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Religious Involvement, Humility, and Self-Rated Health

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Abstract

The purpose of this study is to develop and test a conceptual model that assesses the following theoretical linkages: (1) people who go to church more often tend to receive more spiritual support from fellow church members (i.e., encouragement to adopt religious teachings and principles); (2) individuals who get more frequent spiritual support are more likely to be humble; and (3) people with greater humility tend to rate their health more favorably. The data come from the third wave of a nationwide longitudinal survey of older adults. The data provide support for each of the conceptual linkages identified above.

Keywords

spiritual support; humility; health

1 Introduction

This study has two specific aims. The first goal is to see whether social support from fellow church members encourages older people to be more humble. The second objective is to determine if humility is associated with self-rated health in late life.

As Tangney (2000) points out, humility has been defined in a number of ways. She goes on to argue that the lack of consensus that is found across definitions of humility is a significant obstacle in the field. No effort is made in the current study to resolve this problem. Instead, the definition that is provided by Peterson and Seligman (2004) is used as a point of departure for exploring humility within the context of research on religion and health. These investigators maintain that humility "… involves a nondefensive willingness to see the self accurately, including both strengths and limitations. Humble individuals will not willfully distort information in order to defend, repair, or verify their own image" (Peterson and Seligman 2004, p. 463). The opposite of humility is pride. And pride is consistently viewed as a destructive trait in the literature. For example, C. S. Lewis (1942/2001) maintained that "… Pride is spiritual cancer: it eats up the very possibility of love, or contentment, or even common sense" (p. 125).

In order to get better insight on how to approach the study of humility, it is helpful to briefly examine the intellectual roots of this key character strength. Two sources have contributed significantly to what we know about humility. The first is positive psychology, whereas the second involves religion. As the positive psychology movement gained momentum, researchers began to explore a range of beneficial traits and virtues. Peterson and Seligman (2004) have done the best research on this area. These investigators identified a host of

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virtues and the character strengths that promote them. Humility is among the character strengths that they examine in detail.

Peterson and Seligman's (2004) work on humility is embedded in a broader religious tradition that is approximately two thousand years old. According to Richardson (1996), an anonymous letter written to the church in Corinth in 96 A.D. is the earliest Christian document in existence. Many religious scholars believe this letter was written by Clement, who was the third bishop of Rome. In this document, Clement (96 A.D./1996) entreats the faithful to be humble: “It is to the humble that Christ belongs, not to those who exalt themselves above his flock. The scepter of God's majesty, the Lord Jesus Christ, did not come with pomp or pride or arrogance, though he could have done so. But he came in humility …@”(pp. 50–51).

Although humility has been discussed at length by social scientists, behavioral scientists, and theologians, relatively little attention has been devoted to empirically examining this important character strength. Support for this assertion may be found in the literature review of humility provided by Peterson and Seligman (2004). Instead of reviewing empirical studies on humility per se, these investigators rely primarily on research that deals with narcissism. Although narcissism and humility share some common conceptual ground, Tangney (2000) persuasively argues that humility and narcissism are, nevertheless, conceptually distinct.

Even when researchers focus specifically on humility, at least four problems can be identified with the empirical work they have conducted. First, some investigators study humility with data that has been provided by college students (e.g., Exline and Geyer 2004). This makes it difficult to determine whether the findings from this research can be generalized to a wider population. Second, other researchers who have studied humility do not make any reference to religion in their work (Ashton and Lee 2005). Although these studies are clearly important, they tend to sever research on humility from its longstanding religious roots. This is unfortunate because ignoring the religious foundations of humility overlooks important ways in which humility is fostered and maintained. Third, other researchers have studied humility within the context of religion, but only a limited range of religion measures has been examined in this work. For example, Powers and his associates assess the relationships among humility, spiritual transcendence, and forgiveness (Powers et al. 2007). This research clearly makes an important contribution to the literature. However, as a number of investigators point out, a wide array of constructs are subsumed under the broad rubric of religion and, as a result, a number of dimensions of religion have been overlooked in research on humility (Fetzer Institute/National Institute on Aging Working Group 1999). Until all of the dimensions of religion are evaluated, it will be difficult to pinpoint the precise ways in which religion promotes humility. Fourth, a growing body of research suggests that people who are more deeply involved in religion tend to enjoy better physical and mental health than individuals who are not religious (Koenig, McCullough, and Larson 2001). Because so many different facets of religion appear to have health-enhancing consequences, it is important to see whether humility provides this type of benefit, as well. There do not appear to be any studies in the literature that focus specifically on the interface between humility, religion, and health.

The research that follows was designed to address these limitations. First, the data are provided by a nationwide sample of older people. Second, this work is firmly grounded within the context of religion. Third, an effort is made to explore the roots of humility by focusing on an aspect of religion that has not been evaluated by other investigators - the social relationships that people form in the places where they worship. Fourth, an attempt is

made to broaden the scope of research on humility by seeing if humility is associated with better physical health.

1.1 Religion, Humility, and Health

A latent variable model was developed for this study to assess the relationships among church-based social support, humility and self-rated health. This conceptual scheme is depicted in Figure 1. It should be emphasized that the relationships among the constructs in this model were evaluated after the effects of age, sex, education, and race were controlled statistically. However, in order to make the model easier to follow, the effects of these demographic control variables are not shown in Figure 1. In addition, this conceptual scheme was further simplified by not including the elements of the measurement model (i.e., the factor loadings and measurement error terms).

A relatively straightforward set of linkages is proposed in Figure 1 to show how feelings of humility arise and are sustained in the church, and to assess whether humility is, in turn, associated with physical health. More specifically, these core hypotheses are as follows: (1) older people who attend worship services more often will report receiving more spiritual support from follow church members, (2) older adults who receive more spiritual support from the members of their congregation will be more humble, and (3) older people who feel more humble will be more likely to rate their health in a favorable way. Before the theoretical rationale for these relationships is discussed, it is important to define spiritual support. Spiritual support refers to assistance that is intended to increase the religious commitment, beliefs, and behavior of a fellow parishioner. This means, for example, that spiritual support involves helping fellow church members apply their religious beliefs in daily life, and it involves helping them find solutions to their problems in the Bible.

Church Attendance and Social Support—As discussed below, the participants in this study are primarily Christian. In order to see why more frequent attendance at religious services may be associated with receiving spiritual support, it is helpful to delve more deeply into the fundamental nature of spiritual support, and the religious tenets that bolster this type of assistance within the Christian faith tradition.

Christianity is practiced primarily within communities of faith. Tillich (1987), who was a noted liberal theologian, provides compelling support for this view. He maintained that "… the act of faith, like every act in a man=s spiritual life, is dependent upon language and therefore community. For only in the community of spiritual beings is language alive" (Tillich 1987, p. 27). But Tillich does not fully explore all of the ways in which communities of faith are sustained. One potentially important mechanism for maintaining a community of faith involves the practice of discipleship. As Sheldrake (2007) notes in his work on the history of the Christian faith, "A fundamental scriptural image for Christian spirituality is discipleship. Indeed, during the later history of Christian spirituality across two millennia, the concept of discipleship became virtually interchangeable with leading a Christian life" (p. 14). Sheldrake goes on to point out that part of discipleship involves working with Jesus to bring the Kingdom of God into existence. Although many different tasks are required to reach this religious goal, an important step involves sharing religious tenets and precepts with fellow church members. Writing nearly 100 years ago, Josiah Royce (1912/2001) captured the essence of this perspective when he argued that "… the principal means of grace … lies in … communion with the faithful … It is natural that we should begin this process of communion through direct personal relations with the fellow-servants of our own special cause" (p. 291).

Given the core role that spiritual support plays in the mission of discipleship, greater insight into this important type of religiously-based assistance may be obtained by addressing two

issues. The first involves reflecting on where church members learn the religious tenets they emphasize when providing spiritual support to others, whereas the second issue has to do with specifying the social setting in which the exchange of spiritual support often takes place.

Focusing on attendance at church services provides a better understanding of both issues. Religious services comprise a number of activities, including sermons, hymns, and communal prayers. The principles of the faith are transmitted and reinforced through each of these components. This view is consistent with the insights in Stark and Finke's (2000) discussion of religious explanations. Religious explanations refer to religious world views (i.e., religious precepts) designed to shape behaviors and beliefs. Stark and Finke (2000) argue that, "Confidence in religious explanations increases to the extent that people participate in religious rituals" (p. 107). However, people may fail to develop confidence in religious precepts if they are not exposed to them on a regular basis. Instead, more frequent church attendance is necessary to accomplish this goal.

In order for church members to receive spiritual support from another person in their congregation, they must develop a relationship with the support provider and they must come into contact with this individual on a regular basis. Attendance at worship services provides one place in which the interpersonal ties that are necessary for the exchange of spiritual support are forged. And once these relationships are formed, attendance at worship services provides a forum where repeated contact with support providers can take place.

Spiritual Support and Humility—A basic premise in the current study is that when church members are left to their own devices, they may neither fully appreciate the value of being humble nor may they be fully aware of the ways in which they may become more humble. Instead, these individuals are likely to derive greater insight into humility through interaction with like-minded others. This assertion rests on a longstanding social psychological principle that is discussed by Berger and Pullberg (1965). This principle deals with the way in which people jointly construct the social worlds in which they live. More specifically, Berger and Pullberg maintain that "… *men together* engage in constructing the world, which then becomes their dwelling. Indeed, since sociality is a necessary element of human being, the process of world production is necessarily a social one" (Berger and Pullberg 1965, p. 201, emphasis in the original). This view is consistent with the work of Stark and Finke (2000), who propose that, "An individual=s confidence in religious explanations is strengthened to the extent that others express their confidence in them" (Stark and Finke 2000, p. 107). However, Berger and Pullberg go on to argue, repeated interaction with significant others is required before shared definitions of the social environment can take root. More specifically, they maintain that "… the world must be confirmed and re-confirmed *by others*" (Berger and Pullberg 1965, p. 201, emphasis in the original). Cast within the context of the current study, these principles suggest that fellow church members may be instrumental in helping older people become more humble, but their efforts will only be successful if the religious principles that deal with humility are confirmed and reconfirmed with repeated spiritual support. This is why it is proposed in Figure 1 that more spiritual support from fellow church members is associated with greater humility.

Humility and Self-Rated Health—As noted earlier, there do not appear to be any studies in the literature that assess whether humility is associated with better health. This is somewhat surprising because the idea that humility may influence health is centuries old. Matthew Henry was a noted English clergyman who lived in the late 17th century. In 1699 he delivered a sermon on meekness, which is synonymous with humility. During this sermon, Henry asserted that, "Meekness hath a good influence upon our Health. If envy be

the rottenness of the Bones … (then) … Meekness is the preservation of them … The Excesses and Exorbitancies of Anger, stir up those peccant Humors in the Body, which kindle and increase wasting and killing Diseases, but Meekness governs these Humors, and so contributes very much to good Temper and Constitution of the Body" (Early English Books on Line Text Creation Project 2004, p. 65). Although Henry's notions about physiology are outdated, his observation on the health-related benefits of humility may have been ahead of his time.

There are two reasons why humility may be associated with better health. The first may be found by turning to the literature on stressful life events. This research shows that when people are confronted with a stressor, they typically appraise the problem situation and devise a plan of action for dealing with it (Aldwin 2007). One of the tasks involved in appraising a problem situation has to do with determining how the stressor arose. This can be a rather delicate task because people may be the architect of their own misfortune. For example, they may have lost a job because they didn't perform the required tasks successfully, or they may have gotten divorced because they weren't supportive of their spouse. Moreover, when a plan of action is devised for coping with a stressor, people must make a frank and accurate assessment of their ability to successfully execute the plan (see Taylor and Armor 1996, for a detailed discussion of this issue). Viewed more generally, this brief overview reveals that in order to successfully eradicate a stressor, both the appraisal of the event and the development of a plan for coping with it must be based on accurate self-appraisals. Otherwise, individuals are likely to cope poorly with the stressor, and their inability to adequately cope with the event may put them at risk for developing physical or mental health problems (Aldwin 2007). The emphasis that is placed on adequate self-appraisals is important because accurate views of the self are more likely to be found among humble people. Recall the definition of humility that was proposed earlier. As Peterson and Seligman (2004) point out, humility involves a nondefensive willingness to assess the self accurately, including faults as well as strengths. To the extent that this is true, humble people should enjoy better health than individuals who lack humility.

The second way in which humility may influence health is found by returning to the work of C. S. Lewis (1942/2001) on pride. Lewis argues that, "Pride is *essentially* competitive … Pride gets no pleasure out of having something, only out of having more of it than the next man … power is what Pride really enjoys: there is nothing makes a man feel so superior to others as being able to move them about like toy soldiers" (1942/2001, pp. 122–123, emphasis in the original). The emphasis that Lewis (1942/2001) places on power, manipulation, and control of others is important because if people relate to others in this way, they are likely to generate a good deal of negative interaction (Newsom et al. 2005). More specifically, if the attributes of pride that are discussed by Lewis (1942/2001) shape the way a person deals with others, then social network members are likely to feel hurt and resentful. And when people feel hurt and resentful, they often respond by lashing out angrily at the individual who is trying to manipulate them. These unpleasant social exchanges are noteworthy because a growing number of studies indicate that negative interaction is associated with poor health (see, for example, Newsom et al. 2008).

Reflecting on the Influence of Age—Recall that the sample for the current study is composed of older adults. Although it is not possible to explore age differences in humility with these data, some justification for focusing specifically on older people is in order. In his widely cited theory of human development, Erikson (1959) partitions the life course into eight stages that are delineated by the successful resolution of a specific challenge or crisis. The last stage, that is typically encountered in late life, deals with resolving the crisis of integrity versus despair. According to Erikson (1959), this is a time of deep introspection when individuals review the significant experiences they have encountered in life in an

effort to weave the story of their life into a more coherent whole. Part of this task involves resolving the inevitable gap that arises between what a person sets out to do and what he or she was actually able to accomplish. It seems unlikely that an older person will be able to resolve this final crisis without having a sense of humility because it is difficult to see how older people could find meaning in their life without having a "… nondefensive willingness to see the self accurately, including both strengths and limitations" (Peterson and Seligman 2004, p. 463).

However, Erikson (1959) did not clearly identify the resources that older people may rely on to successfully resolve the final developmental crisis. Fortunately, some insight on how to approach this issue is provided by Hoare (2002), who wrote a fascinating volume based on the unpublished papers that were left by Erikson. In this book, Hoare (2002) observed that Erikson often changed the way he wrote about his work. One of the changes in this thinking is especially salient for the current study because it explicitly links Erikson=s views about integrity with religion. More specifically, Hoare (2002) notes that toward the end of his life, Erikson "… changed his thinking to bring in God … he had to give faith its due … *Faith* then became an alternate term for *integrity*" (p. 90, emphasis in the original). The notion that religion is especially important in old age is consistent with findings from a number of studies which suggest that people in the current cohort of older adults are more deeply involved in religion than people who are presently young (Levin 2004). If humility is needed to resolve the final developmental crisis successfully and if involvement in religion provides one way of attaining humility, then it follows that focusing on samples comprising older people may be especially useful in studying the interface between religion and humility. It is toward this end that the research presented below was conducted.

2 Methods

2.1 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 was performed by Harris Interactive (New York). A total of 1,500 interviews were completed, face-to-face, in the homes of the study participants. Elderly 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 African Americans. 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 moved to 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 155 older study participants had died. Not counting those who had died, the re-interview rate was 75%.

The analyses presented below are based on data from the Wave 3 survey because measures of humility were not administered until this time. Spiritual support plays a pivotal role in the model depicted in Figure 1. However, some study participants reported that they either never go to church or they go to church only once or twice a year. The members of the research team felt it was not appropriate to administer questions to these people that deal with church-based spiritual support because it is unlikely that individuals with very low church attendance will have had the opportunity to form meaningful ties with the people who worship there. Consequently, 342 subjects were eliminated from the analyses presented below. After using listwise deletion to handle item nonresponse, complete data were available from 508 older study participants. Preliminary analysis of the data provided by these individuals reveals that 37.8% are older men and 48.8% are older whites. The average age of the respondents in this group at Wave 3 was 78.4 (*SD* = 5.5 years). Moreover, the participants in this study reported that they had successfully completed an average of 12.1 years of schooling (*SD* = 3.3 years). These descriptive statistics, as well as the findings that are presented below, are based on data that have been weighted.

2.2 Measures

Table 1 contains the core measures used to evaluate the conceptual model presented in Figure 1. The procedures used to code these indicators are provided in the footnotes of this table.

Church attendance—The participants in this study were asked how often they attend worship services. A high score represents more frequent church attendance. The mean of this indicator is 7.4 (*SD* = 1.3).

Spiritual support—The indicators assess how often fellow church members share their own religious experiences with study participants, how often they help study participants lead a better religious life, and how often they help study participants know God better. A high score on these items denotes more frequent spiritual support. The mean of this brief scale is 7.3 (*SD* = 2.8).

In the process of developing the spiritual support items, it quickly became evident that church members can provide spiritual support in two different settings. First, spiritual support can be provided informally in the process of interacting with fellow church members. This interaction may take place inside, as well as outside, the church. Second, as the work of Wuthnow (1994) reveals, people also provide spiritual support in formal church settings, such as Bible study and prayer groups. The items that assess spiritual support were developed with an extensive item development strategy that included quantitative and qualitative interviews (Krause 2002b). Some of the older people who participated in the qualitative interviews that were part of this phase of the study said they considered sermons that were delivered during formal worship services and congregational prayers to be a source of spiritual support, as well. Expanding the scope of inquiry to include these formal

settings tends to blur the boundaries between support that is obtained through formal worship services, spiritual guidance that is garnered through prayer or Bible study groups, and spiritual assistance that is provided informally by rank-and-file church members. In order to more clearly identify the underlying factors that may be at work, participants in the present study were instructed to exclude spiritual assistance they may have received in Bible study groups, prayer groups, and formal worship services when answering the spiritual support questions.

Humility—The items assessing humility were taken from the scale that was developed by Peterson and Seligman (2004). A high score on this brief index stands for greater humility. The mean of this scale is 12.9 (*SD* = 1.9).

Self-rated health—Three items are used to assess self-rated health. The first asks study participants to rate their health as either poor, fair, good, or excellent. The second asks respondents to compare their health at the time of the survey with their health one year prior to the survey. The third indicator asks the older people in this study to indicate how satisfied they are with their health. A high score on these items represents more favorable health ratings. The mean of these measures is 7.0 (*SD* = 1.6).

Demographic control measures—The relationships among church attendance, spiritual support, humility, and health were evaluated after the effects of age, sex, education, and race were controlled statistically. Age is coded in years. The education measure reflects the total number of years of schooling that were completed successfully. In contrast, sex (1 = men; 0 = women) and race (1= whites; 0 = blacks) are scored in a binary format.

3.1 Results

3.2 Assessing the Effects of Sample Attrition

As the discussion of the sampling procedures reveals, some older people who were interviewed at Wave 1 did not participate in the Wave 3 survey. The loss of subjects over time may bias study findings if it occurs in a nonrandom manner. Although it is difficult to conclusively determine the extent of this problem, some preliminary insight may be obtained by seeing if select data from the Wave 1 survey are associated with study participation status at Wave 3. The following procedure was used to address this issue. First, a nominal-level variable containing three categories was created to represent older adults who participated in Wave 3 survey (scored 1), older people who were alive but did not participate at Wave 3 (scored 2), and older adults who died during the course of the follow-up period (scored 3). Then, using multinomial logistic regression, this categorical outcome was regressed on the following Wave 1 measures: age, sex, education, race, the frequency of church attendance, spiritual support, and self-rated health.[1] The category representing older people who remained in the study served as the reference group. Evidence of potential bias would be found if any statistically significant findings emerge from this analysis.

The results (not shown here) reveal that two of the seven Wave 1 measures significantly differentiated between those who were alive but did not participate in the Wave 3 survey and older people who took part in the Wave 3 interviews. Specifically, the data suggest that compared to people who remained in the study, those who dropped out but were still alive

[1]The substantive analyses in this study are based on Wave 3 survey measures. The health measure that is used in these analyses consists of three items. The independent variables that are used in the sample attrition analyses come from the Wave 1 survey. However, only two of the health indicators were administered at Wave 1 (i.e., the item on satisfaction with health was not administered at Wave 1). Even so, the use of the two-item indicator in the attrition analysis should provide some insight into the influence of health on the loss of subjects over time.

were less likely to be white ($b = -.900$; $p < .001$; odds ratio = .407) and they were less likely to rate their health favorably ($b = -.194$; $p < .05$; odds ratio = .823).

The findings further indicate that compared to those who remained in the study, respondents who had died were more likely to be older ($b = .073$; $p < .001$; odds ratio = 1.075), they attended worship services less often ($b = -.152$; $p < .01$; odds ratio = .859), and they tended to rate their health less favorably ($b = -.379$; $p < .001$; odds ratio = .685).

Even though there is some evidence that the loss of study participants over time is not random, there are two reasons why the study findings may not be biased substantially. First, as Graham (2009) points out, because measures of age, sex, church attendance, and health are included in the study model, any potential bias associated with these constructs is likely to be minimal. Second, Groves (2006) argues that nonresponse does not necessarily translate into nonresponse bias. Even so, the issue of bias that is created by nonresponse continues to be debated in the literature. Consequently, the potential influence of nonrandom subject attrition should be kept in mind as the substantive findings from this study are examined.

3.2 Religious Involvement, Humility, and Health

Assessing the Fit of the Model to the Data—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 data suggest that the fit of the model to the data is acceptable. More specifically, the Bentler-Bonett Normed Fit Index (Bentler and Bonett 1980) estimate of .938 and the Comparative Fit Index (Bentler 1990) value of .964 are above the recommended minimum cut point of .900. Similarly, the standardized root mean square residual estimate of .034 is below the recommended ceiling of .050 (Kelloway 1998).

Psychometric Properties of the Observed Indicators—Table 2 contains the factor loadings and measurement error terms that were derived from the final model. These coefficients are important because they provide preliminary information about the psychometric properties of the multiple item measures. 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 .472 to .925. Fortunately, only one coefficient (.472) is below .600. Consequently, the measures that are used in the current study generally appear to have good psychometric properties.

Although the factor loadings and measurement error terms associated with the observed indicators provide useful information about the reliability of each item, it would be helpful to know something about the reliability of the scales as a whole. Fortunately, it is possible to compute these reliability estimates with a formula provided by Raykov (1998). This procedure is based on the factor loadings and measurement error terms in Table 2. Applying the procedures described by Raykov (1998) to the data in the current study yields the following reliability estimates for the multiple item constructs in Figure 1: spiritual support (.889), humility (.787), and self-rated health (.731). Taken as a whole, these estimates indicate that the items used in the current study have an acceptable level of reliability.

Substantive Findings—Table 3 contains the substantive findings that were obtained by estimating the model depicted in Figure 1. Taken as a whole, these data are consistent with the hypotheses that were developed for this study. More specifically, the results reveal that people who go to church more often tend to report that they receive more spiritual support from fellow church members than individuals who attend worship services less frequently (Beta = .210; $p < .001$). The findings also suggest that people who receive more spiritual support from people at church are, in turn, more humble (Beta = .201; $p < .001$). And people

who are more humble appear to rate their health more favorably than individuals who are less humble (Beta = .271; $p < .001$).

Three additional findings that are provided in Table 3 deserve closer scrutiny. First, the data initially appear to suggest that church attendance is not associated with humility (Beta = .087; *ns*). However, focusing solely on the direct effect of church attendance provides somewhat limited information about the nature of the relationship between these constructs. Greater insight into this issue may be obtained by reflecting on the indirect effect of church attendance on humility. In this instance, the indirect effect arises from the fact that church attendance is associated with greater spiritual support, and more spiritual support is, in turn associated with greater humility. When this indirect effect (Beta = .042; $p < .01$; not shown in Table 3) is coupled with the direct effect of church attendance on humility (Beta = .087; *ns*), the resulting total effect is statistically significant (Beta = .129; $p < .01$; not shown in Table 3). This decomposition of effects is helpful because it suggests that people who go to church often are more likely to be humble primarily because of the informal spiritual support they receive from the individuals who worship there.

The second finding in Table 3 that requires a closer look involves the direct effect of spiritual support on health. This coefficient reveals that people who get more spiritual support from fellow church members tend to rate their health less favorably (Beta = −.137; $p < .01$). At first, this may seem somewhat counterintuitive because a number of studies indicate that more church-based support is associated with better health (Krause, 2008). But once again, an inspection of the indirect and total effects of spiritual support on health provides some insight into this issue. The data indicate that the indirect effect of spiritual support on health that operates through humility is statistically significant (Beta = .055; $p < .01$; not shown in Table 3). When this indirect effect is coupled with the direct effect of spiritual support on health, the resulting total effect is not statistically significant (Beta = −.082; *ns*; not shown in Table 3). Based on the total effect alone, it might be tempting to conclude that spiritual support, therefore, does not affect health in late life. However, as the discussion that is provided in the last section of this study will reveal, this may not be the best conclusion.

The third set of findings that merit additional comment have to do with the effects of race. Recall that about half of the participants in this study are older African Americans. The sample was selected in this way so that greater insight into the relationship between race and religion could be obtained. The data in Table 3 provide support for this sampling strategy. More specifically, the findings indicate that older whites tend to receive less spiritual support from fellow church members than older blacks (Beta = −.211; $p < .001$). Moreover, the results reveal that older whites also tend to be less humble than older African Americans (Beta = −.147; $p < .01$).

4. Conclusions

Down through the centuries, religious leaders have extolled the virtue of being humble. But social and behavioral scientists have been somewhat slow to empirically assess how the virtue of humility arises and whether humility is associated with better health. The purpose of this study was to examine both issues. Three potentially important findings emerged from this work. First, the data indicate that humility is, at least in part, a social phenomenon that arises from spiritual support from fellow church members. Second, the results further reveal that more frequent attendance at worship services may encourage people to become more humble, as well. Taken together, these findings suggest that both formal and informal aspects of religion may encourage people to become more humble. Third, and perhaps most important, the data indicate that older people who are more humble tend to rate their health

more favorably than older adults who are less humble. This appears to be the first time that the interface between spiritual support, humility, and health has been empirically examined in the literature.

The finding involving the direct effect of spiritual support on health was not anticipated. More specifically, the data indicate that greater spiritual support is associated with less favorable self-rated health. But when the indirect effect of spiritual support on health was combined with the direct effect, the resulting total effect was not statistically significant. It might be tempting to conclude that spiritual support, therefore, does not have a significant impact on the health of older people. However, this is not an appropriate conclusion. Instead, these results suggest that the relationship between spiritual support and health may be more complex than researchers have assumed because this type of church-based assistance may have beneficial as well as detrimental effects on health. Although it is relatively easy to see why spiritual support may have a beneficial effect on health, it is more difficult to understand why spiritual support may compromise an older person=s health. Speculating briefly on this issue may help promote further research on church-based social support and health. Two closely-related explanations come to mind. First, McFadden and her colleagues point out that some individuals may feel that spiritual support from fellow church members is intrusive and unwanted (McFadden, Knepple, and Armstrong 2003). This is noteworthy because research reveals that unwanted advice is a form of negative interaction that may exert a deleterious effect on health (Newsom et al. 2008). Second, older adults may feel that some people who try to give them spiritual support are hypocritical because they fall short of their own spiritual advice. Although research on hypocrisy and health is vastly underdeveloped, it is possible that older adults may begin to have doubts about their faith when they believe that religious others are hypocritical. In fact, there is some evidence that hypocrisy leads to apostasy (Altemeyer 2004). This is important because research indicates that religious doubt may, under certain circumstances, exert a deleterious effect on health (Krause and Ellison 2009).

Clearly, empirical research on humility and health is in its infancy. A number of issues await researchers who are interested in delving more deeply into this important character strength. The definition that was provided earlier suggests that people who are more humble tend to see themselves more accurately, including their strengths and weaknesses, than individuals who are less humble. Yet the accuracy of the self-assessments that are made by humble people has not been evaluated empirically. It is possible that religious people who rate themselves as being more humble do so because these perceptions are self-serving and are merely a defensive strategy that is devised to make them seem as though they are in line with official teachings of the church. Alternatively, people may honestly believe that in order to be humble they must lower their expectations and the goals or standards they wish to maintain. This is important because having lower standards may lead to more favorable self-rated health lower standard provide a more favorable basis upon which to gauge or rate one's own health.

More research is also needed on the intervening constructs that link humility with health. Earlier it was proposed that humility may be associated with better health because humble people cope more effectively with stress, and because people who are humble may experience less negative interaction in their lives. However, the intervening effects of stress and negative interaction were not evaluated in the current study. Empirically assessing these issues should be a high priority in the future.

The findings in the current study suggest that more humility is associated with better health. However, researchers may gain greater insight into the nature of this character strength by assessing whether there are limits to the health-enhancing effects of humility. Evidence that

this issue is worthy of further consideration may be found in the work of Sheldrake (2007). He argues that the 15th century reformation was driven, in part, by a period of Christian humanism. One of the key works of the Christian humanist period, the *Imitation of Christ*, was written in 1418 by Kempis. Sheldrake (2006) reports that this book was so influential that it "… became a popular classic in both Catholic and Protestant circles well into the twentieth century" (p. 108). However, the form of humility that is advocated by Kempis appears to be rather extreme. More specifically, he maintained that, "God protecteth the humble and delivereth him; the humble He loveth and comforteth … (but) … Do not feel that thou has made any progress, unless thou esteem thyself inferior to all" (Kempis 1418/2005, p. 50). It is difficult to see how feeling inferior to all would have health-enhancing effects because people who feel this way may have very low self-esteem. This is worrisome because research indicates that a strong sense of self-worth is associated with good health (Murrell, Salsman, and Meeks 2003). Stated in a more technical way, this reasoning suggests that there may be a nonlinear relationship between humility and health such that initial increments in humility are associated with better health, but beyond a certain threshold point, additional increments in humility may be self-effacing and, ultimately, injurious to health.

In the process of exploring these as well as other issues, researchers should keep the limitations of the current study in mind. Two shortcomings are especially important. First, according to the model that was developed for this study, greater humility tends to promote better health. However, one could reverse the causal ordering between these constructs and instead argue that people with better health tend to be more humble. The direction of causality can only be demonstrated conclusively in studies that employ true experimental designs. Second, a number of researchers argue that self-reports of humility, like the ones that are used in the current study, may be adversely influenced by social desirability response bias (e.g., Powers et al. 2007). In fact, there is some empirical support for this contention (e.g., Exline and Geyer 2004). Although these findings are useful, it is more important to determine whether social desirability unduly affects the relationship between humility and health-related outcomes. Because measures of social desirability were not available in the current study, it was not possible to assess the potential biasing effects of this form of response style. Consequently, the effects of response bias on the study findings should be kept in mind as the results of the current study are evaluated.

Although there are limitations in this study, it is hoped that the theoretical arguments and empirical findings that have been presented encourage further research on the relationship between humility and health. This kind of work needs to be conducted because, as Emmons and Paloutzian (2003) cogently argue, there is an "urgent need" for studies that examine the relationship between humility and "real world consequences" (p. 390). It is important to pursue this recommendation because further research on the relationship between humility and health will open up new vistas for investigators who study religion and will provide compelling evidence of the practical benefits of the research they conduct.

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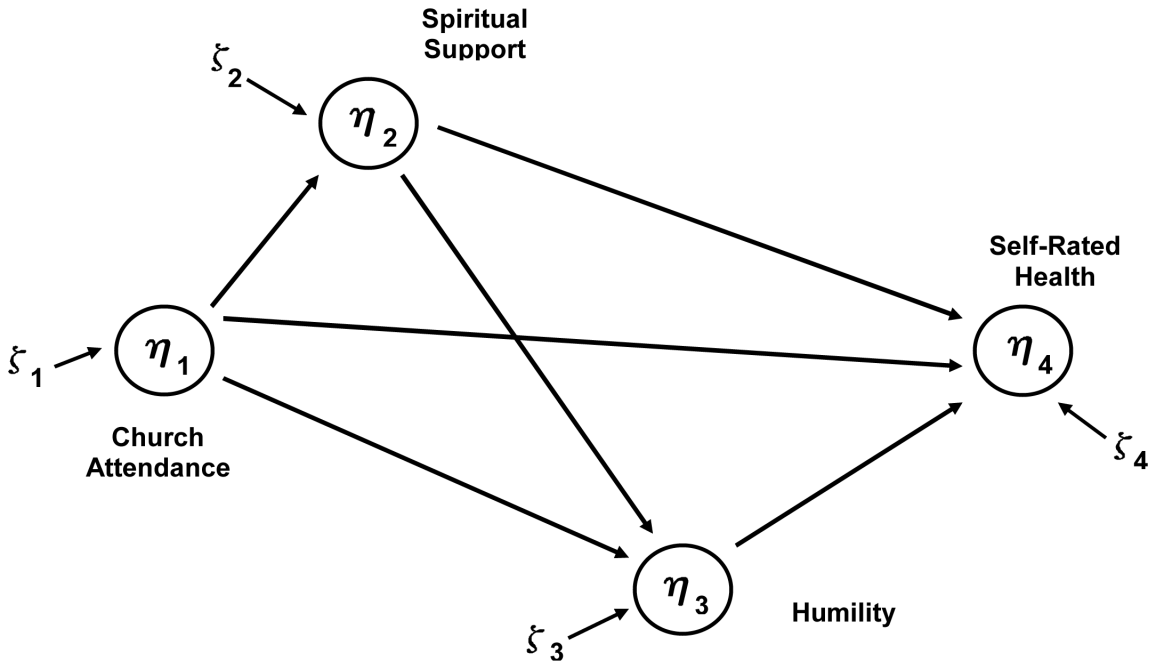

Figure 1.
Religious Involvement, Humility, and Health

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 religious services, how often does someone in your congregation share their own religious experiences with you?
	B.	Not counting Bible study groups, prayer groups, or religious services, how often do the examples set by others in your congregation help you lead a better religious life?
	C.	Not counting Bible study groups, prayer groups, or church services, how often does someone in your congregation help you to know God better?
3	Humility[c]	
	A.	I always admit when I am wrong.
	B.	I am always humble about the good things that happen to me.
	C.	I never brag about my accomplishments.
	D.	I am honest with myself when I assess my own faults and limitations.
4	Self-Rated Health	
	A.	How would you rate your overall health at the present time?[d]
	B.	Do you think your health is better, about the same, or worse than it was a year ago?[e]
	C.	In general, how satisfied are you with your health?[f]

[a] This item is scored in the following manner (coding in parentheses): 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).

[b] These items are scored in the following manner: never (1); once in a while (2); fairly often (3); very often (4).

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

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

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

[f] This item is scored in the following manner: not at all satisfied (1); somewhat satisfied (2); very satisfied (3).

Table 2

Measurement Model Parameter Estimates for Core Study Measures (N = 542)

Construct	Factor Loading[a]	Measurement Error[b]
1. Church Attendance	1.000	0.000
2. Spiritual Support		
A. Share experiences[c]	.729	.468
B. Lead better life	.925	.145
C. Know God better	.895	.199
3. Humility		
A. Admit when wrong	.687	.528
B. Always humble	.732	.465
C. Never brag	.682	.535
D. Honest with self	.669	.552
4. Self-Rated Health		
A. Overall health	.767	.412
B. Health a year ago	.472	.777
C. Satisfaction with health	.806	.350

[a] Factor loadings are from the completely standardized solution. The first listed item for each latent construct was fixed at 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.

Table 3

Religious Involvement, Humility, and Self-Rated Health (N = 508)

	Dependent Variables			
Independent Variables	**Church Attendance**	**Spiritual Support**	**Humility**	**Self-Rated Health**
Age	.058[a]	−.111*	−.008	−.091
	(.014)[b]	(−.014)	(−.001)	(−.010)
Sex	.035	−.118**	−.046	.025
	(.097)	(−.174)	(−.044)	(.030)
Education	.033	−.069	.009	.213***
	(.013)	(−.015)	(.001)	(.037)
Race	.024	−.211***	−.147***	.090
	(.064)	(−.301)	(−.137)	(.105)
Church attendance		.210***	.087	.142**
		(.112)	(.030)	(.061)
Spiritual support			.201***	−.137**
			(.130)	(−.111)
Humility				.271***
				(.337)
Multiple R^2	.007	.078	.042	.072

[a] Standardized regression coefficient

[b] Metric (unstandardized) coefficient

* =$p < .05$;

** =$p < .01$;

*** =$p < .001$.