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Meaning in Life: One Link in the Chain From Religiousness to Well-Being

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Meaning in life has been identified as a potential mediator of the link between religiousness and psychological health. The authors tested this hypothesis in 2 studies, using multiple methods and measures of religiousness and well-being. In the studies, meaning in life mediated the relation between religiousness and life satisfaction (Study 1A), as well as self-esteem and optimism (Study 1B). In addition, using an experience sampling method, the authors found that meaning in life also mediated the relation between daily religious behaviors and well-being (Study 2). The authors discuss these findings and suggest that meaning in life may be an effective conduit through which counselors and clients can discuss "ultimate" matters, even when they do not share similar perspectives on religion.

Keywords: meaning in life, religion, well-being

Religion has emerged as an important topic in such disparate domains as electoral politics, constitutional law, and, after several decades of relative obscurity, psychological science (Pargament, 2002a). Recent reviews examining the relations among religiousness, mental health, and physical health (Pargament, 2002b) and between religiousness and physical health (Powell, Shahabi, & Thoresen, 2003) reflect this renewed interest in these areas. The emerging consensus is that the link between religion and well-being is consistent and positive and that the next step is to establish why that link exists (George, Ellison, & Larson, 2002). Thus, Pargament (2002a) concluded that it is important to consider factors that may mediate this relation. Counseling psychology has traditionally focused on strengths and factors associated with well-being (Walsh, 2003). Gaining greater understanding of why religion is related to well-being is consistent with these efforts: Such understanding would benefit theory development in the study of religion and would help counselors assist their clients. Toward these ends, we examined meaning in life as one factor that may mediate the relation between religiousness and psychological well-being. We conducted two studies that support the mediation hypothesis, one on a general level (Studies 1A and 1B) and one on a daily level (Study 2).

Although religiousness has been operationalized in several different ways, across the studies most religious variables are positively associated with well-being. For example, attendance at religious services is consistently related to decreased risk of mortality (Powell et al., 2003) and other indices of well-being (see George et al., 2002). Prayer has been called the most widely performed form of religious practice and also is positively related to a number of well-being markers (Hood, Spilka, Hunsberger, & Gorsuch, 2003). Researchers have differentiated between religion and spirituality, with one critical distinction being that religion generally implies involvement with specific rituals and faith communities (Emmons & Paloutzian, 2003), whereas spirituality refers to more individual pursuits of the sacred that may not take place within a religious context. Spirituality and spiritual experiences also are positively associated with well-being (MacDonald, 2000). The primary exception to this trend of positive relations is extrinsic religiousness, which refers to the use of religion as a means to other ends (e.g., to obtain social support or networking). Extrinsic religiousness is generally associated with poorer mental health (Pargament, 2002a; Smith, McCullough, & Poll, 2003). Intrinsic religiousness, on the other hand, refers to an individual investment in one's spiritual development through religion and is generally associated positively with mental health (Smith et al., 2003). Interested reader scan obtain more comprehensive reviews for further details (e.g., Emmons & Paloutzian, 2003; Pargament, 2002a; Powell et al., 2003; Smith et al., 2003).

Understanding why and how religion contributes to well-being represents the next stage of research. Several contributors in a recent issue of *Psychological Inquiry* (Baumeister, 2002) argued that researchers particularly need to investigate mediators of this relation. Nonetheless, to date, research into mediators of the religion–well-being connection is scarce. Promising results have been reported for health behaviors, social support, and a sense of coherence about life challenges (George et al., 2002). Goal characteristics—such as the extent to which a goal pursuit has been sanctified, or devoted to a holy purpose—also have been found to be significant mediators (Tix & Frazier, 2005). Meaning in life is one potential mediating factor identified as a high priority for further investigation (George et al., 2002).

One function of religion is to provide individuals with the means through which they can experience purpose in their lives (Emmons & Paloutzian, 2003), and one of the core benefits of religious experience might be the extent to which religion gives people a sense of meaning and coherence about ultimate truths (Exline, 2002; Simpson, 2002). Thus, religion—which concerns the pursuit

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of the sacred or holy in the context of a faith community—appears likely to provide the opportunity for people to discover purpose or meaning in their lives.

People often face the question, "Why am I here?" Religion offers one answer and is therefore a source of meaning for many. People need to feel that their lives matter, are understandable, and have a purpose or mission. Meaning in life refers to such feelings regarding the self-perceived significance of one's life (e.g., Crumbaugh & Maholick, 1964). Those who characterize their lives as high in meaning believe that their lives are significant, purposeful, and comprehensible. Several studies have investigated the relations among meaning in life and religious variables. Positive relations have been found between meaning and intrinsic religiousness (e.g., Chamberlain & Zika, 1988) and between meaning and beliefs in monotheism (Molcar & Stuempfig, 1988). In addition, meaning in life was higher among clergy and nuns than among laypersons (Crumbaugh, Raphael, & Shrader, 1970), and meaning in life increased among those who converted to Christianity after attending a tent revival (Paloutzian, 1981).

Several studies also positively link meaning with well-being, as measured by a variety of indices such as life satisfaction (Zika & Chamberlain, 1987), optimism, self-esteem (Compton, Smith, Cornish, & Qualls, 1996), and positive affect (Zika & Chamberlain, 1987). Those who perceive that their lives are high in meaning also reported less substance abuse (Newcomb & Harlow, 1986) and less need for psychotherapy (Battista & Almond, 1973).

We found only one study in which meaning in life was tested as a mediator of the relation between religiousness and well-being. Specifically, Chamberlain and Zika (1988) reported that measures of meaning mediated the relation between intrinsic religiousness and life satisfaction in a sample of 188 stay-at-home mothers in New Zealand. However, the meaning measures that the researchers used have been criticized as having excessive item overlap with the outcome variable in the study—namely, life satisfaction (e.g., Frazier, Oishi, & Steger, 2003; Yalom, 1980). In addition, results from this sample may not generalize to the typical populations seen by counselors. In the present studies, we sought to replicate this finding using a measure of meaning that has no item overlap with life satisfaction. We also used multiple methods and measures to examine the relations among measures of religion, meaning, and well-being. In particular, we included measures of religious activity instead of a solely subjective measure (i.e., intrinsic religiousness). We focused on college undergraduates because it is important that counselors working with college students recognize religion as both a resource and potential source of students' presenting complaints. In fact, almost one quarter of a large undergraduate sample reported considerable distress related to religious and spiritual concerns (Johnson & Hayes, 2003).

Our interest in meaning in life as a factor that may explain the relation between religion and well-being was threefold. First, we wanted to answer the call to study meaning as a mediator (George et al., 2002; Pargament, 2002b). Second, because the extent to which people feel their lives are meaningful is independent of their religious affiliation, talking about meaning could provide therapists who are not religiously inclined with a way to approach their clients' concerns about the deeper truths and mysteries in life, and to understand the functions of religion in clients' lives. Establishing that meaning is a critical ingredient in the development of well-being from religion provides a first step in this direction. Finally, focusing on sources from which clients draw meaning may provide a way for therapists to help their nonreligious clients address these same concerns outside the religious context. The latter two points are also in accord with suggestions to expand research on religion beyond the confines of Christian denominations (Worthington, Kurusu, McCullough, & Sandage, 1996).

STUDY 1

In Study 1, we assessed religiousness using four variables designed to capture important aspects of religious experience based on our review of the literature. Specifically, we assessed the frequency of prayer and attendance at religious services and the level of self-reported religiousness and spirituality. We chose these variables because they assess both behavioral aspects (prayer and attendance) and subjective aspects (religiousness and spirituality) of religion, as well as private expressions of religiousness (prayer and spirituality) and expressions of religiousness associated with specific faith communities (attendance and religiousness). In Study 1A, we used multiple regression to assess the degree to which scores on a meaning-in-life scale mediated the relation between these religiousness items and life satisfaction. We used life satisfaction as an outcome measure because it has received considerable research attention and occupies a prominent place in theories of happiness and subjective well-being (see Diener, 2000, for a review). In Study 1B, we tested mediation using additional well-being indices in a subsample of participants who had been administered measures of self-esteem and optimism.

Study 1A

Method

Participants

We recruited 512 participants from introductory psychology classes at a large Midwestern university. They were recruited via flyers and in-class announcements and received extra credit in their courses for participating. Of these participants, 508 provided usable data. This sample size provided adequate power for tests of mediation (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). The participants were 20.2 years old, on average (SD = 3.8), and predominantly female (67.6%). They were mostly Caucasian (78%) and were either Protestant (33%) or Catholic (30%). Our sample was similar to the undergraduate population on our campus (N = 28,747) in terms of age (21.5 years old, on average) and ethnicity (79% Caucasian), but the total undergraduate population had a smaller percentage of women (52%) than did our sample.

Measures

Religiousness. Four items were used to assess religiousness. The first item, "How often do you attend religious services?" was rated with the following scale anchors: *at least once a week, 1–3 times a month, 7–11 times a year, 2–6 times a year, 1–2 times a year,* and *never*. The second item, "How often do you pray outside of religious services?" was rated using the following scale anchors: *several times daily, about once a day, about once a week, about once a month, 1–11 times a year,* and *never.* The third and fourth questions were parallel items that assessed subjective religiousness and spirituality: "In general, how _____ (religious, or spiritual) do you consider yourself?" These items were rated with the following scale anchors: *very religious/spiritual, moderately religious/spiritual, somewhat religious/spiritual,* and *not at all religious/spiritual*.

Each item was standardized to adjust for the different scaling of the items. Aggregate scores were generated by reverse scoring then by summing these standardized scores. These scores could range from −4 to 4, with higher scores indicating greater religiousness. The internal consistency reliability of these four items was .79.

Meaning in life. Participants completed the Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi, & Kaler, in press), which consists of two 5-item subscales, one of which measures the presence of meaning in life (e.g., "I have discovered a satisfying life purpose," "I have a good sense of what makes my life meaningful"). Items are rated on a 7-point scale ranging from 1 (*absolutely untrue*) to 7 (*absolutely true*), thus scores could range from 7 to 35, with higher scores indicating greater perceived meaning in life. The factor structure of the MLQ has been replicated through confirmatory factor analysis in three independent samples, with fit indices ranging from acceptable to excellent. The Presence subscale has been shown to be reliable, with alpha coefficient estimates of internal consistency ranging between .82 and .86. The test–retest stability of scores over 1 month was good ($r = .70$). Convergent and discriminant validity was demonstrated using a multitrait–multimethod matrix of informant reports and self-reports. Presence scores were shown to relate highly to other measures of meaning in life (*r*s ranged from .60 to .86), providing evidence of convergent validity. Using both self-reports and informant reports, we showed that Presence scores were related to—but distinct from—life satisfaction, optimism, and self-esteem (see Steger et al., in press). The alpha coefficient of the Presence scale in this sample was .85.

Life satisfaction. The Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) is a widely used and well-validated measure of life satisfaction. In this scale, five items (e.g., "In most ways my life is close to the ideal") are rated from 1 (*absolutely untrue*) to 7 (*absolutely true*). Thus, scores could range from 5 to 35, with higher scores indicating great satisfaction with life. Diener et al. (1985) provided more psychometric information. The SWLS has been consistently related to other indices of well-being (e.g., self-esteem and optimism; Lucas, Diener, & Suh, 1996). The alpha coefficient for the SWLS in this sample was .84.

Procedure

Those who agreed to participate completed survey packets containing the demographic items, as well as measures of religiousness, meaning in life, and life satisfaction in small groups during scheduled testing times in classrooms on campus.

Results

Descriptive Information

Participants reported moderate levels of religiousness. For example, the modal response to the religious service attendance question was one time per week (20% of respondents). Participants reported praying about once per day, on average (27% of respondents), and reported being somewhat to moderately religious ($M = 2.7$, $SD = 1.0$) and spiritual ($M = 2.3$, $SD = 0.9$). Scores on both the Presence subscale of the MLQ ($M = 24.3$, $SD = 5.8$) and SWLS ($M = 24.3$, $SD = 5.5$) were slightly above the midpoint (midpoint = 20), indicating that participants found their lives to be somewhat meaningful and satisfying. Using a criterion of three standard deviations above or below the mean, we observed no outliers among these data. Correlations among variables are shown in Table 1.

Test of Mediation

We used multiple regression to assess mediation. Scores on all three of the scales used in this study were significantly skewed (skewness statistic divided by standard error was greater than 1.96). After square-root transformation, these scores were no longer significantly skewed.

Table 1
Correlation Matrix for Studies 1A, 1B, and 2

Study and variable	Religiousness	Meaning in life	Optimism
Study 1A ($n = 508$)			
Religiousness[a]			
Meaning in life[a]	.40***		
Life satisfaction[a]	.20***	.47***	
Study 1B ($n = 240$)			
Religiousness			
Meaning in life	.39***		
Optimism[a]	.33***	.45***	
Self-esteem	.22**	.43***	.64***
Study 2 ($n = 84$)			
Religious activity			
Meaning in life	.27*		
Well-being[a]	.12	.66***	

[a] Variable was square root transformed prior to analyses.
* $p < .05$. ** $p < .01$. *** $p < .001$.

We first established that the conditions for mediation were met (Baron & Kenny, 1986). Satisfying the first requirement, religiousness was positively related to life satisfaction (see Table 1). Satisfying the second requirement, religiousness was also related to meaning in life. Satisfying the third requirement, meaning in life was related to life satisfaction, controlling for religiousness in a multiple regression ($\beta = .46$, $p < .0001$). The fourth requirement was that the relation between religiousness and life satisfaction be significantly smaller, with meaning entered as a predictor. Supporting this requirement, the relation between religiousness and life satisfaction was not significant when meaning in life was included in the regression model ($\beta = .02$, $p > .67$). Sobel's (1982) test was significant, indicating that the relation between religiousness and life satisfaction decreased significantly when meaning in life was included in the equation (*Sobel test statistic* = 7.59, $p = .000001$). Finally, following guidelines provided by Frazier, Tix, and Barron (2004), we calculated that 92.3% of the total effect was mediated by meaning in life. We derived this proportion by multiplying the unstandardized regression coefficient of the relation between religiousness and meaning by that between meaning and life satisfaction, then dividing by the coefficient of the relation between religiousness and life satisfaction (see Frazier et al., 2004).

Study 1B

The implications of Study 1A's results are limited by the use of only one criterion variable: life satisfaction. In Study 1B, we sought to expand the assessment of well-being to include two commonly studied well-being variables: self-esteem and optimism. Self-esteem refers to individuals' judgments about their personal worth, whereas optimism refers to individuals' positive expectations of their future. These variables describe similar, yet distinct, positive orientations (for further discussion, see Lucas et al., 1996). Previous studies have found that religiousness typically is positively related to both self-esteem and optimism (see Hood et al., 2003, for a review). We again used multiple regression to test

whether meaning in life mediated the relation between the religious variables used in Study 1A and both optimism and self-esteem.

Method

Participants

A subsample (n = 240) of the participants recruited for Study 1A completed, in small groups, measures of self-esteem and optimism as well as the religion variables, the MLQ, and the SWLS, all of which have been described previously. Participants in this subsample were 21.1 years of age, on average (SD = 5.2), and predominantly female (63%). They were mostly Caucasian (75%) and were either Protestant (34%) or Catholic (30%). The measures of self-esteem and optimism were late additions to the survey packet administered to the full sample, thus creating this subsample.

Measures

Self-esteem. We used the 10-item Rosenberg Self-Esteem Test (RSET; Rosenberg, 1965) as a measure of positive self-regard. The RSET is widely used and has been shown to be reliable and valid in a large body of studies (e.g., Lucas et al., 1996). Items are rated on a 5-point scale, such that scores could range from 5 to 50, with higher scores reflecting higher self-esteem. The alpha coefficient in this sample was .88.

Optimism. Participants also completed the Life Orientation Test (LOT; Scheier & Carver, 1985), a 12-item measure of optimism. Respondents indicated the extent to which they agreed or disagreed with four positively worded items, four negatively worded items, and four filler items on a 5-point scale. Thus, scores could range from 8 to 40, with higher scores indicating greater optimism. The LOT is commonly used, and evidence of its reliability and validity can be found in Scheier and Carver (1985). The alpha coefficient in this sample was .84.

Procedure

Participants who agreed to participate completed, in small groups, survey packets containing all measures during scheduled testing times in classrooms on campus.

Results

Descriptive Information

Religiousness (M = 0.0, SD = 0.81), MLQ (M = 23.8, SD = 5.6), and RSET scores (M = 31.2, SD = 4.7) were not skewed in this subsample. LOT scores (M = 20.1, SD = 5.1) were significantly skewed.[1] After square-root transformation, the LOT was no longer skewed. As in Study 1A, participants reported moderate levels of religiousness, with the modal response to the religious service attendance question being one time per week (21% of respondents). Participants reported praying once per day, on average (28% of respondents), and reported being somewhat to moderately religious (M = 2.6, SD = 1.0) and spiritual (M = 2.3, SD = 0.9).

Tests of Mediation

To assess whether the conditions for mediation were met, we separately assessed each necessary relation (see Table 1 for correlation coefficients). Satisfying the first requirement of mediation, religiousness was positively related to both optimism and self-esteem. Satisfying the second requirement, religiousness was also related to meaning in life. Satisfying the third requirement, meaning in life was related to optimism (β = .45, $p < .0001$) and self-esteem (β = .43, $p < .0001$), controlling for religiousness in regression analyses.

Regarding the fourth requirement of mediation, religiousness was still significantly related to optimism (β = .18, $p < .005$) when meaning was added to the model. Thus, meaning in life did not appear to mediate fully the relation between religiousness and optimism. However, we performed a Sobel test to determine whether meaning partially mediated the relation between religiousness and optimism. The Sobel test was significant (*Sobel test statistic* = 5.12, p = .000001), indicating that meaning in life accounts for at least a portion of the relation. Using procedures recommended by Frazier et al. (2004), we determined that meaning accounted for 53.4% of the total relation between religiousness and optimism. We also determined that religiousness was no longer significantly related to self-esteem after meaning was added (β = .06, p = .33). The Sobel test statistic was significant, indicating that the relation between religiousness and self-esteem diminished significantly with the addition of meaning scores to the equation (*Sobel test statistic* = 4.87, p = .000001). Meaning accounted for 76.0% of the total relation between religiousness and self-esteem.

Discussion

Studies 1A and 1B demonstrated that meaning in life mediated the relation between religiousness and well-being in a university student sample when well-being was assessed by life satisfaction and self-esteem. In addition, meaning partially mediated the relation between religiousness and optimism. These findings effectively replicate those of Chamberlain and Zika (1988) by using a meaning-in-life measure without items overlapping with the outcome variables and by extending the findings to encompass additional measures of well-being. Meaning did not fully mediate the relation between religiousness and optimism. This finding suggests that, to the extent that people involved with religion have positive expectations for the future, those expectations cannot be explained completely by religion's contribution to their sense of meaning in life.

One limitation of these studies was that measures were assessed at only one point in time. In addition, all of the measures were general assessments of experience. Thus, these studies did little to inform us about how religious experiences are related to well-being in daily life. Therefore, we sought to obtain a longer sample of experience using a daily diary method. This approach allowed us to examine whether religious and spiritual activities are related to well-being and whether meaning mediates the relation between religious activities and well-being on a daily basis.

[1] The subsample of participants in Study 1B (n = 240) did not differ from those in the larger sample in Study 1A who did not complete the measures of optimism or self-esteem (n = 268) on religiousness, $t(506)$ = 0.06, p = .95; meaning in life, $t(506)$ = .29, p = .78); or life satisfaction scores, $t(506)$ = 1.36, p = .17.

STUDY 2

Meaning in life has been almost exclusively studied as a trait variable—one that does not change much over time. Other well-being variables such as life satisfaction have been explored as having both trait-like and state-like components (e.g., Schimmack, Diener, & Oishi, 2002). When measured as a global variable, life satisfaction judgments are stable and related to personality traits. When measured on a short-term basis, life satisfaction judgments are more statelike, reflecting momentary concerns and activities. Meaning in life can also be viewed as having both trait-like and state-like features. In Study 1, we assessed global meaning-in-life judgments, which have been shown to be stable over time (MLQ Presence subscale 1-month test–retest correlation of .70; Steger et al., in press). However, the extent to which people feel their lives are meaningful may fluctuate from day to day. Consistent with the meaning-as-mediator model, we hypothesized that well-being would be higher on days when participants reported religious behaviors and that this relation would be explained by greater perceived meaning in life on those days. In Study 2, we used a 2-week daily diary method to assess the frequency of two religious activities. We used the multilevel modeling software program, Hierarchical Linear Modeling, Version 5.0 (HLM 5; Raudenbush, Bryk, & Congdon, 2000), to assess whether religious activity covaried with well-being on a daily level and whether daily meaning in life mediated that relation.

Method

Participants

We recruited 100 participants from introductory psychology classes in exchange for class credit. Participants were recruited via flyers and in-class announcements. Eighty-nine percent of participants ($n = 89$) returned the daily forms. Five of these participants returned forms that contained either suspicious duplicate patterns of responses across days or out-of-range responses on multiple days. The remaining 84 participants were 20.1 years old, on average ($SD = 3.49$), and were predominantly female (76%). They were mostly Caucasian (78%) and either Catholic (33%) or Protestant (20%). As in Studies 1A and 1B, our sample was similar to the undergraduate student population on our campus in terms of age and ethnicity, but our sample contained more women.

Materials

Time 1 survey. At Time 1, participants completed a pretest survey containing the MLQ and SWLS, along with other measures not relevant to these analyses. (The MLQ and SWLS were described in the previous section.)

Daily religiousness. We assessed daily religiousness with two items designed to tap into traditional religious activity and spiritually oriented behavior. These two items were "Attended a religious service (because I wanted to)" and "Engaged in spiritual reading or meditation." Participants indicated whether they had engaged in each type of behavior every day of the diary study. HLM 5 provided reliability estimates of the consistency of participants' daily ratings, which have been recommended as the most appropriate measure of reliability for nested, within-persons data (Nezlek, 2001). The reliability of the average daily religious behaviors was .95.

Daily well-being. We included measures of daily positive affect (e.g., happy, love) and negative affect (e.g., sad, angry), modified from the Long-Term Affect Scale (Diener, Smith, & Fujita, 1995). In addition, we included the item "How was today?" which was rated from 1 (*terrible*) to 7 (*excellent*). Several researchers have advocated for creating a measure of affect balance by subtracting negative affect scores from positive affect scores (e.g., Diener, 2000). Greater well-being is indicated when this affect balance is positive. In accord with these suggestions, we calculated a daily affect balance score for each participant and added that to scores on the "How was today?" item to create an index of overall daily well-being. Aggregate scores on the daily well-being measures were significantly related to scores on the SWLS ($r = .73$, $p < .0001$), indicating good convergent validity. The reliability of the average daily well-being measure was .86, computed using HLM 5.

Daily meaning. We assessed daily meaning in life with the item "How meaningful does your life feel today?" This item was rated from 1 (*not at all meaningful*) to 7 (*absolutely meaningful*). The reliability of the average daily meaning ratings, computed using HLM 5, was .90. We computed the relation between the daily meaning items and scores on the MLQ presence scale using the same approach that we used for daily well-being. This relation was significant ($r = .60$, $p < .0001$), indicating evidence for convergent validity.

Procedure

Participants completed the pretest survey in a large group at a scheduled time in a classroom on campus. At that time, participants were given a packet containing 14 days' worth of report forms. They were instructed to complete one form at the end of each day during the 14-day period. Participants met again in a large group at the end of 14 days, at which time their daily report packets were collected by researchers.

Results

Descriptive Information

Participants engaged in an average of 2 ($SD = 3.6$) religious or spiritual behaviors during the 2-week period. The average daily well-being rating was 7.4 ($SD = 1.9$). Theoretically, scores could range from -11 (if someone reported the highest levels of negative affect and the lowest levels of positive affect and day's quality) to 19 (if someone reported the lowest levels of negative affect and the highest levels of positive affect and day's quality). Thus, the average daily well-being rating was above the midpoint (4) of that range, suggesting that this sample experienced a moderate level of daily well-being. The average daily rating for the meaning-in-life item was 5.0 ($SD = 1.3$), which was 1 point above the midpoint (4), suggesting that participants in this sample felt their lives were somewhat meaningful. We aggregated scores across time to derive variables that represented the average rating across 14 days. Correlations among aggregated scores for these variables are in Table 1.

Daily religious activity scores were significantly skewed, as were daily well-being and meaning-in-life scores. We square-root-transformed daily well-being and meaning scores prior to analysis, to reduce skew. However, the majority (approximately 75%) of daily religious activity scores were zeroes, which cannot be transformed. But results from even extremely nonnormal distributions are reliable if observed relations are significant at $p < .001$ or less (Lumley, Diehr, Emerson, & Chen, 2002). The initial relations among daily religious behaviors and the other daily measures are significant at that level (see Daily Mediation section on next page), so results are likely reliable.

Data Analytic Strategy

The purpose of these analyses was to assess whether religious behaviors, affective well-being, and feelings of meaning in life

Table 2
Study 2: Meaning in Life as a Mediator of the Relation Between Religious Behavior and Well-Being in Daily Life

Predictor	Coefficient	*SE*	*t* ratio	*df*	β
Equation 1[a]					
Intercept	.14	.03	5.04	83	
Religious behavior	.18 ($\lambda 10$)	.06	2.94	83	.11**
Equation 2[b]					
Intercept	.14	.03	5.04	83	
Religious behavior	.03 ($\lambda 10$)	.05	0.62	83	.02
Meaning in life	.79 ($\lambda 20$)	.03	22.77	83	.72***

Note. $n = 84$. Dependent variable = daily well-being. The *df*s are approximate degrees of freedom in hierarchical linear modeling.
[a] To assess whether religious behavior covaried over time with daily well-being, we used the following equation: $Y_{ij} = \beta 0_i + \beta 1_i + e_{ij}$ (Level 1), where Y_{ij} is the daily well-being score for respondent i on day j, $\beta 0_i$ is the intercept for person i (the value of Y when day = 0), $\beta 1_i$ represents the covariation over time between religious behavior and well-being, and e_{ij} is participant i's residual at time j. The Level 2 equation for $\beta 1_i$ (the parameter of interest) is $\beta 1_i = \lambda 10 + u 1_i$, where $\lambda 10$ represents the covariation between religious behavior and well-being. [b] The second equation assessed the relation between religious behavior and daily well-being with the addition of a meaning-in-life term: $Y_{ij} = \beta 0_i + \beta 1_i + \beta 2_i + e_{ij}$, where $\beta 2_i = \lambda 20 + u 1_i$ and $\lambda 20$ represents the covariation between meaning in life and daily well-being.
** $p < .005$. *** $p < .0001$.

occur together on a daily basis and whether meaning in life mediates the relation between religious behaviors and well-being. We used HLM 5 to assess the covariance over time of the daily diary reports. We modeled a Level 1 equation in which daily scores were nested within persons. In doing so, we were able to assess whether daily religiousness, well-being, and meaning-in-life scores were related to one another on a daily basis within individuals (see Table 2 for equations). A positive coefficient ($\gamma 10$) means that two variables change together in similar ways (e.g., they both increase over time), whereas a negative coefficient means that two variables change inversely over time (e.g., as one increases, the other decreases). HLM 5 does not provide standardized estimates, so in addition to standardizing the unstandardized estimates, we standardized the coefficients as recommended by Hox (1995).[2] With this dataset, we had multiple observations (days) nested within participants. Multilevel random coefficients modeling is the preferred means for analyzing this type of data (Nezlek, 2001). Thus, the analyses of interest were whether participants reported greater well-being and greater meaning in life on days in which they engaged in religious behavior. We centered each participant's daily meaning and religious behavior scores around their individual averages (using group mean centering). We modeled all variables as random effects, thus allowing them to be freely estimated from the data. We tested mediation with the methods specified by Krull and MacKinnon (2001) for multilevel data. Specifically, we first tested all of the criteria for mediation, as previously described in Study 1A. Then we used Sobel's (1982) test statistic to assess the significance of the change in coefficients, which performed well in multilevel mediation simulations, according to Krull and MacKinnon (2001).

Daily Mediation

The initial conditions for mediation were met, with daily religious behaviors significantly related to daily well-being ($\gamma 10 = .18$, $p < .001$, $\beta = .11$) and daily meaning in life ($\gamma 10 = .20$, $p < .001$, $\beta = .14$), and with daily meaning in life significantly related to daily well-being ($\gamma 10 = .80$, $p < .001$, $\beta = .72$), controlling for daily religious behaviors. However, the relation between religious behaviors and life satisfaction was no longer significant when meaning in life was added ($\gamma 10 = .03$, $p > .48$, $\beta = .02$). The Sobel test statistic indicated that the relation between religious behaviors and well-being was significantly attenuated when meaning in life was included in the equation (*Sobel test statistic* = 4.02, $p < .01$), indicating that meaning in life mediated the relation between religious behaviors and well-being on a daily level. Using procedures described by Frazier et al. (2004), we calculated that 90.8% of the total relation between daily religious behaviors and daily well-being was mediated by daily ratings of meaning in life.

Discussion

We found strong support for the hypothesis that meaning in life is an important mediator of the relation between daily religious activity and well-being, suggesting that religious individuals might feel greater well-being because they derive meaning in life from their religious feelings and activities. This study added an important dimension to the study of mediators of religion by indicating that the mediating role of meaning takes place even during brief periods of time, with the implication that people's experiences of meaning may occur very quickly after they engage in religious activity. Future studies should endeavor to explore whether and how quickly this occurs by using a sampling of multiple reports from each day or by sampling meaning and well-being immediately after religious events. Replication of these findings with different assessment strategies is important because of the high magnitude of the relation between daily meaning and daily well-

[2] A standardized coefficient equals the product of the unstandardized coefficient and its standard deviation, divided by the standard deviation of the dependent variable (Hox, 1995).

being. The covariance may have been so high that a relation between religious behaviors and well-being was overwhelmed.

GENERAL DISCUSSION

We aimed to empirically test recent speculation that meaning in life may be an important mediator of the relation between religion and well-being. We examined this question using different indices of religiousness and well-being, on a general and on a daily level. Results from these analyses supported meaning in life as a significant mediator between religion and well-being. Taken together, these results paint a picture of religious persons feeling greater meaning in life as they attend services, meditate, or read about spirituality. These results also indicate that religious persons' greater sense of meaning is in turn associated with greater positive regard for their lives and selves.

Several other mediators of the relation between religion and well-being have been studied. George et al. (2002) concluded that strong evidence indicates that religion appears to promote healthier habits, which then promote health. George et al. also suggested that the evidence for mediation by social support or psychosocial resources has been mixed or weak. The evidence from the present studies, as well as that reported by Chamberlain and Zika (1988), indicates that in the context of other potential mediators, meaning appears very promising.

We want to be careful in declaring that these results cannot "explain away" religion (see Pargament, 2002a). We believe it takes nothing away from the unique nature of religion to demonstrate that religion is related to well-being to the extent that it increases feelings of meaning in life. Meaning *should* be an important element of religion because religions almost universally address issues regarding what in life is important, what people's purposes for living are, and what the nature of the human experience is. Moreover, people do not generally engage in religion to elevate well-being. Religions exist to bring people into greater contact with sacred matters, rather than maximizing happiness.

The results of this study also help deepen our understanding of what factors create a sense of well-being and why. Many studies have established that religion is important to well-being (for a review, see Pargament, 2002a). Fewer studies have helped illuminate why religion is so important, although several possibilities exist. Religion could contribute to well-being by providing people with social support or coping resources, or with a sense of self-esteem or self-worth. The present study suggests that religion creates a sense of meaning in life that in turn fosters well-being. We believe that these findings provide a strong argument that meaning in life is a crucial element of human well-being and functioning—one that deserves further study.

Religious Variables and Counseling

Researchers have made a number of attempts to provide therapists with theoretical perspectives and tools to effectively serve their religious clients (e.g., Worthington, 1988; Worthington et al., 2003). This is important because the majority of Americans feel that religion is an important part of their lives (Gallup, 1995), and research suggests that religious clients may want to discuss religious and spiritual issues in therapy (Rose, Westefeld, & Ansley, 2001). Additionally, some evidence shows that religiously focused therapy is as effective as (McCullough, 1999), if not more effective than (Propst, Ostrom, Watkins, Dean, & Mashburn, 1992), standard approaches, although only a minority of therapists view religion as a suitable topic in therapy (Bergin & Jensen, 1990). Even fewer therapists have reported having received adequate training regarding religious or spiritual issues (Shafranske & Maloney, 1990), and less than half of American Psychological Association–accredited counselor training programs that participated in a recent survey included religion in their curriculum or supervision (Kelly, 1997). The present findings highlight evidence that religion can be a source of well-being in clients' lives, and the findings further suggest that religious clients may derive meaning from their religion, which in turn helps them feel better. Although few counselors appear to address religion in session, knowing that meaning in life is important to these clients may help counselors understand them better. Meaning may also be a means for discussing matters of ultimate importance without necessarily touching on religion, or alternatively, may provide a common framework for addressing some religious concerns in session. Finally, counselors may wish to consider designing interventions to help clients find meaning in their lives, particularly if their clients are nonreligious or are experiencing crises of religious doubt.

Religious matters also intersect with multicultural issues. Sometimes, religion and ethnicity are very closely associated (e.g., Latinos and Catholicism, North Africans and Islam), and religion—like race—is a determinant of social status in the United States, with some religions held in higher regard than others (Fouad & Brown, 2000). In addition, the greater importance placed on spirituality is one dimension that may differentiate some ethnic minority groups from majority groups in the United States (Blaine & Crocker, 1995). Thus, therapists' ability to work more effectively with religious clients could contribute to multicultural competence. Clients from ethnic minority groups who are more religiously involved also might be more likely to derive meaning from religion than would clients from majority groups. Meaning could be an important meeting ground from which to understand multicultural clients' religious—and cultural—experiences.

Limitations and Future Directions

This study was limited in several ways. First, although we used a variety of methods to assess religiousness, we did not assess one of the most commonly used constructs (i.e., intrinsic or extrinsic religiousness). Replication of these results with other measures of religiousness would increase confidence in meaning as a mediator. Second, all of our data were correlational in nature, curtailing assertions of causal mediation. Third, the assessment of key variables was somewhat limited in Study 2, which often is the case in daily diary studies. Fourth, we did not assess other potentially important mediators of religion's relation with well-being, such as health practices or social support. Doing so should be an important contribution of future studies aimed at understanding how religion is related to well-being (see Joiner, Perez, & Walker, 2002). Finally, these studies assessed mostly White college student samples; hence, these results may not generalize to other populations.

Despite their limitations, these studies provide clear support for the hypothesis that meaning in life is a primary mediator through which religion is associated with well-being. We believe that the variety of methods and measures used strengthen this claim and

should encourage those interested in religion and well-being to examine meaning in life. We hope that future research will focus more generally on the role of meaning in life in fostering well-being. Finally, we hope that these results encourage counselors to explore with their clients the fundamental questions of meaning and purpose in life.

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