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## Comparing the Effects of Volunteering and Providing Informal Support in Church on Health in Late Life

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### Abstract

**Objective**—To assess the relationships among volunteer work at church, providing informal support to fellow church members, religious commitment, and change in self-rated health over time.

**Method**—Data were obtained from a nationwide longitudinal sample of 681 older adults.

**Results**—The findings suggest that providing informal tangible support to fellow church members is associated with better health over time. In contrast, the data reveal that performing volunteer work does not have a statistically significant effect on health. The results further indicate that the health-related benefits of providing tangible help to fellow church members are especially evident among older adults who are more deeply committed to their faith.

**Discussion**—Although older people may assist others in different ways within the church, the informal assistance they provide to coreligionists appears to be more strongly associated with health.

### Keywords

volunteering; informal support; religion

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An impressive body of research suggests that engaging in volunteer work is associated with a wide range of health-related benefits (Musick & Wilson, 2008). This literature reveals that people who volunteer tend to enjoy better physical health (Lum, 2005), better mental health (Morrow-Howell et al., 2003), and they tend to live longer than individuals who are not involved in volunteering (Harris & Thoresen, 2005). Although it is difficult to find a definition of volunteering that is agreed upon by all researchers, the definition that is proposed by Musick and Wilson (2008) is used here. They maintain that "... volunteer work includes not only the unpaid provision of services directly to others in need, but also political activism and community representation on boards of various agencies" (Musick & Wilson, 2008, p. 26). Musick and Wilson go on to point out that one of the key characteristics of volunteering is that it is an organized activity that does not include casual or informal helping.

Even though a number of studies have been conducted to assess the health-related benefits of volunteering, several issues involving this important type of helping behavior have yet to be examined fully. One broad issue forms the focal point of the current study. When viewed at the simplest level, volunteering involves helping other people. But volunteering is not the only way in which an individual can assist someone who is in need. Instead, a vast literature reveals that people also provide a significant amount of assistance to their informal social network members. Moreover, this research reveals that informally helping others appears to provide many of the same health-related benefits as formal volunteering (see Krause, 2006, for a review of this literature). This makes sense because volunteering as well as informal helping may be

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viewed as manifestations of a wider tendency to engage in altruistic behavior. To the extent this is true, people who volunteer may also be more likely to provide informal support to their significant others. Therefore, in order to be sure that health benefits arise from volunteering per se, it is important to compare and contrast volunteering with other ways of helping. Despite the straightforward nature of this rationale, it is surprising to find that research on volunteering and informally helping others has evolved in a largely independent manner.

Krause, Herzog, and Baker (1992) conducted one of the few studies that directly compare volunteering with providing informal help to others. Their research reveals that providing informal support to others, but not volunteering, bolsters feelings of personal control in late life. Krause et al. (1992) went on to demonstrate that greater feelings of personal control are, in turn, associated with fewer symptoms of depression. Although this study examined an important issue, it suffers from several limitations. First, the data are cross-sectional, making it difficult to determine whether helping others reduces depressive symptoms, or whether people who have better mental health are more likely to help in the first place. Second, this study focused solely on feelings of personal control and symptoms of depression. This leaves open the question of whether volunteering or informal helping has a greater impact on physical health, as well.

The purpose of the current study is to see whether performing volunteer work has a more beneficial effect on the physical health status of older people than giving informal support to social network members. Greater faith may be placed in the findings that emerge from this research because the data are provided by a nationwide longitudinal survey of older adults.

The discussion that follows is divided into three main sections. The theoretical underpinnings of this study are developed in the first section. Then the study sample and survey measures are introduced in section two. Following this, the findings are presented and discussed in section three.

## **Volunteering, Informal Social Support, and Health**

### **The Health-Related Benefits of Helping Others**

There are a number of reasons why helping others, through either volunteer work or providing informal assistance to social network members may be associated with better health. Some time ago, Reissman (1965) identified three ways in which support providers benefit from helping others. First, Reissman (1965) argues that helping other people enhances the self-esteem of support providers. Giving assistance to those who are less fortunate makes a clear and unambiguous statement about the support provider because it highlights basic aspects of his or her character that are admired widely in American society. Having a strong sense of self-esteem is important because a number of studies suggest that a positive sense of self-worth is associated with better physical health, better mental health, and the adoption of beneficial health behaviors (see Trzesniewski, Donnellan, & Robins, 2003, for a review of this research). Second, Reissman (1965) maintains that seeing support recipients overcome problems with the assistance they have been given makes it possible for help providers to believe they can gain greater control over their own lives, as well. This is important because a vast literature suggests that greater feelings of personal control are associated with better physical health, better mental health, and greater use of beneficial health behaviors (see Krause, 2003, for a review of this research). Third, Reissman (1965) points out that assisting people who are in need provides a psychological respite from the support provider's own difficulties: It shifts the focus away from the self and the problems that support providers may be grappling with. This is noteworthy because the ability to temporarily escape one's own problems may have beneficial effects on health and well-being (Gottlieb, 1997).

## Exploring the Social Context of Helping Others

In 2002, researchers in the Department of Labor conducted an extensive survey on volunteering. Participants in this study were asked a range of questions about volunteering, including a question about where they performed volunteer work. Data were provided on eight different formal help settings ranging from civic organizations to hospitals, secular community service organizations, and religious institutions. The data indicate that if older people engage in volunteer work, they are especially likely to do so within a religious institution. More specifically, the findings suggest that 45.2% of all volunteers aged 65 and over helped others through religious organizations. The second most frequent help setting for people in this age group was secular community service organizations (17.6%). This finding was replicated in a subsequent study by the Corporation for National and Community Service (2006). This study reveals that 45.5% of older people who performed volunteer work in 2005 did so through a religious institution.

The fact that older people are especially likely to perform volunteer work through religious institutions makes sense for three reasons. First, research consistently shows that people who are currently older are more deeply involved in religion than individuals who are presently younger (Barna, 2002). Second, virtually all the major religions in the world extol the virtues of helping others (Princeton Religion Research Center, 1994). Third, many religious institutions have formal programs in place that are geared specifically toward helping people who are in need (Trinitapoli, 2005). Therefore, if older adults are more involved in religion; if religion encourages people to help others; and if places of worship provide the opportunity to become involved in volunteer programs; then it is not surprising to find that older people are especially likely to perform volunteer work through the church.

There is another reason why studying volunteer work in church provides an ideal strategic context for assessing the relative importance of this type of helping behavior. A growing number of studies suggest that informal social support systems tend to flourish in religious institutions and that the assistance that is provided by fellow church members may be more efficacious than informal help that is exchanged in the wider secular world (Krause, 2008). If older people are especially inclined to participate in volunteer work at church and if informal social support systems are especially well-developed in religious institutions, then evaluating the relative impact of these two different types of helping behavior specifically within the church should provide valuable insight into their relative impact on health.

Studying the helping process within the context of the church makes it possible to evaluate another issue that has been largely overlooked in the literature. As discussed above, researchers suspect that older people are especially likely to perform volunteer work in the church because they are encouraged to do so by the tenets of their faith. However, research reveals there is variation in the extent to which older people are committed to their faith (Barna, 2002). Therefore, if religiously motivated helping behavior has a beneficial effect on health, then these benefits should be enjoyed by people who are more deeply committed to religion. Put another way, this means that the impact of performing volunteer work at church on health, as well as the effect of providing informal assistance to fellow church members on health, should depend upon the extent to which older church members are committed to their faith. A second major aim of the current study is to evaluate this issue empirically.

## Methods

### Sample

The data for this study come from an ongoing nationwide survey of older Whites and older African Americans. The study population was defined as all household residents who were

either Black or White, noninstitutionalized, English-speaking, and at least 66 years of age. Geographically, the study population was restricted to all eligible persons residing in the coterminous United States (i.e., residents of Alaska and Hawaii were excluded). Finally, the study population was restricted to currently practicing Christians, individuals who were Christian in the past but no longer practice any religion, and people who were not affiliated with any faith at any point in their lifetime. This study was designed to explore a range of issues involving religion. As a result, individuals who practice a faith other than Christianity were excluded because members of the research team felt it would be too difficult to devise a comprehensive battery of religion measures that would be suitable for individuals of all faiths.

The sampling frame consisted of all eligible persons contained in the beneficiary list maintained by the Centers for Medicare and Medicaid Services (CMS). A five-step process was used to draw the sample from the CMS Files. A detailed discussion of these steps is provided by Krause (2002a).

The baseline survey took place in 2001. The data collection for all waves of interviews in this study was performed by Harris Interactive (New York). A total of 1,500 interviews were completed, face-to-face, in the homes of study participants. Older African Americans were over-sampled so that sufficient statistical power would be available to assess race differences in religion. As a result, the Wave 1 sample consisted of 748 older Whites and 752 older Blacks. The overall response rate for the baseline survey was 62%.

The Wave 2 survey was conducted in 2004. A total of 1,024 of the original 1,500 study participants were re-interviewed successfully, 75 refused to participate, 112 could not be located, 70 were too ill to participate, 11 had moved to a nursing home, and 208 were deceased. Not counting those who had died or were placed in a nursing home, the re-interview rate for the Wave 2 survey was 80%.

A third wave of interviews was completed in 2007. A total of 969 older study participants were re-interviewed successfully, 33 refused to participate, 118 could not be located, 17 were too sick to take part in the interview, and an additional 155 older study participants had died. Not counting those who died, the re-interview rate was 75%.

The data that are used in the analyses for the current study come from the Wave 1 and the Wave 3 interviews. This makes it possible to evaluate the impact of church-based volunteer work and informal support in the church on change in health over time. After using listwise deletion to deal with item nonresponse, complete data were available for between 661 and 680 older study participants. The reduction in cases from 969 to 680 respondents was primarily due to the way information on church-based volunteering and informal support was obtained. When this study was designed, the members of the research team felt that it did not make sense to administer questions on volunteering in church and providing support to fellow church members to individuals who either never go to church or go to church no more than twice a year. Based on this reasoning, questions on volunteering and providing informal support at church were not administered to 374 older people at the baseline survey.

Preliminary analysis revealed that the average age of the participants in the analysis presented below was 73.7 years ( $SD = 5.7$  years) at the baseline survey. Approximately 36% of these study participants were men, 55% were married at the time of the Wave 1 interview, and 49% were White. Finally, these study participants reported they had successfully completed an average of 11.9 years of schooling ( $SD = 3.4$  years). These descriptive data, as well as the data used in the analyses presented below, have been weighted.

## Measures

Table 1 contains the core measures that are used in this study. The procedures used to code these items are provided in the footnotes of this table.

**Volunteering in Church**—The participants in this study were asked how often they spend time working in volunteer programs that are operated by their church. The measures that are used in this study were evaluated with an extensive qualitative item-development program (see Krause, 2002b, for a detailed description of this program). In-depth interviewing procedures that were implemented as part of this program revealed that a number of older people believed that donating money, food, or clothing was part of volunteer work. As shown in Table 1, the question on volunteering was carefully phrased to avoid confounding donations with actual time spent volunteering. The measure of volunteering was taken from the Wave 1 survey. A high score on this item denotes more time spent volunteering. The mean score on the volunteering measure is 1.6 ( $SD = 1.2$ ).

**Providing Tangible Support To Fellow Church Members**—Formal volunteer work typically involves the provision of tangible goods and services (food, clothing, shelter) to people in need. In order to make a more accurate comparison of the relative contributions of volunteering and the provision of informal support, it is imperative that the informal support measure focuses on the provision of the same kind of assistance that is typically found in a volunteer program. It is for this reason that the measure of informal support to fellow church members focuses specifically on the provision of tangible help. Informal tangible assistance is assessed with four items that were administered in the baseline survey. These measures were developed especially for the current study. A high score on these indicators shows that study participants provide instrumental support to their fellow church members more often. The internal consistency reliability estimate for this brief composite is .744. The mean of this composite measure is 6.6 ( $SD = 2.7$ ).

**Religious Commitment**—Religious commitment is measured with three items that were administered during the Wave 1 interviews. The first two indicators were taken from the scale Hoge (1972) devised to assess intrinsic religious motivation. The third item comes from the Mature Faith Scale that was developed by Benson and Elkin (1990). These measures capture the importance of religion in a person's daily life and the extent to which they try to implement their faith in all their dealings with others. As the members of the Fetzer Institute/National Institute on Aging Working Group (1999) argue, these items assess the depth of a person's commitment to his or her faith: "Because intrinsic religiousness captures a general orientation to all aspects of life and social relationships, it can be regarded as a measure of religious commitment" (p. 71). A high score on this short scale denotes greater religious commitment. The reliability estimate for this brief composite is .909. The mean is 10.4 ( $SD = 1.6$ ).

**Self-Rated Health**—Self-assessed health is measured with two items. The first asks study participants to rate their overall health at the present time, and the second indicator asks respondents to compare their health at the present time to their health a year ago. The same items were administered at the Wave 1 and Wave 3 surveys. A high score represents more favorable self-rated health. The mean at Wave 1 is 4.9 ( $SD = 1.1$ ) and the mean at Wave 3 is 4.5 ( $SD = 1.2$ ).

**Religion Control Measures**—A number of constructs are subsumed under the broad rubric of religion. Moreover, many of the different facets of religion are correlated, sometimes highly (Idler et al., 2003). Therefore, in order to obtain better estimates of the relationship between helping others and change in health over time, it is important to rule out the influence of other dimensions of religion. This is why two religion control measures are included in the current

study. Both indicators are taken from the baseline survey. The first item assesses how often study participants attend religious services. A high score denotes more frequent church attendance. The mean at Wave 1 is 7.3 ( $SD = 1.5$ ). The second religion control variable measures how often older people pray when they are alone. A high score reflects more frequent prayer. The mean at Wave 1 is 7.2 ( $SD = 1.3$ ).

**Demographic Control Variables**—The relationships among volunteering, informal helping in church, religious commitment, and health are evaluated after the effects of age, sex, race, education, and marital status are controlled statistically. The demographic control measures were all taken from the baseline survey. Age is scored continuously in years and education reflects the total number of years of schooling that were completed successfully. In contrast, sex (1 = men; 0 = women), race (1 = Whites, 0 = Blacks), and marital status (1 = married; 0 = otherwise) are measured in a binary format.

## Results

The findings from this study are presented below in four main sections. When the sample for this study was introduced, data were provided which reveal that some older people who participated in the Wave 1 survey did not participate in the Wave 3 interviews. The loss of study subjects over time may bias study findings if it occurs non-randomly. The analyses that are presented in the first section were designed to take a preliminary look at this potential problem. Following this, findings from the analyses that assess the effects of volunteering in the church and religious commitment on change in health are presented in section two. The relationships among informal support, religious commitment, and health are also provided in section three. Up to this point, the two types of helping behavior are evaluated in separate sets of analyses. The effects of these constructs are evaluated separately because this mirrors the way these two constructs have been assessed previously in the literature. Finally, in the fourth section, the effects of both volunteering and providing informal tangible support are estimated in the same model. This final set of analyses makes it possible to assess the relative importance of each type of helping behavior and highlights the importance of evaluating them simultaneously.

### Assessing the Effects of Sample Attrition

Although it is difficult to conclusively determine if the loss of subjects over time has biased the findings from this study, a preliminary sense of the extent of the problem can be obtained by seeing whether select data at the Wave 1 survey are associated with study participation status at the Wave 3 interview. The following procedures were used to address this issue. First, a nominal-level variable containing three categories was created to represent older adults who participated in both the Wave 1 and Wave 3 surveys (scored 1), older people who had died during the course of the follow-up period (scored 2), and older individuals who were alive but did not participate at Wave 3 (scored 3). Then, using multinomial logistic regression, this categorical outcome was regressed on the Wave 1 measures of age, sex, race, education, marital status, the frequency of church attendance, the frequency of private prayer, volunteering, providing tangible support, religious commitment, and self-rated health. The category representing older people who remained in the study served as the reference group in this analysis. Evidence of potential bias would be found if any statistically significant relationships emerge from this analysis.

The results (not shown here) reveal that the loss of subjects over time did not occur in a random manner. More specifically, the data suggest that compared to older people who remained in the study, those who died were older ( $b = .067$ ;  $p < .001$ ; odds ratio = 1.069), they were more likely to be men ( $b = .446$ ;  $p < .05$ ; odds ratio = 1.563), they attended church less often ( $b = -$



171;  $p < .01$ ; odds ratio = .843), they gave less tangible help to their fellow church members ( $b = -.092$ ;  $p < .05$ ; odds ratio = .912), and they rated their health less favorably ( $b = -.362$ ;  $p < .001$ ; odds ratio = .696).

The findings from the sample attrition analysis further indicate that, compared to older people who remained in the study, those who dropped out but were still alive were less likely to be White ( $b = -.566$ ;  $p < .05$ ; odds ratio = .568), less likely to be married ( $b = -.619$ ;  $p < .001$ ; odds ratio = .441), and less likely to rate their health in a favorable way ( $b = -.199$ ;  $p < .05$ ; odds ratio = .819).

There is considerable controversy in the literature over the effects of non-random sample attrition on substantive study findings (Groves et al., 2004). It is not possible to resolve this debate here. Instead, it is best to keep the potential influence of non-random subject attrition in mind as the substantive findings from the study are reviewed.

### Volunteering and Change in Health

Table 2 contains the results from the analyses that were designed to see whether volunteering in church and religious commitment are associated with change in self-rated health over time. It was hypothesized that the effects of volunteering in the church on health would be more evident among older people who are more deeply committed to their faith. Stated in more technical terms, this hypothesis predicts that there will be a statistical interaction effect between volunteering and religious commitment on change in health. Tests for this interaction effect were performed with a hierarchical ordinary least squares multiple regression analysis consisting of two steps. In the first step (see Model 1 in Table 2), measures of volunteering, religious commitment, baseline health, and the control variables were entered into the equation. Then, a multiplicative term was added in the second step (Model 2). This term was created by multiplying volunteering scores by scores on the measure of religious commitment. This cross-product term tests for the proposed interaction effect. All of the independent variables were centered on their means prior to estimating Models 1 and 2.

The data in the left-hand column of Table 2 suggest that older people who are more involved in volunteer work at church do not rate their health more favorably over time than older adults who are less involved in volunteering (Beta = .025; *n.s.*). Similarly, religious commitment does not appear to be significantly associated with change in health over time (Beta =  $-.067$ ; *n.s.*). Based on these results alone, it might be tempting to conclude that neither volunteering in church nor religious commitment is associated with health. However, the data provided in the right-hand column of Table 2 (see Model 2) suggest otherwise.

The findings provided by Model 2 reveal that there is a statistically significant interaction between church-based volunteer work and religious commitment on change in health ( $b = .072$ ;  $p < .01$ ; unstandardized coefficients are presented when interaction effects are reviewed because standardized estimates are not meaningful in this context). Even though the data indicate that there is a statistically significant interaction effect in the data, it may be difficult to tell if it is in the hypothesized direction. Fortunately, it is possible to address this issue by using formulas that are provided by Aiken and West (1991) to estimate the effects of volunteering in church at select levels of religious commitment. If the theoretical rationale that was developed for this study is valid, the beneficial effects of volunteering on health should become progressively larger at successively higher levels of religious commitment. Although any religious commitment value could be used to illustrate the observed interaction effect, scores at one standard deviation below the mean, the mean, and one standard deviation above the mean were selected for this purpose.

The additional calculations (not shown here) reveal that older people who engage in volunteer work in the church but who have relatively low levels of religious commitment (i.e., -1 standard deviation) tend to rate their health *less* favorably over time (Beta = -.112;  $b = -.108$ ;  $p < .05$ ). In contrast, volunteering is not significantly associated with change in health over time for older people with average levels of commitment to their faith (Beta = .005;  $b = .005$ ; *n.s.*). However, the findings further indicate that performing volunteer work in the church is associated with better self-rated health over time for older people with relatively high levels of religious commitment (Beta = .123;  $b = .118$ ;  $p < .01$ ).

### Providing Informal Support and Change in Health

Table 3 contains the results from the analyses that were designed to assess the relationships among providing tangible support to fellow church members, religious commitment, and change in self-rated health. The findings provided by Model 1 suggest that older people who give tangible help to their coreligionists tend to rate their health more favorably over time (Beta = .085;  $p < .05$ ). However, the magnitude of this relationship is relatively weak. The data further indicate that older people who are more committed to their faith tend to rate their health less favorably over time (Beta = -.084;  $p < .05$ ). Initially, this finding is hard to explain. However, the data provided by Model 2 help clarify these results.

The findings provided by Model 2 suggest that there is a statistically significant interaction between the provision of informal tangible support and religious commitment on change in self-rated health ( $b = .035$ ;  $p < .001$ ). This suggests that the unanticipated finding involving religious commitment that was observed in Model 1 arose because the functional form of the relationships among informal support, religious commitment, and health was not specified correctly. Instead of assessing the additive effects of religious commitment, the data indicate that the effects of religious commitment on health must be viewed in conjunction with the influence of helping others.

Once again, the formulas provided by Aiken and West (1991) were used to clarify the nature of the statistical interaction effect between informally helping others in church and religious commitment on health. The results (not shown here) suggest that providing tangible support to fellow church members is not significantly associated with change in health over time for older people with relatively low levels of commitment to their faith (i.e., at -1 standard deviation below the mean) (Beta = -.064;  $b = -.029$ ; *n.s.*). The same appears to be true for older people with an average level of religious commitment (Beta = .058;  $b = .026$ ; *n.s.*). But in contrast, the additional calculations indicate that providing tangible help to fellow church members is associated with more favorable health ratings over time for older people with relatively high levels of religious commitment (i.e., +1 standard deviation above the mean) (Beta = .180;  $b = .081$ ;  $p < .001$ ).

### Volunteering, Informal Support, and Change in Health

The findings that have been presented up to this point suggest that when they are evaluated separately, both volunteering and providing informal support to fellow church members are associated with better health among older people who are more deeply committed to their faith. However, a major aim of the current study is to assess the relative effects of these two types of helping behavior on health. The last set of analyses was designed to address this issue. Specifically, an additional set of analyses was performed to simultaneously evaluate the statistical interaction between volunteering and religious commitment, as well as the interaction between informal support and religious commitment, on change in health. The results of this analysis are provided in Table 4.



The findings derived from estimating Model 2 suggest that the interaction effect between providing informal support in church and religious commitment on change in health over time is statistically significant ( $b = .029$ ;  $p < .01$ ). However, the interaction effect between performing volunteer work at church and religious commitment on health is not statistically significant ( $b = .038$ ; *n.s.*).<sup>1</sup> Simply put, when volunteering and providing informal support are evaluated together, the data indicate that only providing informal support appears to have consequential health effects.<sup>2</sup>

## Discussion

The findings from the current study suggest that helping others tends to have a beneficial effect on the health of older support providers. Initially, the data appear to suggest that these health-related benefits may arise from performing either volunteer work in church or providing informal tangible support to fellow church members. But when the influence of volunteering and providing informal support are evaluated together, only the provision of informal tangible help appears to have a statistically significant effect. This appears to be the first time that the effects of both formal and informal helping behavior on physical health have been evaluated in the same study. Viewed more broadly, these results underscore the importance of examining more than one type of helping behavior simultaneously. Unfortunately, as indicated earlier, this has rarely been done in the literature on volunteering.

The findings presented above further reveal that providing informal tangible help at church is associated with better health, but these potential benefits are only evident among older people who are more deeply committed to religion. This appears to be the first time that religious commitment has been evaluated in this way. These results are noteworthy because they appear to have a wide range of applicability in studies on religion and health. For example, a number of studies suggest that more frequent prayer is associated with better health (see Levin, 2004, for a review of this research). If the findings from the current study are valid, then the health-related benefits of prayer may be even more evident among older people who are more deeply committed to their faith.

One finding that emerged from the analyses was not anticipated. Recall that the data indicate that engaging in volunteer work more frequently is associated with less favorable health among older people with relatively low levels of commitment to their faith. Unfortunately, additional data are not available to explore this issue further. Even so, there is a potentially important theoretical explanation for these results. Musick and Wilson (2008) recently observed that, "Volunteering that is (or feels) mandatory ... may not provide the benefits that flow from more freely chosen helping activities" (p. 514). Perhaps older people who volunteer in their church, but who are less committed to their faith, feel pressured or coerced into performing these activities. And the resentment, anger, and frustration that arise from feeling pressured to volunteer under these circumstances may have an adverse effect on their health. Although

<sup>1</sup>Further analysis revealed that older people who engage in volunteer work are also more likely to provide informal tangible support to their fellow church members ( $r = .349$ ;  $p < .001$ ). This finding is important for two reasons. First, it suggests that performing volunteer work at church may be part of a wider pattern of helping behavior. Second, although the relationship between these two forms of helping is statistically significant, the magnitude of this relationship is not large enough to interfere with the assessment of their relative impact on health (i.e., there is only 12% shared variance between the two types of helping).

<sup>2</sup>One reason for the potential health-related benefits of providing tangible help to fellow church members may arise from the fact that older people who give this type of assistance are also more likely to receive tangible help from their coreligionists. This issue was examined by simultaneously testing for a statistical interaction between giving tangible support and religious commitment, as well as receiving tangible assistance and religious commitment, on health. The data reveal that the interaction between providing tangible support and religious commitment ( $b = .029$ ;  $p < .01$ ), as well as the interaction between receiving tangible help and religious commitment ( $b = .023$ ;  $p < .05$ ), are statistically significant. However, the size of the interaction effect between providing tangible help and religious commitment remains largely unchanged when the interaction involving the receipt of tangible help is added to the model. This suggests that the beneficial effects of giving support cannot be explained by the assistance that support recipients may receive from significant others at church.

issues involving pressure and coercion in the church have not been assessed often in the literature on religion and health, there is some evidence that these sanctions may reach levels that are quite high. For example, research by Ellison and Sherkat (1995) reveals that pressure to participate in religious activities may, under certain circumstances, reach the point where the church becomes a “semi-voluntary institution” (p. 1415). Perhaps more important, volunteer work is virtually mandatory in Mormon and Jehovah's Witness congregations (Stark & Finke, 2000). However, it is unclear how members of these faiths react to these expectations when their level of religious commitment is relatively low.<sup>3</sup> A high priority should be placed on assessing the health-related effects of mandatory volunteering in future studies on religion and health.

The findings from this study present another intriguing theoretical challenge: Why does helping others informally at church appear to have greater health-related benefits than engaging in formal volunteer work? There are two closely related ways to explain these findings. First, older people who engage in volunteer work are probably not deeply involved in the lives of the individuals they help. Instead, any relationship they may have with help recipients is likely to be more instrumental in nature. In contrast, older adults who provide informal support to their fellow church members are likely to be more deeply involved in the lives of the people they assist. Perhaps there is something about the depth and scope of the relationship between informal support providers and recipients that tends to convey greater health-related benefits. This proposition may be especially relevant when studying older people because findings from the secular literature on social support indicate that as people grow older, they develop an increasing preference for social relationships that are more intimate and more close emotionally (e.g., Carstensen, Fung, & Charles, 2003).

The second explanation is related to the first. Although it is not possible to tell from the data that are available in the current study, some people who are involved in formal volunteer programs in the church may not have direct contact with the people these programs are designed to serve. For example, an older volunteer may work in an office doing accounting work for a volunteer program and never see the clients who benefit from the program. Similarly, an older adult may work in a kitchen preparing food for the needy, but never come in direct contact with the people who are fed by this program. In contrast, older people cannot provide tangible help to fellow church members without coming into direct contact with them. This is especially true with respect to the way tangible help is measured in the current study (see Table 1). Perhaps coming into direct contact with the people one has helped allows support providers to see the good they are doing first-hand, thereby enhancing the benefits of helping others. In addition, coming into direct and more intimate contact with a help recipient provides the opportunity for help recipients to express gratitude for the things that have been done for them. This is important because a small, but growing, literature suggests that gratitude may have beneficial health effects (Emmons & McCullough, 2004). Clearly this, as well as other potentially important underlying mechanisms needs to be evaluated empirically.

In the process of probing more deeply into the relationship between helping others and health, researchers should pay attention to the limitations in the current study. First, the data presented above only assess volunteer work that is provided in the place where an older person worships. As a result, it is not possible to tell whether volunteering outside one's own church provides health-related benefits. Second, even though the relationships among helping others and health

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<sup>3</sup>Some intriguing indirect support for the notion that mandatory volunteer work may have an adverse effect on health may be found by returning to the hand calculations that were performed to illustrate the interaction between providing informal tangible help and religious commitment on health. Unlike formal volunteering, informal tangible support is more likely to be given freely without undue pressure from the wider congregation. Therefore, because it is not typically mandatory, providing informal tangible help should not be associated with less favorable health for older people with relatively low levels of commitment to their faith. This is what the data provided above reveal (Beta =  $-.064$ ; *n.s.*).

were examined with data that were gathered at more than one point in time, it is still not possible to conclusively state that providing informal support to fellow church members “causes” improvements in health. Issues involving causality can only be conclusively resolved in studies that employ true experimental designs. Even so, it is difficult to imagine how the relationships among helping others, religious commitment, and health could be manipulated in an experimental setting.

Down through the ages, numerous theologians and other scholars have emphasized the importance of helping others. For example, writing in 1536, John Calvin argued that “... all the endowments which we possess are divine deposits entrusted to use for the very purpose of being distributed for the good of our neighbors” (as quoted in Thornton & Varenne, 2006, p. 86). Similarly, Albert Schweitzer (1933/1990), the well-known philanthropist and Nobel laureate, maintained that, “One can save one’s life as a human being ... if one seizes every opportunity, however, unassuming, to act humanly toward those who need another human being” (pp. 90-91). The work in the present study helps build upon the insights of these luminaries by showing that providing assistance to others may have a beneficial effect on the health of support providers, as well. Hopefully, these results will encourage other investigators to delve more deeply into the potentially important benefits that are associated with helping others.

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**Table 1****Core Study Measures**


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<b>1</b>	Volunteering (Wave 1) <sup>a</sup>
	Some churches have programs to help people in need, such as food banks or programs that provide shelter to the homeless. Other than giving donations of money, food, and clothing, how often do you spend time working in this type of organization in your church?
<b>2</b>	Tangible Support Provided to Fellow Church Members (Wave 1) <sup>b</sup>
	<b>A.</b> How often do you provide transportation to church for someone in your congregation?
	<b>B.</b> How often do you provide transportation for someone in your congregation to places like the grocery store or the doctor's office?
	<b>C.</b> How often do you help someone in your congregation with things that need to be done around their home, such as household chores or yardwork?
	<b>D.</b> How often have you helped take care of someone in your congregation when they were ill?
<b>3</b>	Religious Commitment (Wave 1) <sup>c</sup>
	<b>A.</b> My faith shapes how I think and act each and every day.
	<b>B.</b> I try hard to carry my religious beliefs over into all my other dealings in life.
	<b>C.</b> My religious beliefs are what lie behind my whole approach to life.
<b>4</b>	Self-Rated Health (Wave 1 and Wave 3)
	<b>A.</b> How would you rate your overall health at the present time? <sup>d</sup>
	<b>B.</b> Do you think your health is better, about the same, or worse than it was a year ago? <sup>e</sup>

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<sup>a</sup>This item is scored in the following manner (coding in parentheses): Never (1); less than once a month (2); once a month (3); a few times a month (4); once a week (5); several times a week (6).

<sup>b</sup>These items are scored in the following manner: Never (1); once in a while (2); fairly often (3); very often (4).

<sup>c</sup>These items are scored in the following manner: Strongly disagree (1); disagree (2); agree (3); strongly agree (4).

<sup>d</sup>This item is scored in the following manner: Poor (1); fair (2); good (3); excellent (4).

<sup>e</sup>This item is scored in the following manner: Worse (1); about the same (2); better (3).

**Table 2**Volunteering in Church and Self-Rated Health ( $N = 680$ )

Independent Variables	Model 1	Model 2
Age	-.115*** <sup>a</sup> (-.024) <sup>b</sup>	-.115*** (-.024)
Sex	-.011 (-.028)	-.022 (-.054)
Education	.130*** (.046)	.130*** (.046)
Race	.048 (.114)	.052 (.125)
Marital status	.039 (.095)	.044 (.105)
Church attendance	-.024 (-.019)	-.025 (-.020)
Private prayer	.105** (.099)	.113** (.106)
Volunteering	.025 (.024)	.005 (.005)
Religious commitment	-.067 (-.051)	-.065 (-.049)
(Volunteering × religious commitment)	.....	..... (.072)**
Health (Wave 1)	.331*** (.358)	.332*** (.348)
Multiple R <sup>2</sup>	.179	.192

<sup>a</sup>Standardized regression coefficient<sup>b</sup>Metric (unstandardized) regression coefficient\*  
 $p < .05$ ;\*\*  
 $p < .01$ ;\*\*\*  
 $p < .001$ .



**Table 3**Providing Tangible Support to Church Members and Health ( $N = 667$ )

Independent Variables	Model 1	Model 2
Age	-.111** <sup>a</sup> (-.023) <sup>b</sup>	-.110** (-.023)
Sex	-.023 (-.057)	-.029 (-.071)
Education	.131*** (.046)	.133*** (.047)
Race	.061 (.147)	.068 (.164)
Marital status	.044 (.107)	.049 (.118)
Church attendance	-.028 (-.023)	-.026 (-.021)
Private prayer	.098* (.093)	.108** (.102)
Providing support	.085* (.038)	.059 (.026)
Religious commitment	-.084 (-.065)	-.073 (-.056)
(Providing support × religious commitment)	.....	..... (.035)***
Health (Wave 1)	.323*** (.354)	.315*** (.345)
Multiple R <sup>2</sup>	.188	.201

<sup>a</sup> Standardized regression coefficient<sup>b</sup> Metric (unstandardized) regression coefficient\*  $p < .05$ ;\*\*  $p < .01$ ;\*\*\*  $p < .001$ .

**Table 4**Volunteering, Providing Tangible Support and Health ( $N = 661$ )

Independent Variables	Model 1	Model 2
Age	-.110 <sup>**a</sup> (-.023) <sup>b</sup>	-.109 <sup>**</sup> (-.023)
Sex	-.017 (-.041)	-.027 (-.067)
Education	.135 <sup>***</sup> (.047)	.137 <sup>***</sup> (.048)
Race	.064 (.152)	.070 (.166)
Marital status	.038 (.091)	.046 (.110)
Church attendance	-.040 (-.032)	-.037 (-.030)
Private prayer	.114 <sup>**</sup> (.108)	.125 <sup>**</sup> (.119)
Volunteering	.007 (.007)	-.008 (-.007)
Providing support	.091 <sup>*</sup> (.041)	.068 (.030)
Religious commitment	-.081 (-.062)	-.070 (-.053)
(Volunteering × religious commitment)	.....	.....
	.....	(.038)
(Providing support × religious commitment)	.....	.....
	.....	(.029) <sup>**</sup>
Health (Wave 1)	.324 <sup>***</sup> (.353)	.315 <sup>***</sup> (.342)
Multiple R <sup>2</sup>	.192	.209

<sup>a</sup>Standardized regression coefficient<sup>b</sup>Metric (unstandardized) regression coefficient\*  
 $p < .05$ ;\*\*  
 $p < .01$ ;\*\*\*  
 $p < .001$ .