

Relationships Between Islamic Religiosity and Attitude Toward Deceased Organ Donation Among American Muslims: A Pilot Study

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Background. Religion-rooted beliefs and values are often cited as barriers to organ donation among Muslims. Yet how Islamic religiosity relates to organ donation attitude among Muslims is less studied.

Methods. Using a community based participatory research approach, we recruited adults from mosque communities to self-administer a questionnaire assessing levels of Islamic religiosity, attitude toward deceased organ donation, and sociodemographic descriptors.

Results. Of the 97 respondents, there were nearly equal numbers of men and women. Over a third were Arab American (n=36), and nearly a quarter were either South Asian (n=23) or African American (n=25). Respondents viewing difficulties in life as punishment from God had a decreased odds of believing deceased organ donation to be justified (OR 0.85, $P<0.05$). Other measures of Islamic religiosity, such as intrinsic religiosity, positive religious coping and one related to following Islamic ethical guidelines, were not associated with organ donation attitude. Arab Muslims were more likely to believe deceased organ donation to be justified than South Asian or African Americans (OR 7.06, $P<0.05$). Sociodemographic descriptors including age, sex, and country of origin, as well as self-reported health and trust of the American health-care system, were not significantly associated with attitude toward deceased organ donation.

Conclusion. Higher levels of intrinsic religiosity or adherence to Islamic ethics do not appear to associate with negative attitudes toward deceased organ donation. Negative religious coping appears, however, to be related to lower rates of believing deceased organ donation to be justified. Future studies with larger samples that incorporate additional measures of religiosity can further clarify relationships between religiosity and organ donation attitude among Muslim communities.

Keywords: Cadaveric organ donation, Religion, Islam, Minority Health.

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Although more than 119,000 individuals await organ transplants (1), only about 28,000 transplants are performed in the United States yearly (2). Although the

number of organ donors has increased over the past 2 decades, the need for transplantable organs continues to far outstrip the supply, with the disparity growing (3). As such, understanding public barriers to organ donation is an area of intense study, and developing programs that traverse these challenges to promote organ donation is a critical health priority.

More than 75% of transplanted organs within the United States originate from deceased donors, and a complex array of factors influence public attitudes toward deceased organ donation. Across race and ethnicity, women (4), younger individuals (5–7), and those who on average have higher levels of educational attainment and income (5, 8, 9) are more likely to hold positive attitudes toward deceased organ donation (10). Increased knowledge about organ donation also predicts positive attitudes toward donation (10). Additionally, psychosocial characteristics appear to associate with organ donation attitudes as individuals with altruistic tendencies are more likely to find deceased organ donation to be favorable (10).

Racial and ethnic minorities, in general, tend to hold more negative attitudes toward organ donation than their white counterparts; African and Hispanic Americans demonstrate

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TABLE 1. Sociodemographic characteristics of participants (N=97)

Characteristic	No. (%)
Age, N=96	
≤40	31 (32.3)
41–49	27 (28.1)
50–75	38 (39.6)
Median (range)	45 (range: 18–75)
Sex, N=96	
Male	45 (46.4)
Female	51 (52.6)
Racial/ethnic background, N=96	
White/European	7 (7.2)
African American/Black	25 (25.8)
Arab/Arab American	36 (37.1)
South Asian	23 (23.7)
Country of origin, N=95	
United States	48 (49.5)
Middle East (Arab)	24 (25.3)
South Asian (Indian Subcontinent origin; Pakistan, India, Bangladesh)	22 (23.2)
Duration in the United States, N=92	
≤20 yr	28 (30.4)
21–49 yr	44 (47.8)
≥50 yr	20 (21.7)
Median (range)	28.5
Highest level of education, N=94	
High school or less	9 (9.6)
Some college	28 (28.9)
Bachelors (4-yr college)	25 (25.8)
Advanced degree (Master or Doctorate)	30 (39.9)
Have health insurance, N=96	
Yes	74 (76.3)
Believe organ donation after death is justified, N=93	
Completely disagree	36 (37.1)
Somewhat disagree	15 (15.5)
Somewhat agree	25 (25.8)
Completely agree	17 (17.5)

a lower willingness to donate organs (11, 12). Understanding the particular challenges toward organ donation among minorities is important because minorities are disproportionately afflicted with diseases that contribute to organ failure, and thereby collectively evidence a greater need for organ transplantation than other groups (13).

Drilling down into what informs minority group attitude toward organ donation, studies of the African and Hispanic Americans note religious beliefs, mistrust of health-care providers, and discrimination in the health-care system, as factors affecting organ donation (14–18). In this present work, we further explore the relationship between religiosity, minority group affiliation, and attitude toward deceased organ donation.

On one hand, it appears that all of the major religious traditions support organ donation (19–21), yet on the other,

stronger religious beliefs appear to be predictive of less favorable attitudes toward, and a lower willingness to donate organs (22–24). Accordingly, religion is oft-cited as a barrier toward organ donation by research participants and organ donation stakeholders (9, 17, 18, 25–28). This puzzling paradox is particularly notable among Muslims (29–32). Survey research in the United Kingdom (29, 33, 34), Malaysia (35), Saudi Arabia (36), and Turkey (37, 38) demonstrates that identifying with Islam is associated with negative attitudes toward organ donation and transplantation. Although these findings represent an international perspective, no studies, of which we are aware, have specifically examined the relationships between Islamic religiosity and attitude toward organ donation among American Muslims.

American Muslims represent a diverse and growing minority community. They number between 5 and 7 million (39–42) and are expected to double in number by 2030 (43). African Americans (35%), Arab Americans (25–30%), and South Asian Americans (20%–25%) are the dominant racial/ethnic groups within this community (40, 44). Our previous research examined a population-based representative survey of Detroit area Arab Americans and revealed that Muslim Arabs had decreased odds of believing deceased organ donation to be justified (45). The exploratory research we present herein builds upon that work by exploring relationships between religiosity and attitude toward deceased organ donation among a diverse group of American Muslims. Based on the international literature on Muslim organ donation attitudes, we hypothesized that higher levels of Islamic religiosity would associate with negative attitudes toward deceased organ donation. In addition, akin to findings among other minority groups, higher levels of trust of the health-care system would positively correlate with organ donation attitude.

RESULTS

Participant Demographics

Of the 97 survey respondents, more than a third were Arab American (37%; n=36) and about a quarter South Asian (n=23) and African American (n=25) (Table 1). Our sample had diversity in their attitude toward deceased organ donation with 39% of respondents completely disagreeing and 18% completely agreeing with the statement “It is justifiable to donate my organs after I die.” With respect to measures of Islamic religiosity, 43% of respondents marked their religiosity between 1 and 7 on the SRR, and 57% between 8 and 10; the mode response was 8.

Factors Associated With Attitude Toward Deceased Organ Donation

Measures of Islamic Religiosity

Two of the three subscales from the Psychological Measure of Islamic Religiousness (PMIR) were negatively associated with organ donation attitude on bivariate testing (Original Positive Religious Coping and Identification Subscale, OR 0.73; $P<0.1$; Punishing Allah Reappraisal Subscale OR 0.85; $P<0.05$) (Table 2). After adjustment for race/ethnicity in multivariate models, the PMIR: Positive Religious Coping and Identification subscale was no longer significantly associated with organ donation attitude, whereas

TABLE 2. Associations between variables of interest and attitude toward deceased organ donation

	Multivariate model ^a	
	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
Demographic characteristics		
Age	0.98 (0.96–1.0)	
Sex	1.3 (0.61–2.7)	
Race/ethnicity		
Arab	3.23 ^b (1.2–8.6)	7.06 ^c (2.2–22.3)
South Asian	1.96 (0.65–5.9)	2.9 ^b (0.82–10.3)
Black/African American	Reference	Reference
Country of origin	0.87 (0.42–1.84)	
Duration in the United States		
≤20 yr	Reference	
21–49 yr	1.4 (0.59–3.3)	
≥50 yr	0.98 (0.33–2.9)	
Level of educational attainment		
High school or less	Reference	
Some college	1.61 (0.34–7.7)	
Bachelors (4-yr college)	3.67 (0.74–18.1)	
Advanced degree (Master or Doctorate)	3.67 (0.77–17.6)	
Have health insurance	0.93 (0.38–2.25)	
Measures of Islamic religiosity		
Self-rating of religiosity	0.83 (0.6–1.2)	
PMIR: Original Positive Religious Coping and Identification Subscale (q24-37)	0.73 ^b (0.53–1.00)	0.91 (0.60–1.4)
PMIR: Positive Religious Coping Subset Factor 1 (Positive Religious Coping)	0.78 (0.56–1.1)	
PMIR: Positive Religious Coping Subset Factor 2 (Intrinsic Motivation for Prayer)	0.87 (0.73–1.03)	
PMIR: Punishing Allah Reappraisal Subscale	0.85 ^c (0.76–0.95)	0.85 ^c (0.75–0.96)
PMIR: Islamic Ethical Principles & Universality Subscale	0.99 (0.79–1.2)	
Factors related to health and the health-care system		
Self-reported health status (SF-1)	1.0 (0.89–1.2)	
Level of trust in American health-care system	0.98 (0.87–1.1)	
Level of trust in U.S. physicians	1.1 (0.92–1.2)	

^a A single multivariate ordered regression model adjusted for participant race/ethnicity, PMIR: Positive Religious Coping and Identification, and PMIR: Punishing Allah Reappraisal subscales.

^b $P < 0.1$.

^c $P < 0.05$.

the PMIR: Punishing Allah Reappraisal subscale maintained its negative association (OR 0.85; $P < 0.05$). Using data from our exploratory factor analyses, we separated the PMIR: Positive Religious Coping and Identification subscale into two latent constructs: positive religious coping and intrinsic motivation for prayer. Neither of these new measures were significantly associated with organ donation attitude, nor was the self-rating of religiosity (SRR).

Factors Related to Health and Perception of the Health-care System

The variables related to health (SF-1) and trust of the health-care system and physicians were not associated with organ donation attitude.

Sociodemographic Factors

Among age, sex, race/ethnicity, country of origin, duration of U.S. residency, educational level, and health insurance status, only race/ethnicity was significantly associated

with organ donation attitude. In both bivariate and multivariate models, Arab Muslims had a higher odds of believing deceased organ donation to be justified than South Asian Muslims, and both groups had higher odds than African Americans (Arab OR 7.06 $P < 0.05$; South Asian OR 2.9; $P < 0.1$; African Americans = reference).

DISCUSSION

This study represents a preliminary exploration of relationships between Islamic religiosity and attitudes toward deceased organ donation among an ethnically and racially diverse group of American Muslims. On the international stage, intensive ethnographic research has sought to describe the complex ways in which religious ideas about the sanctity of the body, notions of death, and socioeconomic factors interact to inform how Muslims evaluate organ donation and transplantation (46, 47). Quantitative surveys have been likewise deployed to examine the specific demographic and

psychosocial predictors of organ donation attitudes and donor behavior (29, 37, 38, 48–51). Yet, relationships between quantitative measures of religiosity and deceased organ donation attitude are underexplored. We found that negative religious coping, as measured by the PMIR: Punishing Allah Reappraisal subscale, independently predicted a negative attitude toward deceased organ donation. Contrary to our hypothesis higher levels of intrinsic religiosity, as measured by the SRR, did not associate with attitudes toward deceased organ donation. We additionally found that Arabs in our sample held a more positive attitude toward deceased organ donation than did South Asian or African American Muslims.

The relationship between Islamic beliefs and organ donation attitudes among Muslim populations is complex and requires better elucidation. It is clear that religion greatly influences organ donation attitudes and related health behaviors across diverse Muslims groups. Accordingly, in one study involving Pakistani Muslims in the UK “religion often superseding (sic) all other factors affecting attitudes toward organ donation. (32)” While some studies suggest that Islamic ideals motivate individuals to donate their own organs or those of their relatives (48, 49, 52, 53), a greater number of studies find religious beliefs to be a barrier toward organ donation among Muslims in Turkey (50), Saudi Arabia (54), and the United Kingdom (29). Furthermore, several studies conducted among Malays (35), Arab Americans (45), and British South Asians (55) report that an affiliation with Islam is independently associated with negative attitudes toward organ donation. Accordingly, one researcher remarks that the “greatest dispute (about organ donation) has arisen among Muslims” and “much of (this debate)...focuses on organ usage from deceased donors (56).” That religious values and beliefs serve as obstacles to organ donation is puzzling when most Islamic authorities condone the practice (57–59). Our study contributes to this literature by examining relationships between Islamic religiosity and deceased organ donation attitude.

We found that individuals that demonstrate aspects of negative religious coping hold more negative attitudes toward deceased organ donation. Negative religious coping is a psychological state in which individuals express an insecure relationship with God and an ominous view of the world, and the most prominent measure of this construct, RCOPE, originated from research conducted among Christians (60). Negative religious coping is associated with various negative health behaviors and outcomes (61). The measure used to assess an aspect of negative religious coping in our survey, the Punishing Allah Reappraisal subscale of the PMIR, derives from RCOPE and was adapted for, and validated among, Muslims (62). For the first time, we document an inverse relationship between this construct and organ donation attitude. Although causal relations cannot be posited from our cross-sectional survey, we hypothesize that Muslims who view life challenges as punishments from God may be less motivated to enter the donor pool on account of feeling that their organs may propagate God’s displeasure onto the recipient. Such a hypothesis is plausible because the idea that the donor’s organs carry spiritual ramifications for the recipient is featured in Muslim debates over donating or receiving organs from non-Muslims (59).

Alternatively, individuals who rate highly on measures of negative religious coping may be less inclined to help others. Further qualitative work is needed to clarify the association between negative religious coping and organ donation attitude.

We did not find the other measures of religiosity; the PMIR: Positive Religious Coping and Identification subscale, and the PMIR: Islamic Ethical Principles and Universality subscale, the Self-Rating of Religiosity (SRR) to correlate with organ donation attitude. The finding that SRR did not associate with deceased organ donation attitude was contrary to the finding by Sharif et al. (51). In a survey of 675 Western Muslims, of which, 64% were South Asian, individuals who rated themselves as religious or moderately religious had a decreased odds of agreeing with organ donation. Larger surveys incorporating other measures of religiosity are needed to clarify these purported associations.

Lastly, in our sample Arab Muslims had a greater odds of believing deceased organ donation to be justified than did South Asian and African American Muslims. While a growing body of work demonstrates that religious beliefs and values informs the health behaviors of racially and ethnically diverse Muslims in similar ways (63), greater research is needed to provide granular details on how religious interpretations may inform distinct attitudes, behaviors, and ethical beliefs regarding organ donation among diverse Muslim communities. As our finding was independent of insurance status, level of education, or duration of US residency, trust in the American health-care system, something other than immigrant experiences may be informing these disparate attitudes. We hypothesize that our finding may be partially explained by the inclination of South Asian Muslims to rely upon the ethico-legal verdicts of Islamic authorities from the Indian continent when considering organ donation and transplantation. To wit, while many Islamic authorities in the Middle East judge organ donation to be permitted within Islamic law, prominent Islamic authorities from the Indian subcontinent consider it to be prohibited by Islam (58, 59). To further clarify the different ethical stances of Arab, South Asian, and African American Muslims, we plan to conduct focus groups among mosque communities within these ethnic and racial groups.

Although our exploratory survey reports novel findings, our data must be interpreted in the light of several limitations. For one, our data should not be considered representative of all American Muslims. We recruited individuals from a set of mosque communities because we desired a participant pool that self-identified with Islam and incorporated Arabs, South Asians, and African Americans. Muslims of different ethnic/racial backgrounds, with less formal identification with Islam, and residing in different locales may have different attitudes toward deceased organ donation. Additionally, as with any survey-based study, our study was limited by the measures included in the questionnaire. With respect to religiosity, few organically developed religiosity measures for the Islamic faith have been developed, and even those measures that exist have rarely been validated across ethnically and racially diverse Muslim populations (64). We choose to use the PMIR because it draws upon leading theories in the psychology of religion, was created using in-depth interviews with diverse Muslims,

and has been psychometrically tested using international samples of Muslims (62, 65). As such, it represents one of the better measures available and lends strength to our findings. Future work should incorporate additional measures of religiosity, and a larger sample to better tease out relationships between Islamic religiosity and organ donation attitudes and behaviors. Furthermore, our outcome measure assesses whether decreased organ donation is “justifiable.” We chose this wording to build upon our previous work with the Detroit Arab American Study (45). Yet, phrasing that connotes an ethical judgment regarding organ donation may not accurately measure one’s willingness to donate their own or a relative’s organs or other organ donation behaviors.

Although additional investigations are necessary to flesh out our preliminary observations, and to test the hypothesis we have formulated, our survey adds a further dimension to the study of how religion influences Muslim attitudes and behaviors toward organ donation.

MATERIALS AND METHODS

Setting

We used a community-based participatory research (CBPR) approach, we partnered with four local community organizations to carry out research within mosque communities in Southeast Michigan, specifically we partnered with the Institute for Social Policy and Understanding (ISPU), a national policy think-tank; the Arab Community Center for Economic and Social Services, which runs several local social and health services centers; and two

Islamic umbrella organizations that represent more than 35 Muslim institutions including more than 25 mosques—the Islamic Shura Council of Michigan and the Council of Islamic Organizations of Michigan (66). Southeast Michigan is home to more than 200,000 Muslims with large numbers of African, Arab, and South Asian members, making it is one of largest American Muslim communities (67, 68) and an ideal setting for American Muslim research. Representatives from the four community partners assisted with questionnaire development, participant recruitment, data analysis, and dissemination. Our project was approved by the University of Michigan’s institutional review board.

Participant Recruitment and Data Collection

Participant recruitment occurred as part of a larger two-phase mixed-method research project on American Muslim health beliefs and health-care challenges (66). Participants were recruited simultaneously to participate in the present survey and a focus group discussion on American Muslim health challenges. Between September 2009 and March 2010, we recruited self-identified Muslim, English-speaking men and women between the ages of 18 and 75 from mosques affiliated with our partners. We purposively and iteratively selected mosque sites to achieve near-equal representation of Arabs, South Asians, and African Americans. Participants were recruited from seven mosques: six mosques were affiliated with Sunni Islam, whereas one with the Shiite branch. In terms of race/ethnicity, two mosques catered to predominately South Asian Muslims, one predominately African Americans, and four Arab American (participant race/ethnicity is reported in the Results section). As each mosque governed the choice of recruitment method, a variety of methods including distributing flyers at worship services, sending emails through mosque listservs, posting notices on mosque and organizational websites, making announcements at community events, and recruiting participants through tables at worship services were utilized.

TABLE 3. Question stems of the PMIR: positive religious coping and identification subscale

Original 14-item PMIR: positive religious coping and identification items	PMIR: positive religious coping subset factor 1 based on exploratory factor analyses (positive religious coping)	PMIR: positive religious coping subset factor 2 based on exploratory factor analyses (intrinsic motivation for worship activities)
Except in prayers, how often do you read or listen to the Holy Qura’n?		
Except in prayers, how often do you engage in d’iker ^a or tasbih ^a ?		
When I face a problem in life, I look for a stronger connection with Allah	X	
When I face a problem in life, I consider that a test from Allah to deepen my belief	X	
When I face a problem in life, I seek Allah’s love and care	X	
When I face a problem in life, I read the Holy Qura’n to find consolation	X	
When I face a problem in life, I ask for Allah’s forgiveness	X	
When I face a problem in life, I remind myself that Allah commanded me to be patient	X	
When I face a problem in life, I do what I can and put the rest in Allah’s hands	X	
I pray because I enjoy it		X
I pray because I find it satisfying		X
I read the Holy Qura’n because I feel that Allah is talking to me when I do that		
I read the Holy Qura’n because I find it satisfying		
I fast in Ramadan because I feel close to Allah		

^a D’iker/Tasbih is a form of meditative non-obligatory prayer that involves the repetitive and reflective invocation of the name of God and/or short verses praising Him.

TABLE 4. PMIR: punishing Allah reappraisal subscale^a

Question stems	
1.	When I face a problem in life, I believe I am being punished by Allah for the bad actions I did.
2.	I face a problem in life, I wonder what I did for Allah to punish me.
3.	When I face a problem in life, I feel punished by Allah for my lack of devotion.

^a Assessed along a frequency scale.

Once individuals indicated interest in participation their contact information was collected and research staff contacted them via phone calls, letters, and/or emails to confirm a time and mosque venue for survey administration concurrent with a focus group discussion. Participants received \$20 remuneration for their time.

Survey Measures

Independent Variables

Our independent variables covered three domains: Islamic religiosity, factors related to health and the health-care system, and sociodemographic descriptors.

Measures of Islamic Religiosity

Four measures assessed Islamic religiosity. The first was a version of the 1-item Self-Rating of Religiosity (SRR) that asks respondents to rate their religiosity along a 10-point scale (69). Higher responses on this item correlate positively with health and happiness (69). The other three measures were subscales of the Psychological Measure of Islamic Religiousness (PMIR) (62). The PMIR-Positive Religious Coping and Identification subscale (Table 3) measures the extent to which Muslims use religious coping methods (reading Qur'an, seeking forgiveness, cultivating reliance upon God) to deal with life stressors and their intrinsic motivation for worship activities. The PMIR-Punishing Allah Reappraisal subscale (Table 4) assesses the extent to which individuals view problems in life to be a reflection of Divine displeasure. Finally, the Islamic Ethical Principles and Universality Subscale (Table 5) taps into the basic set of ethical guidelines (dos and don'ts) Muslims are encouraged to follow as well the degree to which respondents perceive themselves to be part of a global Muslim community. Notably, this measure has positive correlations with measures of altruistic relationships with others (62). In our sample, the Islamic Positive Religious Coping and Identification Subscale had a Cronbach's α of 0.89, the Punishing Allah Reappraisal an α of 0.92, and the Islamic Ethical Principles and Universality subscale an α of .92.

Factors Related to Health and Perception of the Health-care System

Health Status

Health status was assessed using the Short Form-1 (SF-1). SF-1 is an independent predictor of future mortality even after adjusting for baseline physical health status and life style (70).

Trust of Health-care System

Trust of the medical care system was assessed by two questions asking participants to rate their level of agreement to statements that they trusted the following: i) American health-care system, and ii) American doctors.

Sociodemographic Descriptors

Several items inquired about characteristics known to associate with organ donation attitudes such as age, sex, and educational level. Conventional descriptors such as ethnicity, country of origin, duration of U.S. residency, and health insurance status were also captured.

Outcome Variable

The outcome variable measured the level of agreement to the statement: "It is justifiable to donate my organs after I die." This question was a modified form of an item included in the Detroit Arab American Study

(DAAS) which asked "do you think organ donation after death can always be justified, never be justified, or somewhere in between" rated along a ten-point scale (71).

Data Analysis

Survey data were entered independently by two research assistants into Microsoft Access and discrepancies were resolved by referral to the original surveys in consultation with the PI. These data were then imported into STATA/SE 12.1 for analyses. Descriptive statistics were tabulated for all variables. Internal consistency reliability checks utilized the Cronbach's alpha statistic. Summed scores for the PMIR subscales were transformed by assigning each response category a numerical value between 0 and 10. Although the alpha statistic showed high internal consistency for the PMIR-Positive Religious Coping and Identification subscale, we felt that the 14 items may assess two different underlying religiosity constructs: positive religious coping and intrinsic motivation for worship activities (Table 3). Accordingly, we conducted exploratory factor analyses to tease out possible underlying constructs. Our dataset corresponded to approximately five observations per item, which is greater than the minimal 3:1 ratio needed for exploratory factor analyses. The Kaiser-Meyer-Olkin test was greater than 0.5, and Bartlett's test of sphericity was significant, confirming the adequacy of our sample. We next generated a scree plot of Eigen values in concert with using Kaiser's criterion of an Eigen value greater than 1 for each putative underlying factor to determine that a two-factor solution was optimal. We used both orthogonal and oblique factor rotation methods to generate two-factor solutions. Of the original 14 items, we assigned items to factors based on a main loading of greater than 0.5 and a no cross-loading. Using these criteria, nine of the original 14 items were retained in the solution: seven items loading onto factor 1 (positive religious coping) and two items onto factor 2 (intrinsic motivation for prayer) (Table 3). Ordered logistic regression models were used to test the associations between all independent and outcome variables, and unadjusted odds ratios were calculated. Potential variables found to be associated with outcomes at the level of $P < 0.1$ on bivariate analysis were placed into a single multivariate model.

TABLE 5. PMIR: Islamic ethical principles and universality subscale^a

Question stems	
1.	Islam is the major reason why I am a humble person.
2.	Islam is the major reason why I honor my parents.
3.	Islam is the major reason why I help my relatives and neighbors.
4.	Islam is the major reason why I help the needy and the orphans.
5.	Islam is the major reason why I am a tolerant person.
6.	Islam is the major reason why I do not eat pork.
7.	Islam is the major reason why I do not drink alcohol.
8.	Islam is the major reason why I do not have sex before marriage or outside marriage.
9.	Islam is the major reason why I do not consider committing suicide.
10.	Islam is the major reason why I do not engage in gossip.
11.	I consider every Muslim in the world as my brother and sister.
12.	I identify with the suffering of every Muslim in the world.
13.	One of my major sources of pride is being a Muslim.
14.	I believe that brotherhood and sisterhood is one of the basic tenets of Islam.

^a Assessed along an agreement scale.

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