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Religion and Health Among Older Mexican Americans: Exploring the Influence of Making Mandas

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Abstract

A manda is a religious quid pro quo whereby an older Mexican American promises to perform a religious act if the Virgin or one of the saints grants a request. The purpose of this study is to see if making mandas is associated with health among older Mexican Americans. Findings from the study model suggest that making mandas is associated with a greater sense of personal control, and more personal control is associated, in turn, with better health.

Keywords

mandas; Mexican American; spiritual support

Writing in 1999, Hill and Hood concluded that, "…. the psychology of religion in America has been largely dominated by convenience sampling of college students …" (p. 4). Since that time, researchers have made significant strides in exploring religious beliefs and practices in other demographic groups. These advances are perhaps most evident in research on race differences in religious involvement. A rapidly growing number of studies suggest that by almost any standard, African Americans are more deeply involved in religion than whites (Taylor, Chatters, & Levin, 2004). This work is important because studying people in more than one racial group makes it possible to assess both the common and unique aspects of religion. Common aspects of religion refer to religious beliefs and practices that can be found in any racial group, such as the frequency of church attendance or the frequency of private prayer. In contrast, unique aspects of religion involve religious practices and beliefs that are found in one racial group only. For example, research by Krause (2004) reveals that older blacks have found that religion helps them cope more effectively with the racial problems they continue to face in American society.

Although research on race differences in religion has provided many valuable insights, this literature has yet to reach its full potential because the wide majority of studies focus solely on whites and African Americans. This is unfortunate, because recent Census data indicate that Hispanics of all ages (15.1%) have surpassed blacks of all ages (12.3%) to become the second largest racial group in the nation (U.S. Bureau of the Census, 2010). These basic demographic data show why there is a pressing need to know more about the religious practices and beliefs of Hispanics. There has been some empirical research on religion among Hispanics (especially Mexican Americans), but the wide majority of these studies rely on crude measures of religion, such as the frequency of church attendance (Hill et al., 2006) or self-rated religiousness (Levin & Markides, 1985).

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The purpose of the current study is to examine a religious practice that is unique to Mexican Americans - making mandas or promesas. A manda is a religious quid pro quo that works in the following manner. An individual approaches the Virgin Mary or one of the saints with a request. This request often involves things like restoring the health of a loved one. In return for granting the request, the person promises to perform an act which is often overtly religious in nature. For example, an individual may promise to make a pilgrimage to a sacred shrine. There do not appear to be any studies in the literature that empirically evaluate the practice of making mandas in the Mexican American religious community. The data that are used in analyses below are noteworthy because they come from the first nationwide survey to be devoted solely to religion among older Mexican Americans. But rather than merely assessing the extent to which mandas are practiced by older Mexican Americans, an effort is made to contribute to the literature in two potentially important ways. First, key factors within the church that promote the use of mandas are examined. Second, an effort is made to enhance the practical significance of the findings by assessing whether the practice of making mandas is associated with better health. These issues are evaluated with the latent variable model that is presented in the next section.

Mandas and the Health of Older Mexican Americans

Figure 1 contains the latent variable model that is evaluated in the current study. Two steps were taken to simplify the presentation of this conceptual scheme. First, the elements of the measurement model (i.e., the factor loadings and measurement error terms) are not shown in this model. Second, the influence of age, sex, education, and marital status is not depicted in Figure 1 even though the effects of these demographic variables were taken in to account when the model was actually estimated.

The model in Figure 1 examines the practice of making mandas from both a social and psychological perspective. With respect to the social, it is proposed that social support (i.e., spiritual support) provided by fellow church members encourages the practice of making mandas. In contrast, a well-known psychological construct (i.e., feelings of personal control) is used to show one way in which making mandas may influence health. The roles that these social and psychological variables play will become more evident when the linkages that form the theoretical core of the conceptual model are examined. More specifically, it is hypothesized that (1) older Mexican Americans who go to church more often are more likely to get spiritual support from the members of their congregations, (2) older Mexican Americans who receive more spiritual support from fellow church members are more likely to make mandas; (3) older Mexican Americans who make mandas more often will have a stronger sense of personal control, and (4) older Mexican Americans who have a stronger sense of personal control will be more likely to rate their health in favorable manner. The theoretical rationale for each of these relationships is provided briefly below.

Church Attendance and Spiritual Support

Spiritual support is assistance that is provided by rank-and-file church members for the explicit purpose of enhancing the religious beliefs and behaviors of the recipient. For example, a fellow church member may help an older study participant lead a more religious life, or significant others at church may help them live according to their religious beliefs. There are two closely-related reasons why older Mexican Americans who attend church more often will be more likely to receive spiritual support from their co-religionists. The first is straightforward. In order for an individual to receive support from others they must obviously come into contact with potential support providers. Second, in order to develop the kind of relationship in which assistance is likely to be exchanged, support providers and support recipients must have contact on a fairly regular basis. The importance of the continuity of contact may be seen by turning to the literature on interpersonal trust. An

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individual is more likely to adopt the religious recommendations of a fellow church member if he or she believes this person is concerned about their personal welfare and has their best interests at heart. But these feelings of trust do not typically emerge as soon as two people begin to interact. Instead, they tend to arise more slowly as the members of a dyad feel each other out and learn more about the beliefs and intentions of the other (see Simpson, 2007, for a review of the literature on interpersonal trust).

Spiritual Support and Making Mandas

The discussion in the previous section describes how the social context in the church facilitates the exchange and reinforcement of religious principles. The goal of the discussion in this section is extend this line of reasoning by reflecting on how this potentially supportive environment may encourage the practice of making mandas. Berger (1967) provides some insight into this issue. Writing in his classic work, *The Sacred Canopy*, Berger (1967) maintains that religious beliefs and practices are developed and sustained through interaction with fellow believers: "Worlds are socially constructed and maintained. Their continuing reality, both objective … and subjective … depend upon *specific* social processes, namely those processes that ongoingly reconstruct and maintain particular world views" (p. 45, emphasis in the original). Similar views were expressed by Henri Nouwen, a contemporary Catholic priest who had a considerable following. He argued that the primary goals of church members is to help each other find a deeper faith: "As members of the Christian community, we are not primarily for each other, but for God … We discover each other by following the same vocation and by supporting each other in the same search" (Nouwen, 2009, p. 145). Cast within the context of the current study this means that religious beliefs and practices are constructed and maintained through the ongoing exchange of spiritual support among fellow church members. As the analyses provided below will reveal, making mandas is a fairly common practice among older Mexican Americans. So if making mandas is embedded in the faith tradition of older Mexican Americans, and faith traditions are maintained through interaction with others, it follows that greater spiritual support should be associated with the greater use of mandas.

Making Mandas and Feelings of Personal Control

Feelings of personal control are defined as the belief that changes in the social world are responsive to one's own actions, choices, and efforts (Krause, 2003). Although older Mexican Americans may be encouraged by fellow church members to make mandas, it is not clear why doing so would necessarily bolster their feelings of personal control. As disadvantaged members of society, Mexican Americans typically have little opportunity to exercise control over the events in their lives (Mirowsky & Ross, 1984). And because they have relatively little personal control, they often encounter difficulties in getting the things they want, such as medical care for themselves and their loved ones (Chandra & Skinner, 2004). So consistent with the deprivation-compensation hypothesis, Mexican Americans may turn to religion to counteract the relative powerlessness they experience in the secular world (Schieman, Pudrovska, Pearlin, & Ellison, 2006). According to this perspective, socioeconomically marginalized members of society are more likely to engage in religion and derive greater psychological benefits from religion than individuals who are more well-to-do. By striking a bargain with the saints or the Virgin, they may be able to derive a sense that they are able to control the events in their lives through the requests and promises they make with these deities. Perhaps this is one reason why Rodriguez (1994) argues that, "Our Lady of Guadalupe manifests, symbolizes, and *activates the power of the people*, in this case, the power of the poor people" (p. 157, emphasis added). So, for example, if an older Mexican American promises to perform a religious act if their request is granted, and if their manda is fulfilled, then it is not difficult to see why they will view their promesa as a vehicle for exercising control over the events in their lives.

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Feelings of Personal Control and Health

A vast literature reveals that individuals with a strong sense of personal control tend to enjoy better physical and mental health than people who feel they are at the mercy of the social environment (see Krause, 2003, for a review of this literature). There are a number of ways in which a strong sense of control can provide these important benefits. For example, a number of studies indicate that people with a strong sense of control are able to cope more effectively with the stressful events that arise in their lives (Pearlin et al., 1981). In addition, research reveals that people with a strong sense of control are more likely to adopt beneficial health behaviors and avoid health behaviors that are injurious to their health. Evidence of this may be found by turning to one of the most well-known theories in the health behavior literature - the Health Belief Model (Janz, Champion, & Strecher, 2002). A key linkage in this conceptual framework specifies that people will be more likely to adopt sound health behaviors if they have a strong sense of self-efficacy (i.e., personal control).

Bringing Issues Involving Aging to the Foreground

As noted above, the data for the current study were provided by a nationwide sample of older Mexican Americans. Consequently, it is important to reflect briefly on why it is helpful to examine issues involving social support, mandas, control, and health in a sample that is comprised of older adults. Since so little research has been conducted with older Mexican Americans, the rationale for focusing on older people must necessarily come from insights that were made with the general population of older people in mind.

Carstensen's (1992) theory of socioemotional selectivity specifies that as people go through late life, they become increasingly aware they have relatively little time left to live. This awareness promotes a re-evaluation of their social relationships. As Carstensen (1992) points out, older people begin to place a greater emphasis on relationships that are emotionally close, while disengaging from more peripheral social ties. Research consistently reveals that older people are more deeply involved in religion than younger adults (e.g., Barna, 2002). If social relationships become more important as people grow older and if religion becomes more important with advancing age, then it follows that church-based social relationships may take on added value as people reach late life.

A growing number of studies indicate that as people go through the life course, feelings of personal control decline at an accelerating rate (Mirowsky, 1995). As research discussed in the previous section reveals, feelings of personal control may be an important determinant of good health. So if control improves health, but feelings of control decline markedly in old age, then it is imperative that researchers find ways to bolster this important personal resource. Focusing on the interface between making mandas and feelings of personal control represents a potentially important way to reach this goal.

There are two reasons why it is especially important to assess factors that influence the health of older Mexican Americans. First, research reveals that the health of older Hispanics is generally less favorable than that of older whites. For example, research reviewed by Hummer, Benjamins, and Rogers (2004) suggest that 34.1% of older Hispanics males between the ages of 65 and 74 rate their health as either fair or poor while only 24.1% of older white males in this age group rate their health in the same way. Similarly, health disparities arise between older Hispanic women and older white women. Second, average health care expenditures for Hispanics under the age of 65 in 2005 were $2,200. However, average health care expenditures for Hispanics age 65 and older were over three times greater ($7,855) (National Center for Health Statistics, 2008). If older Hispanics are less healthy than older whites and if health care expenses increase markedly as Hispanics grow

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older, then research is needed to identify the factors that enhance the health of the older people in this rapidly growing minority group.

Methods

Sample

The population for this study was defined as all Mexican Americans age 66 and over who were retired (i.e., not working for pay), not institutionalized, and who speak either English or Spanish. The sampling frame consisted of all eligible study participants who resided in select counties in the following five-state area: Texas, Colorado, New Mexico, Arizona, and California. The sampling strategy that was used for the widely-cited Hispanic Established Population for Epidemiological Study (HEPESE) (Markides, 2003) was adopted for the current study (see Markides, 2003, for a detailed discussion of the steps that were followed). All interviews were conducted by Harris Interactive (New York). The interviews were administered face-to-face in the homes of the older study participants. All interviewers were bilingual and study participants had the opportunity to be interviewed in either English or Spanish. The majority of interviews (84%) were conducted entirely in Spanish. A total of 1,005 interviews were completed successfully. The response rate was 52%.

The data that are used in the analyses presented below come from a sub-sample of participants in the wider national survey. Two factors were taken into account when this sub-sample was created. First, as shown in Figure 1, a measure of spiritual support from fellow church members was included in the study model. When this study was being designed, the members of the research team felt that it did not make sense to ask study participants about support they received in church if they either rarely go to church or don't attend church at all. Consequently, questions on spiritual support were not administered to older study participants who attend church services no more than once or twice a year. Second, mandas involve making promises to either the Virgin Mary or one of the saints. Since these deities are unique to the Catholic faith, only older Mexican American Catholics are included in the analyses presented below (78.8% of the entire study sample report they are Catholics). Based on these two exclusion criteria, the analyses presented below are based on the responses of 509 older Mexican Americans.

The full information maximum likelihood estimation (FIML) procedure was used to deal with item non-response in the data. Simulation studies suggest that the FIML procedure is preferable to listwise deletion because listwise deletion may produce biased estimates (Enders 2001). Moreover, research indicates that FIML estimates are as accurate as those that are obtained with more complicated and time-consuming multiple imputation procedures (Newman, 2003).

Preliminary analyses (not shown here) reveal that the average age of the older Mexican Americans in this sample was 73.4 years (SD = 6.2 years), approximately 39% were older men, the average number of years of schooling was 6.8 years (SD = 4.0 years), and approximately 56.0% were married at the time the interviews took place.

Measures

The core measures in the study model are provided in Table 1. All the religion measures, with the exception of church attendance, were developed for this study with an abbreviated version of the item development strategy that was developed by Krause (2002). More specifically, open-ended in-depth interviews were conducted with 52 older Mexican Americans who were residing in South Texas (see Krause & Bastida, 2009, for a discussion of this sample). New closed-ended items to assess religion were devised from the insights that were gleaned from these interviews. The newly developed items were pooled with

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existing items and back-translated from English into Spanish by a team of bilingual investigators. Following this, the quality of the study items was evaluated with 51 cognitive interviews that were conducted with a new sample of older Mexican Americans. The cognitive interviews involved presenting study participants with the newly devised closed ended items followed by a series of open-ended questions that were designed to see if they understood the questions in the intended manner. Finally, the closed-ended questions were again evaluated with 51 pretest interviews that were conducted with a new sample of older Mexican Americans.

Church Attendance—The measure of church attendance reflects how often older study participants attended worship services in the past year. A high score represents more frequent attendance. The mean level of church attendance is 6.8 (*SD* = 1.4).

Spiritual Support—Three items were used to determine how often older Mexican Americans receive spiritual support from their fellow church members. A high score denotes more frequent spiritual support. The mean level of the spiritual support composite measure is 5.9 (*SD* = 2.7).

Mandas—Two items were developed to assess the extent to which mandas are a part of the religious life of older Mexican Americans. As shown in Table 1, the first question asks study participants whether they feel that mandas are an important part of their faith. Preliminary analysis (not shown here) indicates that 58.7% of the older study participants either agreed or strongly agreed with this item. The second question asks study participants whether they make mandas or promesas any time they need something. Preliminary analyses reveal that 50.9% of the participants in this study either agreed or strongly agreed with this statement. As these descriptive data reveal, making mandas appears to be an important part of the religious life of many older Mexican Americans.

Feelings of Personal Control—A sense of personal control is measured with three items that come from the widely used internal-external locus of control scale (Rotter, 1966). A high score on these indicators reflects a stronger sense of control. The mean of these measures is 9.3 (*SD* = 1.6).

Self-Rated Health—Self-rated health was assessed with three widely-used indicators. A high score on these items reflects a more positive self-assessment of health. The mean of these three measures is 7.2 (*SD* = 1.7).

Demographic Control Variables—As noted earlier, the relationships among the measures in Figure 1 were estimated after the effects of age, sex, education, and marital status were controlled statistically. Age and education are scored in a continuous format while sex (1 = men; 0 = women) and marital status (1 = currently married; 0 = otherwise) were scored in a binary format.

Although these demographic variables are included as control variables in the study model, they serve a second function, as well. Because there is virtually no empirical research on making mandas, it is helpful to see if this religious practice varies by age, sex, education, or marital status within the Mexican American community. Finding demographic variations may provide additional insight into the nature of this culturally-unique religious practice. However, given the underdeveloped nature of the literature, hypotheses will not be developed for the relationship between these demographic variables and the practice of making mandas. Instead, this aspect of the analysis is more descriptive nature.

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Data Analysis Procedures: The model depicted in Figure 1 was estimated with Version 8.80 of the LISREL statistical software program (du Toit and du Toit 2001). The maximum likelihood estimator was used in the analyses. However, use of this estimator is based on the assumption that the observed indicators in a study model have a multivariate normal distribution. Preliminary tests (not shown here) revealed that this assumption had been violated in the current study. Following the recommendations of du Toit and du Toit (2001) departures from multivariate normality were handled by converting raw scores on the observed indicators to normal scores prior to estimating the model (see p.143).

Results

The findings from this study are presented below in three sections. The fit of the latent variable model to the data is assessed briefly in section one. Then reliability estimates for the multiple item study measures are provided in section two. Following this, the substantive findings from this study are presented in section three.

Fit of the Model to the Data

Because the FIML procedure was used to deal with item nonresponse, the LISREL software program provides only two goodness-of-fit measures. The first is the full information maximum likelihood chi-square (138.528; $df = 73$; $p < .001$). Unfortunately, this statistic is not very informative because the sample for this study is large. However, the second goodness-of-fit measure is more useful - the root mean square error of approximation (RMSEA). The RMSEA value for the model in Figure 1 is .042. As Kelloway (1998) reports, values below .05 indicate a very good fit of the model to the data.

Reliability of Multiple Item Measures

Table 2 contains the factor loadings and measurement error terms that were derived from estimating the study model. These coefficients are important because they provide preliminary information about the reliability of the multiple item indicators. Kline (2005) recommends that items with standardized factor loadings in excess of .600 tend to have good reliability. As the data in Table 2 indicate, the standardized factor loadings range from .579 to .951. Only one coefficient was below .600, and the difference between this estimate (.579) and the recommended value of .600 is trivial.

Although obtaining information about the reliability of each item is useful, it would also be helpful to know something about the reliability for the multiple item scales as a whole. Fortunately, it is possible to compute these estimates with a formula provided by DeShon (1998). This procedure utilizes the factor loadings and measurement error terms in Table 2. Applying the formula described by DeShon to these data yields the following reliability estimates for the multiple item constructs in Figure 1: spiritual support (.930), making mandas (.867), feelings of personal control (.800), and self-rated health (.721). Taken as a whole, these reliability estimates are acceptable.

Substantive Findings

Estimates of the relationships among the latent constructs in the study model are provided in Table 3. Taken as a whole, these findings provide support for each of the core hypotheses that were developed for this study. More specifically, the data indicate that older Mexican Americans who attend worship services more often tend to receive more spiritual support from fellow church members than older Mexican Americans who do not go to church as often (Beta = .194; $p < .001$). The results further reveal that compared to older Mexican Americans who get relatively little spiritual support, study participants who receive more spiritual support from fellow church members are more likely to report that making mandas

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is an important part of their faith (Beta = .289; $p < .001$). The findings suggest that compared to those who do not feel that making mandas is an important part of their faith, older Mexican Americans who report that making mandas or promesas is important tend to have a stronger sense of personal control (Beta = .131; $p < .05$). Finally, the data in Table 3 indicate that older Mexican Americans who have a stronger sense of personal control tend to rate their health more favorably than older Mexican Americans who feel they are less able to control the things that happen in their lives (Beta = .238; $p < .001$).

As discussed above, a secondary aim of the current study is to see if the practice of making mandas varies by age, sex, education, or marital status. The data in Table 3 suggest that the practice of making mandas does not vary by age (Beta = .057; *n.s.*), sex (Beta = −.079; *n.s.*), or marital status (Beta = .056; *n.s.*). But in contrast, the results indicate that older Mexican Americans with higher levels of educational attainment are less likely make mandas than older Mexican Americans with fewer years of schooling (Beta = −.175; $p < .001$). Although additional data are not available to explain this relationship, the findings are consistent with the deprivation-compensation hypothesis that was discussed earlier (Schieman et al., 2006). Recall that according to this perspective, socioeconomically marginalized members of society are more likely to engage in religion and derive greater psychological benefits from religion than individuals who are more well-to-do. Since educational attainment is a frequently used marker of socioeconomic status, the deprivation-compensation hypothesis helps explain why Mexican Americans with fewer years of schooling are more likely to make mandas.

Conclusions

Cross-cultural psychologists often make a distinction between the etic and emic aspects of a culture (Segall, Lonner, & Berry, 1998). Etic aspects of a culture refer to universal phenomenon that may be found in a number of cultures whereas the term “emic” is used to denote characteristics that are culturally-unique and largely found in one society only. When the etic and emic aspects of a culture are discussed in the literature, the potential relationship between the two is often overlooked. The model that was devised for the current study addresses this issue by showing that certain etic aspects of religion (i.e., church attendance and spiritual support) may at least partly influence the use of emic religious factors (i.e., making mandas). In the process of merging etic and emic facets of religion, this study also shows how social aspects of involvement in religion (i.e., church attendance and spiritual support) can influence constructs that have been viewed as psychological traits (i.e., feelings of personal control). The result of these efforts has produced potentially important insights into a largely overlooked religious practice of older Mexican Americans - making mandas.

The data from the current study reveal that the practice of making mandas is not uncommon and engaging in it may have important implications for the health of older Mexican Americans. Consistent with the study hypotheses, the findings indicate that older Mexican Americans who go to church more often tend to get more spiritual support from their fellow church members. And those who get more spiritual support are more likely to make mandas to the Virgin Mary or one of the saints. The results further reveal that older Mexican Americans who feel that mandas are an important part of their faith report having a greater sense of personal control than older Mexican Americans who put less stock in the practice of making mandas. The findings involving control are important because the data suggest that older Mexican Americans who have a greater sense of personal control tend to rate their health more favorably.

A central premise in the current study is that mandas are important because they tend to empower older Mexican Americans. Further evidence of this potentially important function

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emerged when the demographic correlates of making mandas were examined. The results indicate that older Mexican Americans with lower levels of educational attainment are more likely to make mandas than older Mexican Americans who have more years of schooling. Perhaps the sense of security, order, and predictability that is afforded by this culturally-unique religious practice adds a modicum of control to the lives of those who need it the most.

The findings from the current study hardly scratch the surface of the religious beliefs and practices of older Mexican Americans. Moreover, a number of issues involving mandas have been left unexamined. For example, researchers need to know what happens when requests that form the basis of mandas are not fulfilled. For example, what happens when an older Mexican American makes a manda to improve the health of a loved one but the health of this individual does not improve? Researchers need to identify the psychological processes that older Mexican Americans rely on to cope with this type of disappointment. Moreover, it would be helpful to know if unanswered requests create religious doubts and cause older Mexican Americans to loose their faith. We also need to know more about what happens when a person makes a manda, but fails to live up to their end of the bargain by not fulfilling the promise they made. Based on his experience as a Catholic priest, Fernandez (2007) reports that Mexican Americans believe God will punish people who have not fulfilled their mandas. This raises the possibility that failing to fulfill a promise as health-related consequences.

In the process of addressing these as well as other issues, researchers should pay attention to the limitations in the current study. One is especially important. The data for this study are cross-sectional, and as a result, the direction of causality that was specified in the study model was based on theoretical considerations alone. Consequently, it is possible to challenge the causal assumptions that have been made by arguing, for example, that health determines feelings of personal control instead of the other way around. Clearly, issues involving causality can only be resolved by conducting studies that are based on true experimental designs.

Although there are limitations in the current study, the issues that were raised and the findings that were observed will hopefully encourage other researchers to delve more deeply into the study of race differences in religion. It is imperative to do so because, as American society continues to become more racially diverse, researchers will be forced to ask whether much of what they have learned is relevant for a substantial portion of the population.

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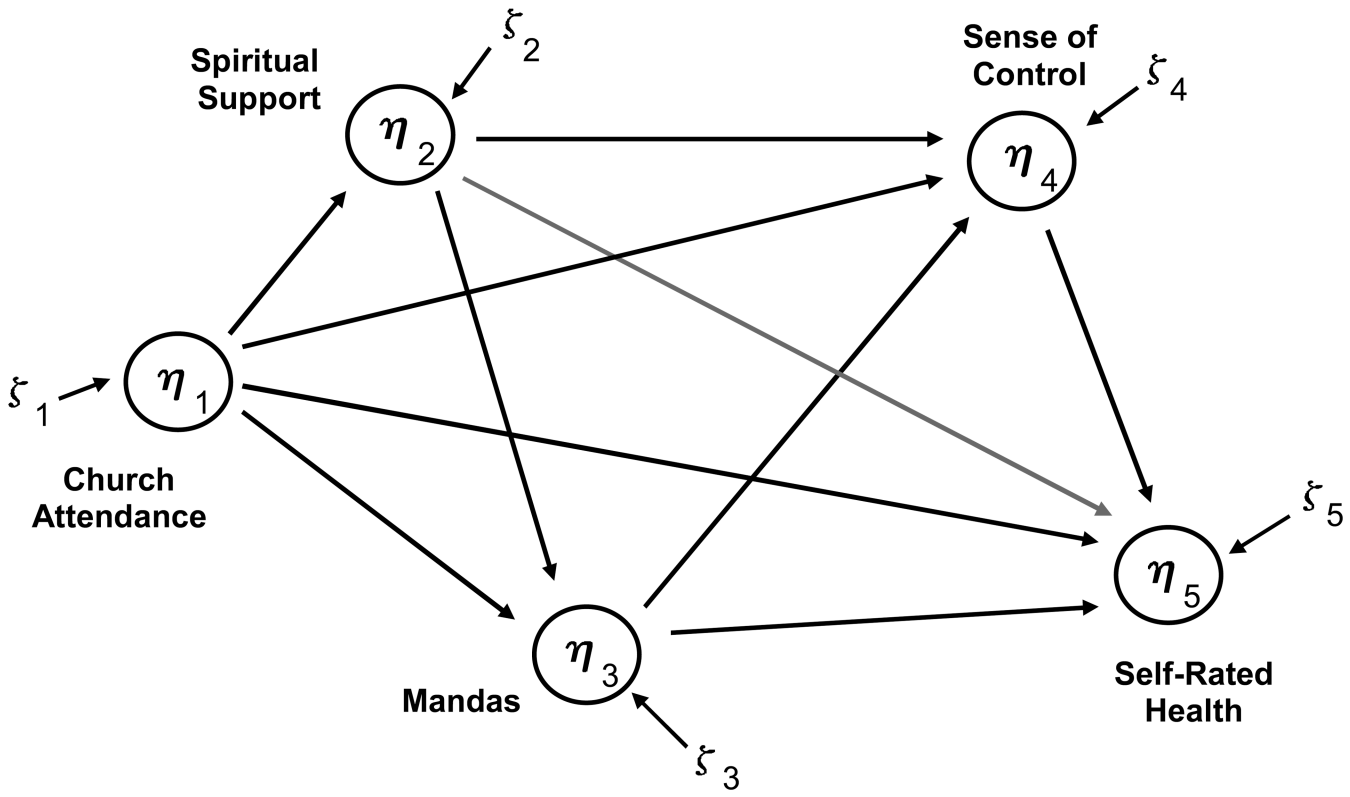

Figure 1.
A Conceptual Model of Making Mandas and Health

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Table 1

Core Study Measures

1	Church Attendance[a]	
	How often do you attend religious services?	
2	Spiritual Support[b]	
	A.	Not counting Bible study groups, prayer groups, or church services, how often do the examples set by others in your congregation help you lead a better religious life?
	B.	Not counting Bible study groups, prayer groups, or church services, how often does someone in your congregation help you to know God better?
	C.	Not counting Bible study groups, prayer groups, or church services, how often does someone in your congregation help you to life according to your religious beliefs?
3	Making Mandas[c]	
	A.	Mandas and promesas are a very important part of my faith.
	B.	I make mandas and promesas to God, the Virgin, or the saints any time I need something.
4	Feelings of Personal Control[c]	
	A.	I have a lot of influence over most things that happen in my life.
	B.	I can do just about anything I really set my mind to.
	C.	When I make plans, I'm almost certain to make them work.
5	Self-Rated Health	
	A.	How would you rate your overall health at the present time?[d]
	B.	Would you say your health is better, about the same, or worse than most people your age?[e]
	C.	In general, how satisfied are you with your health?[f]

[a] This variable is scored in the following manner (coding in parenthesis): several times a year (4), about once a month (5), 2 or 3 times a month (6), nearly every week (7), every week (8), several times a week (9). Note that respondents who attend church less than several times a year were excluded from the analyses.

[b] These variables are scored in the following manner: never, once in a while, fairly often, very often.

[c] These variables are scored in the following manner: strongly disagree (1), disagree (2), agree (3), strongly agree (4).

[d] This variable is scored in the following manner: poor (1), fair (2), good (3), excellent (4).

[e] This variable is scored in the following manner: worse (1), about the same (2), better (3).

[f] This variable is scored in the following manner: not at all satisfied (1), somewhat satisfied (2), very satisfied.

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Table 2

Factor Loadings and Measurement Error Terms for Multiple Item Measures (N = 509)

Construct	Factor Loading[a]	Measurement Error[b]
1. Spiritual Support		
A. Lead better religious life[c]	.868	.247
B. Know God better	.951	.096
C. According to religious beliefs	.891	.206
2. Mandas		
A. Mandas are important part of faith	.866	.250
B. Make mandas any time	.884	.218
3. Feelings of Personal Control		
A. Influence over most things	.579	.665
B. Do just about anything	.957	.084
C. Make plans work	.698	.513
5. Self-Rated Health		
A. Rate overall health	.692	.521
B. Most people your age	.663	.560
C. Satisfied with health	.685	.531

[a]The factor loadings are from the completely standardized solution. The first-listed item for each latent construct was fixed to 1.0 in the unstandardized solution.

[b]Measurement error terms are from the completely standardized solution. All factor loadings and measurement error terms are significant at the .001 level

[c]Item content is paraphrased for the purpose of identification. See Table 1 for the complete text of each indicator.

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Table 3

The Relationship Between Making Mandas and Self-Rated Health ($N = 509$)

	Dependent Variables				
Independent Variables	**Attend Church**	**Spiritual Support**	**Mandas**	**Personal Control**	**Self-Rated Health**
Age	.057[a]	−.035	.057	−.064	.021
	(.013)[b]	(−.005)	(.007)	(−.004)	(.002)
Sex	−.095*	−.102*	−.079	.056	.052
	(−.275)	(−.172)	(−.129)	(.042)	(.061)
Education	.129**	−.067	−.175***	.125*	.246***
	(.043)	(−.013)	(−.033)	(.011)	(.034)
Married	.044	−.122**	.056	−.024	.014
	(.125)	(−.204)	(.091)	(−.018)	(.017)
Attend Church		.194***	.001	.119*	.013
		(.114)	(.001)	(.031)	(.005)
Spiritual Support			.289***	.061	−.060
			(.280)	(.027)	(−.041)
Mandas				.131*	−.067
				(.060)	(−.048)
Personal Control					.238***
					(.371)
Multiple R^2	.029	.073	.126	.058	.144

[a] Standardized regression coefficient

[b] Metric (unstandardized) regression coefficient

* = $p < .05$;

** = $p < .01$;

*** = $p < .001$