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Church-Based Social Relationships, Belonging, and Health Among Older Mexican Americans

Neal Krause* and Elena Bastida**

Neal Krause: nkrause@umich.edu; Elena Bastida: ebastida@fiu.edu

* Marshal H. Becker Collegiate Professor in the Department of Health Education and Behavior, School of Public Health, the University of Michigan, 1420 Washington Heights, Ann Arbor, MI, 48109-2029

** Professor and Chair of the Department of Health Promotion and Disease Prevention, Robert Stemple College of Public Health and Social Work, Florida International University, 11200 S. W. 8th St., Miami, FL, 33199

Abstract

The purpose of this study is to explain how church-based emotional support influences the health of older Mexican Americans. This issue is evaluated with a theoretical model that contains the following core linkages: (1) older Mexican Americans who go to church more often will be more likely to receive emotional support from fellow church members; (2) older Mexican Americans who receive more support from their fellow church members will be more likely to feel they belong in their congregation; (3) older Mexican Americans who feel they belong in their congregation are likely to have a stronger sense of personal control; and (4) older Mexican Americans who have a stronger sense of personal control are likely to enjoy better health. Data from a recent nationwide survey of older Mexican Americans provide support for each of these relationships.

Introduction

A substantial body of research suggests that greater involvement in religion is associated with better health (Koenig, McCullough and Larson 2001). However, researchers have yet to provide a convincing explanation for how the potentially beneficial effects of health may arise. Part of the problem has to do with the fact that religion is a complex multidimensional phenomenon that can be measured in many ways (Fetzer Institute/National Institute on Aging Working Group 1999). So far, a number of different aspects of religion have been linked with better health, including the use of positive religious coping responses (Pargament 1997), forgiveness (Lawler-Row 2010), and feeling grateful to God (Krause 2006a). The research that is presented below is based on another dimension of religion that appears to play an important role in this process - church-based social relationships. A growing number of studies reveal that individuals who have established sound personal relationships with their fellow church members tend to enjoy better health than people who are not as close to their co-religionists (Krause 2008). This is consistent with research that which shows that secular social relationships have a strong impact on health (Krause 2006b).

But instead of merely assessing whether church-based social ties are associated with health, an effort is made to contribute to the literature in two potentially important ways. First, the data come from the first nationwide survey that was devoted solely to exploring the relationship between religion and health in an ethnic group that has received little attention in the literature - older Mexican Americans. All of the older Mexican Americans in the

current study live in the American Southwest. Second, an effort is made to bring the largely overlooked role that a sense of belonging may play in the explaining why sound church-based relationships are associated with better health.

Very few studies have been conducted to see if involvement in religion is associated with the health of older Mexican Americans. And most of the investigators who study older Mexican Americans have relied on crude measures of religion, such as the frequency of church attendance (Levin, Markides and Ray 1996) the importance of religion in daily life (Levin and Markides 1988; Levin and Markides 1985) and private prayer (Levin and Markides 1986). There are two reasons why it is especially important to study the relationship between religion and health among older Mexican Americans. First, recent demographic projections suggest that older Hispanics will soon surpass older African Americans to become the second largest racial/ethnic group in the nation (Vincent and Velkoff 2010).

Third, the dependent variable in this study is self-rated health. Focusing on this outcome is important because research by Hummer and his colleagues indicates that the proportion of older Mexican Americans who rate their health as poor is larger than the proportion of non-Hispanic whites who rate their health as poor (Hummer, Benjamins and Rogers 2004). Moreover, as the data from this study reveal, the gap in self-rated health between older Mexican Americans and older whites becomes progressively larger as the members of these racial/ethnic groups move through late life. So if greater involvement in religion is associated with better health, then it is especially important to study this relationship among members of racial/ethnic groups who have the greatest need for this significant source of resilience.

A Theoretical Model of Religion and Belonging Among Older Mexican Americans

The theoretical model that is used to examine the relationships among church-based social relationships, belonging, personal control, and health is depicted in Figure 1. Two steps were taken to simplify this model. First, the relationships among the constructs in Figure 1 were estimated after the effects of age, sex, education, and affiliation with the Catholic Church were taken into account. Second, the measurement model (i.e., the factor loadings and the measurement error terms associated with the observed indicators) is not shown in this conceptual scheme. However, it should be emphasized that a full multiple-item measurement model was estimated when the relationships among the latent constructs were evaluated.

The following linkages form the conceptual core of the study model: (1) older Mexican Americans who go to church more often will be more likely to receive emotional support from the people who worship there; (2) older Mexican Americans who receive more emotional support from their fellow church members will be more likely to feel they belong in their congregation; (3) older Mexican Americans who feel they belong in their congregation will have a stronger sense of personal control; and (4) older Mexican Americans who have a stronger sense of personal control are likely to enjoy better health. The theoretical rationale for these linkages is provided below.

Church Attendance and Emotional Support

There are three reasons why more frequent church attendance should be associated with receiving more emotional support. The first is straightforward. In order for an individual to receive social support they must obviously come into contact with potential support providers. Second, in order for a supportive relationship to arise, both support providers and

support recipients must have contact on a fairly regular basis. The third reason has to do with the nature of the Christian faith. The core tenets in this faith tradition extol the virtues of loving other people, forgiving them for things they have done, and helping others who are in need (Krause, 2008). If older Mexican Americans and their fellow church members subscribe to these teachings, then more frequent contact among these like minded individuals should provide a greater opportunity to put these teachings into practice by exchanging emotional support.

Church-Based Emotional Support and Belonging in a Congregation

Researchers have maintained for some time that developing a strong sense of belonging is one of the most fundamental human needs (Maslow 1954). In fact, Baumeister and Leary (1995: 498) go as far as to argue that, "... belongingness can be almost as compelling a need as food." But a sense of belonging involves much more than a stated religious affiliation (e.g., "I am a Catholic"). Instead, as Carrier (1965:58) points out, when a person feels they belong to a congregation, "The member sees himself as taking part in his group; he identifies himself with it, he participates in it, he receives his motivation from it; in a word, he is in a state or disposition of interaction with the group, which understands, inspires and welcomes him." Because a sense of belonging is such a fundamental human need, it is surprising to find that only one study that has empirically evaluated the influence of belonging on health (Krause and Wulff 2005). These investigators report that a strong sense of belonging in a congregation is associated with more positive self-rated health. However, the sample for this study was comprised of people of all ages as well as individuals in all racial and ethnic groups.

Research on belonging appears to be especially well-suited for studying Mexican Americans because scholars have argued for some time that the pernicious historical circumstances that Mexican Americans have faced has made it difficult for them to derive a strong sense of belonging: "What makes the experience of Mexican Americans unique compared to other ethnic populations that migrated to this country is their psychohistorical experience and their subsequent subjugation - all taking place in what the indigenous peoples considered to be their own land" (Rodriguez 1994:69). Rodriguez (1994:69) goes on to point out that the colonization of Mexican Americans fosters, "... feelings of inferiority, lack of self-worth, hostility, apathy, (and) apparent indifference..."

A key issue that arises at this juncture involves identifying how older Mexican Americans are able to derive a sense of belonging in the face of this social adversity. Although several sources of resilience may be evaluated in this respect, the strength the older Mexican Americans may find in the church is especially important. More specifically, the deep sense of community and identity that is often fostered in the church lays the foundation for deriving a strong sense of belonging among older Mexican Americans. The wide majority (about 80%) of older Mexican Americans affiliate with the Catholic Church (Fernandez 2007) and as a result, discussions of religion in this ethnic group often focus on this specific faith tradition. In his insightful essay on the Catholic Church in the Mexican American community, Goizueta (2002:121) argues that, "... what Euro-Americans find most striking about Mexican American popular Catholicism (is) its decidedly communal character." Goizueta (2002:122) goes on to point out that the, "... community is the very source of personal identity. Individuals are not building blocks of community; community is, instead, the foundation of individual personhood." If older Mexican Americans are members of congregations that promote a strong sense of identity, it is not difficult to see why they are likely to develop a strong sense of belonging.

But it is still not entirely clear how a sense of belonging is fostered in Mexican American congregations. According to the model in Figure 1, a key factor involves receiving

emotional support from fellow church members. When significant others provide emotional support, they are letting support recipients know they are loved and valued highly. In the process, this positive feedback makes support recipients feel welcomed and makes them feel they are part of the group. This is hardly a new idea. Friedrich Schleiermacher was a well-known theologian. Writing in 1799, he devoted considerable effort to studying the social aspects of religion: "Religion, therefore, withdraws itself from too wide circles to the more familiar conversation of friendship and love..." (Schleiermacher 1799/1994:150). He went on to portray church-based social ties as relationships among neighbors: "Every man is in contact with his neighbour; but on every side and in every direction has neighbours and is thus inseparably bound up with the whole... A band encloses them all and they cannot be quite separated...." (Schleiermacher 1799/1994:154). Cast within the context of the current study, this suggests that the "conversation of friendship and love" that is found in the church (i.e., emotional support) creates inseparable bonds that are not dissolved easily. And if older Mexican Americans feel that they are inseparably bound to their fellow church members, then they should feel a strong sense of belonging in their congregations.

Belonging in a Congregation and Personal Control

Although there are a number of reasons why a sense of belonging is associated with better health, it is proposed in Figure 1 that a sense of belonging in a congregation bolsters feelings of personal control. As Goizueta (2002) observes, identifying with the church and experiencing the sense of belonging that arises from it is an empowering experience that promotes human agency (i.e., a sense of control) among Mexican Americans. He then makes an interesting observation on the direction of causality between these constructs: "... human agency is not the source of community but its' by-product" (Goizueta 2002:122). There is widespread support in the literature for the notion that a sense of personal control arises from the social ties that are maintained by older adults (Krause 2003). But it is not entirely clear how this relationship arises. According to the model in Figure 1, the sense of belonging that arises from the support significant others provide may have something to do with it. Cooley (1927:199) captured the essence of this: "Give a man a secure position and you will note an access of self-confidence and ease of intercourse: he feels the social order bearing him up."

Feelings of Personal Control and Health

A vast literature indicates that strong feelings of personal control are associated with better physical health and better mental health (Krause 2003). There at least three reasons why a strong sense of control may provide health-related benefits. First, research clearly demonstrates that a strong sense of control reduces the deleterious effects of stress on a range of health-related outcomes (e.g., Krause 1987). Second, some studies suggest that people with a strong sense of control are more likely to adopt a wide range of beneficial health behaviors (Schwarzer and Fuchs 1995). Third, findings from a well developed literature indicate that feelings of personal control are an important determinant of psychological well-being (Ross and Sastry 1999). These results are noteworthy because research reveals that psychological well-being is associated with physical health status (Cohen and Rodriguez 1995).

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 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. This sampling strategy was executed in a seven steps. First, using data provided by the Census Bureau, a complete list of counties in the five states were identified and ranked according to the number of Mexican Americans age 66 and older who resided in them. Second, counties where ninety percent of older Mexican Americans reside were retained. Third, a list of census tracts within each county was developed and the number of older Mexican Americans within each census tract was determined. Once again, census tracts where ninety percent of older Mexican Americans resided were retained. Fourth, 125 census tracts were sampled with probabilities proportional to the number of Mexican American elderly. Fifth, a list was created of all the blocks in each census tract. Sixth, a block was selected within each tract with a simple random sampling procedure. Seventh, maps were created for each selected block and the number of housing units on each block was determined. Interviewers then screened the households on each block for eligible study participants. Based on Census estimates, this sampling strategy should cover 82% of all older Mexican Americans in the nation.

All interviews were conducted by Harris Interactive (New York) in 2009. The interviews were administered face-to-face in the homes of the study participants. Study participants had the option of being interviewed in either English or Spanish. The majority of interviews (84%) were conducted in Spanish. A total of 1,005 interviews were completed successfully. The response rate was 52%.

In an effort to make sure that the sample is representative, data on age, sex, marital status, education, country of birth, and affiliation with the Catholic Church were compared with the estimates of the variables in the HEPESE Survey. Virtually identical estimates were obtained from both surveys for the following variables: age, sex, marital status, and country of birth. The level of education was somewhat higher in the current study (6.7 years vs. 4.9 years in the HEPESE), but this can be attributed to the fact that the HEPESE was conducted 15 years before the current study. In addition, the proportion of Catholics was somewhat lower in the current study (79% vs. 86% in the HEPESE). However, this can be attributed to the fact that, for some time, an increasingly larger number of Mexican Americans are leaving the Catholic Church and joining Pentecostal congregations (Fernandez 2007).

Support provided by fellow church members and a sense of belonging in a congregation figure prominently in Figure 1. When this study was being designed, the members of the research team felt it did not make sense to ask study participants about support they received in church or their sense of belonging in a congregation if they either don't attend church at all or if they rarely go to church. Consequently, questions on support and belonging were not administered to study participants who indicated they go to church services no more than twice a year. After deleting these study participants from the sample, the analyses presented below are based on the responses of 663 older Mexican Americans.

The full information maximum likelihood estimation (FIML) procedure was used to deal with missing values in the data. Simulation studies suggest that the FIML procedure is preferable to listwise deletion because listwise deletion may produce biased estimates (Enders 2001).

Preliminary analyses 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 6.0 ($SD = 4.1$ years), and approximately 76.7% affiliated with the Catholic Church.

Measures

The core measures of religion for this study are provided in Table 1. The procedures that were used to code these items are provided in the footnotes of this table. Reliability estimates for the multiple item scales are provided later in this report after information on the elements of the measurement model have been presented.

All the religion measures, except church attendance, were developed for this study with an abbreviated version of the item development strategy outlined by Krause (2002). Open-ended in-depth interviews were conducted with 52 older Mexican Americans who reside in South Texas (see Krause and Bastida 2009). New closed-ended items to assess religion were devised from these interviews. The items were translated and back-translated from English into Spanish by a team of bilingual investigators. Following this, the quality of the newly devised closed ended items was evaluated with 51 cognitive interviews that were conducted with a new sample of older Mexican Americans. This 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. After making a few revisions in the items, they were again translated and back-translated from English into Spanish. 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.

Church-Based Emotional Support—The older participants in this study were asked how often fellow church members love and care for them, talk with them about their private problems and concerns, and express interest in their well-being. A high score denotes more frequent emotional support.

Sense of Belonging in the Congregation—Four indicators were used to measure the extent to which older Mexican Americans feel they belong in the place where they worship. A high score stands for a greater sense of belonging.

Feelings of Personal Control—As shown in Table 1, a sense of personal control is measured with three items that come from the well-known locus of control scale (Rotter, 1966). A high score on these indicators reflects a strong sense of control.

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.

Demographic Control Variables—The relationships among the measures in Figure 1 were estimated after the effects of age, sex, education, and affiliation with the Catholic Church were controlled statistically. Age and education are scored in a continuous format while sex (1 = men; 0 = women) and religious affiliation (1 = Catholics; 0 = all others) are scored in a binary format.

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 for this analysis. 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 (2001:143) departures from multivariate normality were handled by converting raw scores on the observed indicators to normal scores prior to estimating the mode.

Results

Fit of the Model to the Data

Because FIML was used to deal with item non-response, the LISREL software program provides only two goodness-of-fit measures. The first is the full information maximum likelihood chi-square test (716.366 with 104 degrees of freedom, $p < .001$). Unfortunately, this statistic is not very informative because it underestimates the fit of the model to the data when samples are large, such as the one in the current study. 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 .094. As Kelloway (1998) reports, values below .10 indicate a good fit of the model to the data.

Reliability of the Multiple Item Study Measures

Table 2 contains the factor loadings and measurement error terms that were derived from estimating the latent variable model. These coefficients provide 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 .571 to .942. Only one coefficient is below .600, and the difference between this estimate (.571) and the target value of .600 is trivial.

Although obtaining information about the reliability of each item is useful, it is also helpful to know something about the reliability for the multiple item scales as a whole. These estimates can be computed with a formula provided by DeShon (1998). This procedure is based on the factor loadings and measurement error terms in Table 2. Applying the procedures described by DeShon (1998) to these data yield the following reliability estimates for the multiple item constructs in Figure 1: emotional support from church members (.847), feelings of belonging in a congregation (.885), sense of personal control (.815), and self-rated health (.714).

Relationships Among the Latent Variables

The substantive findings that emerged from estimating the model in Figure 1 are provided in Table 3. These data provide support for the hypotheses that were proposed earlier. More specifically, the results indicate that older Mexican Americans who attend church more often report that they receive emotional support from fellow church members more often (Beta = .226; $p < .001$). The findings further reveal that older Mexican Americans who receive more emotional support from the people they worship with are more likely to feel they belong in their congregations (Beta = .241; $p < .001$). Consistent with the hypothesis that was provided earlier, the data indicate that older Mexican Americans who feel they belong in their congregations tend to have a stronger sense of control (Beta = .335; $p < .001$). And as a number of other studies have shown, the results in Table 3 suggest that a stronger sense of personal control is associated with more favorable self-rated health (Beta = .252; $p < .001$). Taken together, the magnitude of these effects is fairly large.

One of the advantages of working with latent variable models arises from the fact that it is possible to assess the indirect and total effects of a variable that operate through a model. A simple example helps clarify the meaning of these terms. The model in Figure 1 specifies that emotional support influences a sense of belonging, and belonging, in turn, affects

feelings of personal control. This means that emotional support may affect personal control indirectly through the sense of belonging. When the direct effect of emotional support on control is added to the indirect effect that operates through belonging, the resulting total effect provides a broader vantage point for assessing role that church-based emotional support plays in fostering a sense of control among. Breaking down the total effects of a construct into direct and indirect effects is known as the decomposition of effects (Alwin 1988). A decomposition of effects of the core variables in this study is presented in Table 4.

Three of the decompositions in Table 4 will be discussed here. The first has to do with the relationship between the frequency of church attendance and feelings of personal control. The direct effect in Table 4 indicates that older Mexican Americans who attend worship services more often tend to have stronger feelings of personal control ($\text{Beta} = .114; p < .01$). When the indirect effects of church attendance on control that operate through emotional support and belonging ($\text{Beta} = .050; p < .01$) are added to the direct effect, the resulting total effect is also statistically significant ($.114 + .050 = .164; p < .001$). These data suggest that approximately 30% of the effect of church attendance on personal control may be attributed to the indirect effects that operate through emotional support and feelings of belonging in a congregation ($.050/.164 = .305$).

The findings regarding the social basis of personal control can be brought into sharper focus by juxtaposing the influence of church-based emotional support and a sense of belonging in a congregation. The second decomposition of effects reveals which of the two facets of social life in the church is more likely to influence feelings of personal control. The data in Table 4 suggest that emotional support from fellow church members does not exert a statistically significant direct effect on feelings of personal control ($\text{Beta} = -.060; n.s.$). However, the indirect effect of emotional support that operates through belonging is statistically significant ($\text{Beta} = .081; p < .001$). Even so, when the direct and indirect effects of church-based support are added together, the resulting total effect of emotional support on control is not statistically significant ($\text{Beta} = .021; n.s.$). In contrast, the direct effect of belonging in a congregation on feelings of personal control is fairly substantial ($\text{Beta} = .335; p < .001$). Taken as a whole, these data suggest that a sense of belonging in a congregation has more consequential effects on feelings of personal control than emotional support from fellow church members.

The third decomposition of effects involves the relationship between belonging in a congregation and self-rated health. Initially, the direct effects in Table 4 may create the impression that a sense of belonging is not associated with the health of older Mexican Americans ($\text{Beta} = .034; n.s.$). However, when the indirect effect of belonging that operates through personal control ($\text{Beta} = .084; p < .001$) is taken into account, a different conclusion is reached. The resulting total effect of belonging on health suggests that older Mexican Americans who feel they belong in their congregation tend to rate their health more favorably than older Mexican Americans who feel less tightly integrated into the place where they worship ($\text{Beta} = .118; p < .05$). Moreover, 71% of this effect may be attributed to the feelings of personal control that are fostered by a greater sense of belonging in the congregation ($.084/.118 = .712$).

Discussion

Research on religion and health among Mexican Americans is in its infancy. The pioneering work of Levin and his colleagues indicates that more frequent church attendance and more frequent prayer are associated with greater psychological well-being and better subjective health among Mexican Americans (e.g., Levin and Markides 1986; Levin Markides and Ray 1996). However, it is time to move beyond the use of these general markers of religious

involvement to more focused religion measures so that greater insight into the ways in which religion may promote the health of older Mexican Americans can be obtained.

The purpose of the current study was to take a step in this direction by assessing the interface between several different dimensions of religious involvement and health. The core measures of religion that were used in this study have a decidedly social emphasis (Krause 2008): emotional support from fellow church members and a sense of belonging in a congregation. The results indicate that more support from coreligionists promotes a greater sense of belonging in a congregation, and this sense of belonging, in turn, is associated with better health. Moreover, the data indicate that belonging affects health primarily by bolstering feelings of personal control among. This is the first time that any of these relationships have been examined empirically among older Mexican Americans.

Although emotional support and belonging both play a role in shaping self-reports of health, feelings of belonging in a congregation appear to be more consequential. The differential impact of these two religion measures make it possible to hone in on the underlying process that may be at work. A sense of belonging is a higher-order aspect of congregational life because it involves feelings that an individual has toward the group as a whole. In contrast, church-based emotional support may be construed as a lower-order social construct because it involves more circumscribed aspects of relationships that older Mexican Americans have been formed with some, but not likely all, church members. Viewed in this way, a sense of belonging in a congregation comes closer to capturing the sense of community that appears to be such a vitally important aspect of Mexican American culture (Goizueta 2002). To the extent that this is true, the wider sense of community (i.e., belonging) that arises in the church may be an important source of resilience for older Mexican Americans.

There are three reasons why the findings from this study are noteworthy. First, the data were provided by members of a largely overlooked ethnic group – older Mexican Americans. Second, instead of assessing whether church-based social support is associated with health, an effort was made to identify the variables that mediate the relationship between these constructs. Third, this is one of the few studies to examine the relationship between a sense of belonging in a congregation and health even though there are sound reasons for exploring this association.

Although the findings from this study may help move the literature forward, a tremendous amount of work remains to be done on the social milieu of the church and health in the Mexican American community. For example, the current study focuses on positive aspects of social relationships in the church, but research with older whites and older blacks reveals that congregations can be rife with conflict, as well (Krause et al. 2000). Researchers need to learn more about the extent of church-based interpersonal conflict and whether it exerts a deleterious effect on the health of older Mexican Americans. Similarly, there is some evidence that the nature of the relationship that church members maintain with their pastors may influence feelings of well-being in late life (Krause 2003). But relationships with the clergy have yet to be evaluated in samples that are comprised of older Mexican Americans. Finally, research with older whites and older African Americans indicates that church-based social ties exert a more beneficial effect on health than social relationships that are maintained outside the church (Krause 2006c). It is time see if the same is true in the Mexican American community.

In the process of determining what needs to be done next, it is important to also keep in mind that there are limitations in the work that is presented above. Two shortcomings merit a brief discussion. First, we equated a sense of belonging with a feeling of community. However, there is a more sophisticated way to measure a sense of community. This

alternative approach involves the use of hierarchical linear modeling (HLM) procedures. More specifically, a sense of belonging among a representative sample of people in the same congregation must be obtained. This would make it possible to use HLM procedures to see if shared feelings of belonging across the sampled individuals influence the individual outcomes that are examined in the current study.

Second, the most important shortcoming has to do with the cross-sectional nature of the data. Because the data were gathered at only one point in time, decisions about the causal ordering among the constructs in the theoretical model were based solely on theoretical considerations. The challenges that arise from making these assumptions appear at several points in the study model. For example, it is possible to argue that health affects feelings of personal control affect instead of the other way around. However, there do not appear to be any studies in the literature that conclusively resolve the direction of causality between these measures. In addition to using empirical data to resolve this type of issue, it is important to turn to theory for guidance, as Bradley and Schaefer (1998:166–167) suggest: “... a claim of causality is fundamentally interpretative. Its credibility depends on its presentation of a (theoretical) mechanism that substantial numbers of people find compelling.” This insight was followed above, when it was argued that control affects health by offsetting the deleterious effects of stress on health (Krause, 1987) and by leading to the greater use of beneficial health behaviors (Mirowsky and Ross 2003).

It is also possible to argue that older people with a greater sense of personal control are more likely to attend church more often than older adults with a diminished sense of personal control. However, there are sound theoretical reasons for the specification that is provided in Figure 1. Hood, Hill, and Spilka (2009) maintain that religion serves three basic human needs, and one is the need for control. In fact, as these investigators point out, “... religious faith alone may provide ... (a) ... subjective sense of control to help people regain the feeling they are doing something that may work. This enhanced subjective feeling of control is often capable of offering people the strength they need to succeed” (Hood, Hill and Spilka 2009:18).

Finally, the model that was evaluated in this study specifies that church-based emotional support affects feelings of personal control, but it could just as easily be argued that older Mexican Americans with a strong sense of personal control are more likely to use social networks in church more effectively. A number of studies reveal that feelings of personal control decline precipitously in late life (Mirowsky 1995). However, given the fundamental need to maintain a strong sense of control, it is not surprising to find that older people turn to significant others in an effort to help restore and maintain this important psychological resource (Krause 2003).

Even though there are shortcomings in the work that has been done, it is the hope of the authors that their research generates greater interest in the relationship between religion and health among older Mexican Americans. Broadening the scope of research on religion and health to include a wider circle of minority group members can add considerable depth and insight to our understanding of the potential health-related benefits that may arise from being more deeply immersed in religion.

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Figure 1.
A Theoretical Model of Belonging in the Congregation and Health

Table 1**Core Study Measures**

1	Church Attendance ^a $M = 7.0$; $SD = 1.5$ How often do you attend religious services?
2	Church-Based Emotional Support ^b $M = 7.0$; $SD = 2.7$ <ul style="list-style-type: none"> A. Other than your minister, pastor, or priest, how often has someone in your congregation let you know they love and care for you? B. How often does someone in your congregation talk with you about your private problems and concerns? C. How often does someone in your congregation express interest and concern in your well-being?
3	Sense of Belonging in the Congregation ^c $M = 13.7$; $SD = 2.0$ <ul style="list-style-type: none"> A. I feel like I really belong in my congregation. B. Being a member of my congregation is an important part of who I am. C. I feel welcomed in my congregation. D. I feel I am accepted by the people in my congregation.
4	Feelings of Personal Control ^c $M = 9.4$; $SD = 1.6$ <ul style="list-style-type: none"> A. I can do just about anything I really set my mind to. B. When I make plans, I am almost certain to make them work. C. When I encounter problems, I don't give up until I solve them.
5	Self-Rated Health $M = 7.3$; $SD = 1.7$ <ul style="list-style-type: none"> 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

^aThis item is scored in the following manner (coding in parenthesis): never (1); less than once a year (2); about once or twice a year (3); several times a year (4); about once a month (5); 2 to 3 times a month (6); nearly every week (7); every week (8); several times a week (9).

^bThese items are scored in the following manner: never (1); once in a while (2); fairly often (3); very often (4).

^cThese items are scored in the following manner: strongly disagree (1); disagree (2); agree (3); strongly agree (4).

^dThis item is scored in the following manner: poor (1); fair (2); good (3); excellent (4).

^eThis item is scored in the following manner: worse (1); about the same (2); better (3).

^fThis item is scored in the following manner: not at all satisfied (1); somewhat satisfied (2); very satisfied (3).

Table 2

Factor Loadings and Measurement Error Terms for Multiple Item Measures (N = 663)

Construct	Factor Loading ^a	Measurement Error ^b
1. Church-Based Emotional Support		
A. Love and care for you ^c	.868	.247
B. Private problems and concerns	.612	.625
C. Concern in your well-being	.914	.165
2. Belonging in the Congregation		
A. Belong in my congregation	.614	.623
B. Important part of who I am	.571	.674
C. Welcomed in congregation	.942	.112
D. Accepted in Congregation	.942	.112
3. Feelings of Personal Control		
A. Do just about anything	.735	.460
B. Make plans work	.825	.319
C. Don't give up	.751	.437
5. Self-Rated Health		
A. Rate overall health	.681	.536
B. Most people your age	.675	.545
C. Satisfied with health	.667	.556

^aThe 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.

^bMeasurement error terms are from the completely standardized solution. All factor loadings and measurement error terms are significant at the .001 level

^cItem content is paraphrased for the purpose of identification. See Table 1 for the complete text of each indicator.

Table 3

The Relationship Between Belonging in a Congregation and Health ($N = 663$)

Independent Variables	Dependent Variables			
	Attend Church	Emotional Support	Belonging	Personal Control
Age	.032 ^a (.007) ^b	.033 (.005)	.144 ^{***} (.009)	-.008 (-.001)
Sex	-.057 (-.169)	-.138 ^{***} (-.256)	-.080 [*] (-.066)	.124 ^{**} (.119)
Education	.116 ^{**} (.041)	.010 (.002)	.068 (.007)	.119 ^{**} (.014)
Catholic	-.274 ^{***} (-.938)	-.278 ^{***} (-.597)	-.054 (-.052)	.067 (.074)
Attend Church		.226 ^{***} (.142)	.136 ^{***} (.038)	.114 ^{**} (.037)
Emotional Support			.241 ^{***} (.106)	-.060 (-.031)
Belonging in a Congregation				.034 (.048)
Personal Control				.252 ^{***} (.302)
Multiple R ²	.091	.188	.159	.154

^a Standardized regression coefficient^b Metric (unstandardized) regression coefficient* $p < .05$;** $p < .01$;*** $p < .001$

Table 4Decomposition of Effects ($N = 663$)

Dependent Variable/Independent Variable	Direct Effect (A)	Indirect Effect (B)	Total Effect (A + B)
Emotional support/Church attendance	.226***		.226***
Belonging/Church attendance	.136***	.054***	.190***
Personal Control/Church attendance	.114**	.050**	.164***
Self-rated health/Church attendance	.053	.035	.088
Belonging/Emotional support	.241***		.241***
Personal control/Emotional support	-.060	.081***	.021
Self-rated health/Emotional support	-.056	.013	-.043
Personal control/Belonging	.335***		.335***
Self-rated health/Belonging	.034	.084***	.118*
Self-rated health/Personal control	.252***		.252***

^a All coefficients in the table are standardized coefficients.

* $p < .05$;

** $p < .01$;

*** $p < .001$.