language, race, and religion. When we look closer at the tolerance variables that are related to PC1, they correspond to moral tolerance, which was defined in the study of Nevitte and Cohrane (2006). However, PC2 is related to racial and religious tolerance.

Table 2 Polychoric Principal Component Loadings.

	PC1	PC2
T1	0.4611	0.6321
T2	0.3154	0.5897
T3	0.3784	0.4728
T9	0.4936	0.64
T4	0.6911	-0.5538
T5	0.7334	-0.4215
T6	0.7392	-0.1412
T7	0.6685	-0.3142
T8	0.6532	-0.1511

Multilevel analysis was employed on the data in the present study to evaluate the effects of religiosity and several socioeconomic variables on new tolerance variables, PC1 and PC2. Multilevel analysis explains the hierarchical structure of a dataset. The existence of such data hierarchies is neither accidental nor ignorable (Goldstein, 1999). Ignoring data hierarchies means not considering the independency assumption of statistical analysis, which may invalidate the estimates of variance and therefore the significance of estimations. The multilevel regression estimates based on the dependent variables, PC1 and PC2, are summarised in Tables 3 and 4, respectively. The magnitudes of the variance components in the null models (not presented here) and *p* values (0.000) of the chi-squared test statistics are derived from the variance of the 'level 2' intercept of each model, confirming the necessity of the multilevel models. Intra-class correlation coefficients, which correspond to the proportion of the total variance in dependent variables that is accounted for by clustering, are calculated as 0.26 and 0.19 for the models consisting of PC1 and PC2, respectively.

Table 3 Multilevel Regression Analysis based on PC1 Dependent Variable

PC1	Coefficient	Std. Err.	P value
Religiosity			
A religious person	-0.0205	0.0066	0,002*
An atheist	0.0944	0.0267	0*
Age			
35-54	-0.0096	0.0059	0.102
55 +	-0.0186	0.0077	0.016
Social class			
Upper middle class	0.0113	0.0159	0.478
Lower middle class	-0.0183	0.01588	0.249
Working class	-0.0391	0.0162	0,016*
Lower class	-0.0384	0.0175	0,028*
Education			
Incomplete primary	-0.0031	0.011	0.781
Complete primary	-0.0026	0.01	0.211
Incomplete secondary:technical	-0.0053	0.0117	0.645
Complete secondary:technical	0.016	0.0112	0.144
Incomplete secondary:university prep	-0.0083	0.0124	0.503
Complete secondary:university prep	0.0028	0.0104	0.784
University without degree	0.0089	0.0121	0.457
University with degree	0.0078	0.011	0.464
Marital Status			
Unmarried	0.0174	0.0055	0.002*
Constant	1.477	0.0469	0*

The number of observations are 17,257. * Refers the significance at 5% level. The reference category for religiosity is 'not religious', for marital status 'married', for education "no formal education", for age "18-34", for social class "upper class".

The estimates reveal in Table 3 that being atheist and unmarried has a positive effect on being tolerant to those addicted to drugs and alcohol, sufferers of AIDS, homosexuals, and people living with a partner without marriage. However, individuals who are religious, aged over 55, and belong to the working or lower class have no tolerance of these aforementioned variables (PC1). There is no clear effect of education on tolerance. Regarding PC2 (Table 4), there is no meaningful effect of being religious or not religious on the tolerance of diversities of religion, language, race, and immigrants. Education (except the incomplete primary school category) has a positive effect on being tolerant. People who have a higher degree of education have higher tolerance levels compared to those with primary and secondary education levels. Ages over 35 and social classes have a positive effect on PC2. Individuals belonging to the upper middle class have more tolerance than the lower and working classes. Furthermore, marriage has a negative effect on the tolerance of diversity in religion, language, and race.

Table 4 Multilevel Regression Analysis based on PC2 Dependent Variable.

PC2	Coefficient	Std. Err.	P value
Religiosity			
A religious person	-0.0285	0.0284	0.317
Not a religious person	-0.0106	0.0289	0.713
Age			
35-54	0.1809	0.0064	0,005*
55 +	0.0286	0.0083	0,001*
Social class			
Upper middle class	0.0554	0.0173	0,001*
Lower middle class	0.0411	0.017	0,018*
Working class	0.0523	0.017	0,002*
Lower class	0.0491	0.018	0,008*
Education			
Incomplete primary	-0.0011	0.0119	0.928
Complete primary	0.0247	0.0114	0,03*
Incomplete secondary:technical	0.0266	0.0126	0,036*
Complete secondary:technical	0.0363	0.0123	0,003*
Incomplete secondary:university prep	0.0463	0.0134	0,001*
Complete secondary:university prep	0.0536	0.0112	0*
University without degree	0.0679	0.0131	0*
University with degree	0.113	0.0115	0*
Marital Status			
married	-0.0188	0.006	0,002*
Constant	1.7809	0.0449	0*

The number of observations are 17.257. * Refers the significance at 5% level. The reference category for religiosity is 'atheist', for marital status 'unmarried', for education "no formal education", for age "18-34", for social class "upper class".

3 Conclusions

Tolerance is a recognition of the reality that human beings are naturally diverse in their values, behaviours, life styles, languages, religions, and races, and acceptance is their equal right. The concept of tolerance goes hand in hand with human rights and democracy, which are essential of modern societies to live peacefully instead of confronting racism, discrimination, religious fanaticism, and (at extreme points) violence.

The present paper investigates whether an individual's religiosity, educational level, social status, age, and marital status have an effect on his/her tolerance of others in MENA countries using the latest WVS dataset. Tolerance is considered under different topics, namely language, religion, race, immigration, addiction to alcohol, addition to drugs, homosexuality, suffering from AIDS, and living together without marriage. To the best of our knowledge, previous studies have not considered tolerance on such an extensive approach, and the effects of religiosity and various socioeconomic variables on tolerance for MENA countries have not previously been studied in the literature.

In the first stage of the analysis, tetrachoric correlation coefficients were obtained between the aforementioned tolerance variables. It was found that tolerance variables (addiction to alcohol, addition to drugs, homosexuality, suffering from AIDS, and living together without marriage), which were termed 'moral tolerance' by Nevitte and Cohrane (2006) are related to each other and have considerably high correlations between themselves. Similarly, there are strong correlations between the tolerance of race, religion, language, and immigrants. Polychoric principal component analysis was employed, and two components were deduced: one is related to moral tolerance and the other is related to the remaining tolerance variables. Evaluation of the effects of religiosity, educational level, social status, age, and marital status on the two deduced tolerance components was employed by multilevel analysis. The findings revealed that moral tolerance is negatively affected by religiosity. Religious individuals who belong to working or lower classes and those aged over 55 are intolerant when it comes to variables of moral tolerance, whereas atheist and unmarried groups are more tolerant. However, religiosity has no convincing effect on tolerance over race, religion, language, and immigrants. It is concluded that, as education level increases, the tolerance level increases as well. In addition to the positive effect of the educational level of individuals, higher social classes have higher racial and religious tolerance than lower social classes.

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Appendix-I

Countries	Year	Countries	Year	Countries	Year	Countries	Year
Algeria	2014	Kuwait	2013	Turkey	2011	Tunusia	2013
Bahrein	2014	Lebanon	2013	Yemen	2013	Morocco	2011
Egypt	2012	Libya	2013	Armenia	2011		
Iraq	2013	Palestine	2013	Cyprus	2011		
Jordan	2013	Qatar	2010	Pakistan	2012		