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North Africa Arabic Women's Attitudes Towards Openness to Change

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Abstract. This article aims to identify some social factors on North Africa Arabic women's attitudes towards openness to change. This study used a quantitative research method using multiple linear regression to explore the relationship between education level, social status, age, and gender as independent variables, and openness to change as a dependent variable. The research used the following questions to examine attitudes of the Arabic women in North Africa toward openness to change; Are there differences between Arabic men and women in their openness to change scores? Is there a positive relationship between education and Arabic women's openness to change? Does social class influence Arabic women's attitudes toward openness to change? Is there a relationship between Arabic women's age and openness to change? The results showed differences between Arabic women's and Arabic men's attitudes toward openness to change. Also, the author found that Arabic older women attitudes who were aged from 46 to 67 years old were more open to change than Libyan younger women attitudes who were aged between 35 to 45 years old to openness to change.

Keywords. Social, factors, Arabic, women, North, Africa, multiple linear regression, openness, change

Introduction

The research questions came as a result of a 2008 U.S. News article that presented a conversation with Queen Noor al-Hussein about the role of women in the Arab world. Queen Noor stated that the role of women in society had changed rapidly in the Arab world, as women became more educated and occupied high positions in different Arabic states (U.S. News, 2008). A recent article addressed Arabic women's conditions in the Arab world and their positive attitudes about openness to change (Tinwala, 2018). This material has provoked the author to examine the key factors that might affect the attitudes of Arab women in North Africa, specifically their openness to change particularly with Libyan women. Therefore, the author would explore whether there is a relationship between some factors such as education, social status, age and gender as independent variables and openness to change as a dependent variable (Creech, 2018).

To answer the first research question, the author included men and women from North Africa in the research sample. To answer the other three research questions, the author limited the research sample to North African Arab women living in six countries (Egypt, Libya,

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Tunisia, Algeria, Morocco, and Mauritania). The author used multivariate linear regression to answer the research questions.

Dataset

The analysis used the dataset of the World Values Survey (WVS) to explore the main factors that might affect the attitudes of Arabic women in North Africa towards openness to change. The World Values Survey (WVS) is a global network of social scientists researching changes in social values between countries and over time to study how far those changes impact on social and political aspects. The international organization's headquarters are located in Vienna, Austria (World Values Survey, 2017). Since the aim of the WVS is understanding changes in beliefs and social values to help scientists and policymakers to understand the changes and motivations of people throughout the world, and this research project aims to explore the Arab women's openness to change, the WVS is the proper dataset to use for an analysis of the attitudes of adult women toward social values in Arab countries in North Africa.

Quantitative Methodology

The whole World Values Survey (WVS) Association community has done the intensive process of design of the WVS-7 questionnaire, started in April 2014. The WVS-7 questionnaire included 290 questions, designed to measure cultural values, attitudes, and beliefs towards gender, family, and religion, attitudes about and experiences of poverty, education, health, and security, social tolerance and trust, attitudes towards multilateral institutions, cultural differences, and similarities between regions and societies (World Values Survey).

Research Questions

The following research questions will guide me to explore the relationship between the independent variables and dependent variables of this study:

1. Are there differences between Arabic men and women in their openness to change scores?
2. Is there a positive relationship between education and Arabic women's openness to change?
3. Does social class influence Arabic women's attitudes toward openness to change?
4. Is there a relationship between Arabic women's age and openness to change?

Sampling and Recruitment

The sample for the first research question includes Arab adult men and women from North Africa. The sample for the remainder of the study is limited to Arab adult women who are living in countries located in North Africa. The full sample size is 7259, while the sample size for only Arabic women aged 35-67 years old is 2007. The North African countries included in this study were Algeria (n=256), Libya (n=627), Mauritania (no data), Morocco (n=283), Tunisia (n=288), and Egypt (n=553).

Study Design

This research project used a descriptive statistical analysis to present key variables for those in the sample. Also, the author used a linear regression to answer each research question.

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Measurement

1. Are there differences between Arabic men and women in their openness to change scores?

The independent variable is gender, and the dependent variable is openness to change.

2. Is there a positive relationship between education and Arabic women's openness to change?

The independent variable is education, and the dependent variable is openness to change.

3. Does social class influence Arabic women's attitudes toward openness to change?

The independent variable is social class, and the dependent variable is openness to change.

4. Is there a relationship between Arabic women's age and openness to change?

The independent variable is age, and the dependent variable is openness to change.

Data Collection

The World Values Survey has used uniformly structured questionnaires designed by the Executive Committee of the World Values Survey by professional organizations in over 100 countries to explore the attitudes and opinions of participants. The data collection methods included surveys carried out face-to-face and by phone, in different languages, to cover most samples from countries around the world. Those conducting the surveys used computers during the personal interview to help with the collecting of information, and that was with the consent of the Scientific Advisory Committee which is responsible for applying any additional methods in collecting data. Each country has a principal investigator from social scientists working in academic institutions who are responsible for implementing the survey following the specific rules and methods. Throughout conducting the study, a consistency checklist is used to ensure consistency between the sampling design and the data collection and data cleaning processes according to the archive of WVS data. After data collection has been completed, only the principal investigators have access to data compiled by surveys. No names or other identifying information will be obtained so that participants cannot be identified by their responses to the survey (WVS, 2018).

Variables for Analysis

The variables for analysis were derived from the following items in the WVS.

Independent variables. The first independent variable was measured using a demographic question about gender with responses, male =1 and female =2 (WVS, 2010-2012). The responses were recoded to create a Dummy variable with two response categories: female=0 and male =1. In this model, the author exclude female to compare the results with male.

The second independent variable was measured using the question, "what is the highest education level that you have attained?" The level of measurement for this variable was originally ordinal. The responses were recoded to create a Dummy variable with two response categories: 0 = no university educations, and 1 = at least some university education. Recoding was completed to address the issue of having small numbers in one or two groups, which might affect the study's results. There were nine original response choice categories: 1= No formal education, 2= Incomplete primary school, 3= Complete primary education, 4= Incomplete secondary school, 5= Complete secondary school: technical /vocational type, 6= Incomplete secondary school: university-preparatory type, 7= Complete secondary: university preparatory

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type, 8= Some university-level education, without degree, and 9= University-level education, with degree (WVS, 2010-2012). To create the Dummy variable, the category "No university education" included response choices 1 through 7, and "At least some university education" included response choice categories 8 and 9. In this model, the author excluded no university education.

The third independent variable is measured using a question asking respondents to self-identify their perceived social class. The level of measurement for this variable was originally ordinal. The WVS interview used this statement to ask people about their social class: "People sometimes describe themselves as belonging to the working class, the middle class, or the upper or lower class. Would you describe yourself as belonging to the [interviewer presents response choices]?" The response choices were upper class, upper middle class, lower middle class, working class, and lower class. I recoded the variable to be a Dummy variable for each category. The (0) means "no" the respondents are not included in this category, and (1) means "yes" the respondents are included in this category. So, the author combined each two of the social class categories into one category to eliminate categories with small counts. The social categories were classified as following: Upper class=1, Upper middle class=2, Lower class= 3, Working class= 4, and Lower class=5. the author combined Upper-class with Upper middle-class into one category to create Upper-class variable, and the author combined Lower middle-class category with Working-class category into one category to create Middle class variable and kept Lower class category without changing. The new categories become as follows: an upper-class variable with (yes, no), middle class variable with (yes, no), and lower-class variable with (yes, no) (WVS, 2010-2014). In this model, the author excluded middle class to compare the result with the upper class and then with the lower class.

The fourth independent variable was measured using the question, "can you tell me your year birth, please 19---(write-in last two digits)" and "this means you are … years old (write in age two digits)" (WVS, 2010-2014). The responses were recoded to create three Dummy variables, each with two responses categories 0 = no, and 1= yes. The first variable is for ages 35 to 45, the second variable is for ages 46 to 56, and the third variable is for ages 57 to 67. In this model, the author excluded the age 35-45 group for comparison with other age groups.

The fifth independent variable non- Libyan was measured using the country codes; the responses were recoded to create a Dummy variable with two responses categories 0=no, and 1=yes. The first response is Libyan= 0, and the second response is Non-Libyan =1. The author excluded the Libyan category for comparison with Non-Libyan.

Dependent variable. The dependent variable is the Openness to change scale, which includes the following variables derived from the question, "would you please indicate for each description whether that person is very much like you, like you, somewhat like you, not like you, a little like you, or not at all like you?" The choices were applied to three statements: "it is important to this person to think up new ideas and to be creative to do things one's way; it is important to this person to have a good time; to 'spoil' oneself; Adventure and taking risks are important to this person; to have an exciting life" (WVS, 2010-2014, P. 6; Houser, 2018). Higher values mean a greater degree of openness to change.

Data Analysis

The study examined Arabic women's attitudes towards Openness to change using the variables from the World Values Survey dataset. The author used the Statistical Program for the Social Sciences (SPSS), version 23. First, the author limited the dataset to only North African respondents. This procedure limited the sample cases to participants who live in six

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countries: Algeria, Libya, Mauritania, Morocco, Tunisia, and Egypt. The author had to eliminate Mauritania because there is no information from Mauritania in Wave 6. Second, the author recorded each variable as described above. Finally, the author ran a set of statistical analyses to examine the research questions.

Findings

Descriptive statistics were used to evaluate the study variables; inferential statistics were used to answer the study questions.

Descriptive Statistics. The following table depicts the descriptive statistics for each study variable for North African women only. Table 1 summarizes the variables; Non-Libyan (0/1), At least some university education (0/1), Lower class group (0/1), Upper class group (0/1), Age group 46-56 (0/1) and Age group 57-67 (0/1) and Openness to Change Scale Score (interval/ratio) and excluded variables; Libyan (0/1), no university education (0/1), and Age groups 35-45 (0/1).

The following table shows the total valid sample size of Arabic women in the sample, along with the mean and standard deviation for openness to change scores and proportions and frequency counts for all categorical variables.

Table 1. Descriptive Statistics: Women from North Africa (n=2007).

Descriptive statistics

Variable	*n*	*P(%)*	*M*	*SD*
Openness to change	1891		3.4107	1.16871
Non-Libyan	1380	68.8		
Libyan	627	31.2		
At least some university education	210	10.5		
No-university education	1797	89.5		
Upper-class	475	24.5		
Middle-class	1124	58.0		
Lower - class	339	17.5		
Age 57-67	368	18.3		
Age 46-56	652	32.5		
Age 35-45	987	49.2		

Table 1 shows the total sample size of Arabic women in the sample, along with the mean and standard deviation for openness to change scores and proportions and frequency counts for all categorical variables.

There were 1891 responses for the variable, Openness to Change. The mean score, on a scale of 1 to 6, was 3.4107 (M=3.4107, SD=1.16871). The second variable shows there were 68.8% (n=1380) non-Libyan, and 31.2% (n=627) Libyan women. Ten-point five percent of women in the sample 10.5% (n=210) reported at least some university education, and 89.5% (n=1797) had no university education. Among Arabic women, 24.5% (n=475) reported being in the Upper-class group, 58% (n=1124) reported being in the Middle-class group, and 17.5%

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(n=339) reported being in the Lower-class group. Among Arabic women,18.3%(n=368) were in Age group 57-67, 32.5% (n= 652) were in Age group 46-56, and 49.2% (n=9870) were in Age group 35-45.

Regression model I. Regression model I addresses research question 1: Are there differences between Arabic men and women in their openness to change scores? Table 2 illustrates the results for a regression model of the relationship between gender and openness to change.

This analysis includes the full sample size of both (male =1 and female =0) with both Libyan and non-Libyan participants combined (n= 7259; female =3842, and male = 3417) to answer the first research question, "Are there differences between Arabic men and women in their openness to change scores?" The author used Multivariate Linear Regression to predict the differences between Arabic men and women's openness to change scores. The following Table 2 shows the difference between North African Arabic men and women in their attitudes toward Openness to change.

Table 2. *Summary of Multivariate Linear Regression analysis for predicting the differences between Arabic men and women's attitudes toward openness to change scores (N=7259.)*

a. Dependent Variable: Openness to Change Scale Score

Linear Regression analysis					
Variable	*B*	*SE B*	*β*	*t*	*sig*
Gender (man=1woman=0)	-.282	.028	-.119*	-9.997	.000
R^2	1.4%				
F	1,6978				

Note: the number of males =3417, females =3842.
**P<.05. **p<.001.*

According to the R2 value, gender explains 1.4% of the variance in openness to change among people from North Africa. The model is statistically significant, F (1,6977) =99.942, p <.001. The table summarizes the information about the relationship between the independent variable and outcome. The table shows that Arabic men have openness to change scale scores that are .282 points lower than those of Arabic women. This relationship is significant at p<.001.

Regression model II. Regression model II addresses research questions 2, 3, and 4: Among Arabic women, are there relationships between (a) education, (b) self-identified social class, and (c) age and openness to change? Table 3 illustrates the inferential statistics for the relationships between the independent variables and the dependent variable.

Table 3. *Summary of Multivariate Linear Regression analysis for predicting the relationship between a set of independent variables to openness to change as the dependent variable (N=2007).*

	Linear Regression analysis				
Variable	*B*	*SE B*	*β*	*t*	*sig*
Non-Libyan	.099	.063	.040	1.580	.114
At least some university education	-.175	.089	-.047	-1.962	.050*

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Lower -class	.386	.075	.123	5.122	.000**
Upper-class	-.205	.069	-.076	-2.984	.003*
AGE 57-67	.218	.076	.070	2.869	.004*
AGE 46-56	.130	.060	.052	2.869	.031*
R^2	4.3				
F	6,1835				

a. Dependent Variable: Openness to Change Scale Score of 1 to 6.

b. **P<.05. **p<.001*

According to the R2 value, the set of independent variables explains 4.3% of the variance in openness to change scale scores, while 95.7% of the variance in openness to change is left unexplained. The model is statistically significant, F (6,1829) = 14.783, p<.001.

Independent variables for the multivariate regression model included Non- Libyan (excluded: Libyan), At least some university education (excluded: No university education), Lower-class group and Upper-class group (excluded: Middle-class group), and Age group 57-67 and Age group 46-56 (excluded: Age group 35-45). Openness to change is the dependent variable in the analysis. Independent variables were loaded into the model using standard simultaneous entry.

All of the independent variables except country (non-Libyan: Libyan) were significantly associated with openness to change. The relationship between country and openness to change was not significant (p=114). Women with some university education have openness to change scores that are .175 points lower than women with no university education. This relationship was significant at p<.050. Women who described themselves as Lower-class have openness to change scale scores that are .386 points higher than women who describes themselves as Middle-class. This relationship is significant at p<001. Women who described themselves as Upper-class have openness to change scale scores that are.205 points lower than women who described themselves as Middle-class. This relationship was significant p=. 003. Women who are in Age group 57-67 have openness to change scale scores that are .218 points higher than women who are in Age group 35-45. This relationship is significant p=004. Women who are in Age group 46-56 have openness to change scale scores that are .130 points higher than women who are in Age group 35-45. This relationship is significant p=.031.

The analysis answered the research questions of Arabic women's attitude towards openness to change.

Discussion

The current research paper investigated the relationship between Arabic women's characteristics and their openness to change. The sample size includes (2007) women who are living in North African countries whose ages are between 35 to 67 years old. The information on openness to change was gathered from the 6th wave of the World Values Survey to answer the four research questions, where the descriptive statistics result provides general information about the number of participants and the percentage of each group for each variable.

The World Values Survey has used uniformly structured questionnaires to examine the Arabic women' attitudes towards openness to change. The questionnaire used choices in three variables to measure the openness to change scores; "it is important to this person to think up new ideas and to be creative to do things one's way; it is important to this person to have a good time; to 'spoil' oneself; Adventure and thinking risks are important to this person; to have an exciting life" (WVS, 2010-2014, P. 6; Houser, 2018). The results of the Multivariate Linear Regression analyses answered the research questions and revealed in the first question's answer that there was in general a difference between Arabic women's attitudes and Arabic men's

attitudes on openness to change scores. The outcome showed that Arabic women have higher openness to change scores than Arabic men. Arabic women's responses, on average, were agreed that it is important for them to think up new ideas and be creative to do things in their ways. Also, they agreed that a person should have an exciting life and have a good time for herself. Besides answering the first question, the Multivariate Linear regression analyses answered the second, third and fourth questions. The analysis revealed also that there was a relationship between Arabic women's social class and openness to change scores. Those who identified themselves as Lower-class were more open to change than those who identified themselves as Middle class. Unexpectedly, the analysis revealed that Arabic women who identified themselves as Upper-class were less open to change than Arabic women who identified themselves as Middle class. Arabic women who were aged between 57 to 67 years old and who were aged between 46 to 56 were more open to change than women who were aged between 35 to 45 years old. Also, the more interesting thing to me is that Arabic women who had at least some University education were less open to change than women who had no university education.

Overall, the results showed that Arabic women who are living in North Africa in Egypt, Libya, Tunisia, Algeria, and Morocco have higher scores to openness to change than Arabic men who are Living into North Africa. Also, Arabic women who were aged between 46 to 67, and those who identified themselves as Lower-class were more to open to change than Arabic women who were identified themselves as Middle- class and those who were aged between 35 to 45yers old. However, Arabic women who described themselves as Upper class and Arabic women who had at least some university education were less to open to change than Arabic women who described themselves as Middle- class and those who had no university education.

Limitations

The dataset of the World Values Survey has a lack of information about some countries. Although WVS professionals have worked hard to give all information about the population's social values, some countries did not provide information about their individuals to enrich the knowledge about the world social values. For example, the author wanted to examine the Arabic women's attitudes toward openness particularly among those who live in North African countries, but I did not find any information about Mauritania which made me exclude the country from my study. Ruling out Mauritania would make my research uncompleted results because of the lack of information about Mauritania in the WVS dataset.

Implications

Since one of the results showed there were differences between men's and women's attitudes toward openness to change in North Africa of Arabic society, this information could be used to promote government policy. That could be by encouraging social policy planners to make plans and programs that increase knowledge that narrows the gap of differences between men's and women's attitudes toward openness and help them to express themselves through social activities in their local society, as well as educate students at schools and colleges about how to be open to new ideas. For example, fear of applying a new idea that might be considered by society as heresy. Also, the fear of being stigmatized because of respecting and prioritizing a woman before a man in public. Also, educate them through schools' activities on how to take advantage of new ideas and add them to their culture to improve themselves and their society without isolating themselves from their mother culture. That could be by educating children about how to be good evaluators of social customs in their society's culture and embrace the positive customs that are based on knowledge to improve their society and eliminate the

negative customs that are based on superstitions and customs which hinder individuals to be creative and open to change.

Also, the results showed that the older women who were aged 45 to 67 were more open than young Libyan women who were aged 35 to 45. Besides, women who had at least university education and who identified themselves as Upper- class were less openness than who had no university education and who identified themselves as Middle class. These results should prompt Arabic governments and social researchers in general and the Libyan government in particular to investigate the reasons for unexpected results through doing re-researching to explore the reasons that make Arabic men less openness than Arabic women and older Arabic women were more openness than younger Arabic women as well as to understand the reason of women had at least some university education were less open than who had no university education. That would reflect well on them and their society socially, economically, and politically.

Conclusion

In this study, the author used the data from the 6th wave (2010-2014) of the WVS. Using SPSS, the author generated descriptive statistics to explore the key variables of the study and conducted Multivariate Linear Regression analysis to examine the relationship between Arabic women attitudes toward openness to change. The Multivariate linear regression analysis answered the research questions which the results were shown that there were the differences between Arabic women and Arabic men's attitudes toward openness to change, as well as the results showed Arabic older women attitudes who were aged from 46 to 67 years old were more openness to change than Libyan younger women attitudes who were aged between 35 to 45 years old to openness to change.

References

[1] Creech, S. (2018). Linear Regression. https://www.statisticallysignificantconsulting.com/RegressionAnalysis.htm

[2] House, L. (2018). Lecture note: T-Test Practice B, Using Quantitative methods I. Widener University, Social work education Delivered Spring Semester /2018.

[3] Tinwala, U. (2018). How Arab women can bring about change. https://www.mysalaam.com/en/story/how-arab-women-can-bring-about-change/SALAAM12032018153033

[4] U.S. News. (2008). "The role of women is changing" in the Arab world : A conversation with Queent Noor al-Hussein. https://www.usnews.com/news/national/articles/2008/05/16/the-role-of-women-is-changing-in-the-arab-world-a

[5] World Values Survey (2014). World Values Survey wave 6 [Data set]. http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp

[6] World Values Survey (2018). Filed work and sampling. http://www.worldvaluessurvey.org/WVSContents.jsp

[7] World Values Survey. (2017). Who we are. http://www.worldvaluessurvey.org/WVSContents.jsp

[8] WVS Wave 6 (2010-2014). WV6_Official_Questionnaire_v4_June2012.pdf. http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp