An Interpersonal Approach to Religiousness and Spirituality: Implications for Health and Well-Being

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Abstract

The interpersonal tradition (Horowitz & Strack, 2011) provides a rich conceptual and methodological framework for theory-driven research on mechanisms linking religiousness and spirituality (R/S) with health and well-being. In three studies, we illustrate this approach to R/S. In Studies 1 and 2, undergraduates completed various self-report measures of R/S, interpersonal style, and other aspects of interpersonal functioning. In Study 3, a community sample completed a wide variety of R/S measures and a measure of interpersonal style. Many, but not all, aspects of religiousness (e.g., overall religiousness, intrinsic religiosity) were associated with a warm interpersonal style, and most aspects and measures of spirituality were associated with a warm and somewhat dominant style. Spirituality and related constructs (i.e., gratitude, compassion) were associated with interpersonal goals that emphasize positive relationships with others, and with beneficial interpersonal outcomes (i.e., higher social support, less loneliness, and less conflict). However, some aspects of R/S (e.g., extrinsic religiousness, belief in a punishing God) were associated with a hostile interpersonal style. R/S have interpersonal correlates that may enhance or undermine health and emotional adjustment. This interpersonal perspective could help clarify why some aspects of religiousness and spirituality are beneficial and others are not.

A growing body of research indicates that individual differences in religiousness and spirituality (R/S) predict emotional adjustment and physical health (Chida, Steptoe, & Powell, 2009; Masters & Hooker, 2012; T. B. Smith, McCullough, & Poll, 2003). The importance of these associations is underscored by the prevalence and variety of religious and spiritual activity in the United States (Pew Research Center, 2008), and by the fact that R/S predict key challenges to public health, such as depression, cardiovascular disease, and early mortality. The aspects of R/S linked to these emotional and physical health outcomes range from the frequency of religious behavior (e.g., church attendance, prayer) and self-ratings of the extent of religiousness to a wide variety of more complex beliefs and experiences (Masters & Hooker, 2012).

This research area currently faces two major challenges. First, associations of R/S with physical health and well-being are often inconsistent, perhaps reflecting the wide variety of concepts and measures related to R/S used in this research (Hill & Edwards, 2013; Masters & Hooker, 2012). Hence, there is a need for research that compares, contrasts, and ultimately integrates commonly used R/S concepts and measures. Second, the beneficial effects of at least some aspects of this constellation of individual differences have prompted studies of the processes through which R/S influence health and well-being, but to date this research has emphasized intrapersonal processes (e.g., higher self-esteem, better coping and self-regulation), with less attention given to interpersonal processes. Also, the limited research to date on interpersonal processes has not been guided by an integrative conceptual and methodological framework.

Previously, we have utilized the concepts and methods of the interpersonal tradition in personality and clinical psychology (Horowitz & Strack, 2011; Kiesler, 1996; Pincus & Ansell, 2013) as an integrative framework in studying personality and social-environmental factors that confer either risk or protection for health problems (T. W. Smith & Cundiff, 2011; T. W. Smith, Glazer, Ruiz, & Gallo, 2004; T. W. Smith, Traupman, Uchino, & Berg, 2010). This perspective provides
established approaches for evaluating the similarities, differences, and interrelations among a wide variety of individual differences in emotional and social functioning. It also provides concepts and methods for understanding interpersonal processes that may link risk and resilience factors typically conceptualized as characteristics of individuals (e.g., personality, emotional adjustment, R/S) with risk and resilience factors typically seen as a separate set of influences on health—aspects of the social environment (e.g., social support, conflict, isolation).

Specifically, a structural model of individual differences in social behavior (i.e., interpersonal style) can be used to identify similarities and differences among various risk or protective factors, and results can guide theory-driven research on interpersonal processes that in turn could link the risk or protective factors with health outcomes (T. W. Smith & Cundiff, 2011; T. W. Smith et al., 2010). Hence, the interpersonal perspective is well suited to addressing key challenges in current research on R/S, physical health, and well-being. After reviewing relevant theory and research in R/S and providing an overview of the interpersonal perspective, we present three studies that illustrate the initial application of this framework to R/S.

Conceptualization and Measurement of Religiousness and Spirituality

Religiousness and spirituality are complex constructs with diverse conceptualizations (Hill & Edwards, 2013). Religiousness generally refers to the extent to which the individual holds a system of beliefs in a divine power and engages in related practices of worship directed toward that power. Spirituality generally refers to the individual’s concerns with ultimate purposes and meanings in life, and a higher calling toward love and compassion. In both religiousness and spirituality, the search for the sacred is central. However, religiousness involves institutional or organizational affiliation and involvement, whereas spirituality is more tied to personal experience and activity and is less tied to specific doctrine (Hill & Edwards, 2013).

Many studies on the relationship of R/S with health and well-being have relied on single-item scales, measuring church attendance or the subjective degree of religiousness. Even these limited measures predict outcomes such as longevity, cardiovascular disease, and depressive symptoms (Chida et al., 2009; Masters & Hooker, 2012; T. B. Smith et al., 2003). However, several multidimensional concepts and measures are central in this research. A key example is the distinction between intrinsic versus extrinsic religiousness (Allport & Ross, 1967). Intrinsic religiousness refers to a religious motivation in which religion is an end in and of itself, whereas extrinsic religiousness refers to a motivational orientation in which religion is a means to an end, such as social inclusion, comfort, or status. Generally, intrinsic religiousness is associated with well-being and good health, whereas extrinsic orientation is unrelated to these outcomes or sometimes even inversely related to these outcomes (e.g., T. B. Smith et al., 2003).

Spirituality is also often conceptualized and measured as a multidimensional construct. The Functional Assessment of Chronic Illness Therapy-Extended Spiritual Well-Being Scale (FACIT-Sp-Ex) and the Spiritual Transcendence Scale (STS) are frequently used assessments of spiritual well-being (e.g., meaning, peace), spiritual concerns (e.g., faith, compassion), connectedness (e.g., belief in a unified link with others), prayer fulfillment (e.g., ability to connect to a larger reality), and universality (e.g., belief in a larger purpose; Brady, Peterman, Fitchett, & Cell, 1999; Piedmont, 2004). The Brief Multidimensional Measure of Religiousness/Spirituality (BMMRS) is meant to capture both religiousness (e.g., private religious practices, religious beliefs) and spirituality (e.g., spiritual experiences, meaning; Fetzer Institute/National Institute on Aging [NIA], 1999). It also assesses potentially negative features of R/S, such as belief in a punishing God. While these multidimensional measures reflect the breadth of the R/S construct, there is a general lack of conceptually guided studies of the similarities and differences among the various aspects of R/S they assess (Hill & Edwards, 2013).

Associations of Religiousness and Spirituality with Health and Well-Being

In a quantitative review of over 90 prospective studies, higher levels of R/S were associated with reduced risk of all-cause mortality and mortality from cardiovascular disease (Chida et al., 2009). Single-item measures (e.g., attendance at religious services) predicted these outcomes among initially healthy individuals, but multidimensional measures of R/S predicted these outcomes in both initially healthy and initially ill samples (Chida et al., 2009). A subsequent review reached similar conclusions, although the somewhat inconsistent associations with health outcomes suggested the need for “an orienting framework” regarding the conceptualization and measurement of R/S (Masters & Hooker, 2012, p. 3).

In terms of emotional health, a quantitative review of 147 studies found an inverse association between R/S and depression (T. B. Smith et al., 2003). Importantly, positive aspects of R/S (e.g., intrinsic religiosity) were associated with lower depression risk, whereas negative aspects (e.g., extrinsic religiosity, avoiding life difficulties through religious activities) were associated with greater depression. Most of the research on R/S and depression has utilized cross-sectional designs and measures of depressive symptoms. However, recent prospective studies of depressive disorders have found protective effects of individual differences in the self-reported importance of R/S (Miller et al., 2012).

It is important to note that health behaviors (e.g., smoking, alcohol use) do not account for the effects of R/S on health (Chida et al., 2009). Approaches to other mechanisms under-
lying the association of R/S with health and well-being mirror the history of scholarly writing on religion, which is replete with descriptions that are individually focused, on the one hand, and interpersonally focused, on the other. For example, Alfred North Whitehead declared, “Religion is what the individual does with his solitariness” (1926, p. 47). In contrast, emphasizing social aspects, Alfred Adler wrote, “[Religions] bear with them the most exalted expression of human greatness . . . but always deeply graven on their ultimate, ideal purpose: ‘Love thy neighbor’ ” (1937, p. 118). This duality is evident in research on mechanisms linking R/S with health and well-being, but to date intrapersonal mechanisms are more developed. In these approaches, the beneficial effects of R/S are attributed to enhanced self-regulation, higher self-esteem, greater self-acceptance, finding meaning in events, greater perceived control, and use of more adaptive forms of coping (Jackson & Bergeman, 2011; Krause, 1995; McCullough & Willoughby, 2009).

Though a less developed research focus, interpersonal processes may contribute to the influence of R/S on health and well-being. Some research suggests that the benefits of R/S for health and well-being may be due to higher levels of social support (George, Ellison, & Larson, 2002), greater disclosure in close relationships (Brelsford, Marinelli, Ciarrochi, & Dy-Liacco, 2009), a sense of belonging in religious communities (Krause & Wulff, 2005), greater forgiveness (Lawler-Row, 2010), and higher levels of relationship quality in marriage (Mahoney, Pargament, Tarakeshwar, & Swank, 2008). Consistent with the view that not all aspects of R/S are beneficial, other work has considered organizational factors (e.g., congregation size) that influence the tone—both positively and negatively—of social interactions among members of a religious community or congregation (C. G. Ellison, Krause, Shepherd, & Chaves, 2009).

Other research suggests that these social processes could link R/S with physical health and well-being. Higher levels of social support and integration as well as lower levels of conflict and disruption in marriage and other close relationships are associated with reduced emotional distress (Hames, Hagan, & Joiner, 2013; Whisman & Beach, 2010; Whisman & Schonbrun, 2010), and similarly predict greater longevity and reduced risk of cardiovascular disease (De Vogli, Chandola, & Marmot, 2007; Holt-Lunstad, Smith, & Layton, 2010; Matthews & Gump, 2002; Sbarra, Law, & Portley, 2011; T. W. Smith, Uchino, Berg, & Florsheim, 2012). Some evidence suggests that social support does not provide a full explanation of associations of R/S with health outcomes (Chida et al., 2009), but the issue has not been adequately examined and little research has addressed the role of negative interpersonal experiences in these associations.

**A Primer of Interpersonal Psychology**

In the present studies, we examine interpersonal characteristics associated with R/S that may contribute to their associations with health and well-being, using a framework grounded in the interpersonal tradition of personality, social, and clinical psychology (Horowitz & Strack, 2011; Kiesler, 1996; Pincus & Ansell, 2013). It is often assumed that R/S are associated with a warm, caring, and friendly interpersonal style, but empirical support for this assumption is mixed (Galen, 2012), perhaps because of the variety of R/S concepts and measures used. The social manifestation of R/S may be quite different depending on the specific domain of R/S examined. For example, a religious person who believes God is generally punishing may be less congenial compared to an equally religious person who believes in a more loving and forgiving deity. A well-articulated conceptual and methodological paradigm with which to compare and contrast measures of various aspects of R/S has the potential to bring an integrative perspective.

The interpersonal perspective includes three basic components: (a) an assumption about the nature of personality and related individual differences, (b) a structural model of behavior, and (c) a model of social transactions. The general assumption suggests that sharp distinctions between intrapersonal and interpersonal phenomena are misleading, as evident in Sullivan’s definition of personality as “the relatively enduring pattern of interpersonal situations which characterize a human life” (1953, p. 111). In this view, psychological individual differences, including relevant aspects of R/S, are evident in recurring patterns of social behavior.

The structural model of behavior in this tradition identifies the key dimensions of such patterns (Kiesler, 1996). The interpersonal circumplex (IPC) describes social behavior through two broad dimensions—affiliation (i.e., warmth vs. hostility) and control (i.e., dominance vs. submissiveness; see Figure 1). These dimensions can describe moment-to-moment behavior, as well as more enduring and general individual differences in social behavior—interpersonal styles. The IPC can also be

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**Figure 1** The interpersonal circumplex.
used to describe qualities of relationships (T. W. Smith et al., 2010).

In comparing, contrasting, and integrating individual differences, associations are computed between the measure in question and IPC-based measures of the affiliation and control dimensions of interpersonal style (Wiggins & Broughton, 1991). These associations indicate the specific interpersonal style (i.e., relative warmth vs. hostility and dominance vs. submissiveness). The multiple correlation between a scale and the two IPC dimensions provides an index of the “interpersonalness” of that trait—specifically, the extent to which it is related to social behavior (Gurtman, 1991). Momentary or situational levels of affiliation and control vary widely in response to specific aspects of the social context, but such situational behavior is also related to interpersonal styles (Sadler & Woody, 2003). Momentary or specific levels of affiliation and control and a person’s characteristic interpersonal style also reflect social motives and goals corresponding to the IPC (Locke, 2000). For example, people with a warm interpersonal style often engage in behavior that reflects a desire to express and obtain affection; a hostile style may be associated with goals involving self-protection and the avoidance of criticism.

In terms of social transactions, the principle of complementarity (Kiesler, 1996) holds that an individual’s behavior invites certain responses from interaction partners (Pincus & Ansell, 2013). In the IPC framework, the invited or evoked complementary behavior is similar in affiliation and opposite in control. Warmth invites warm responses, whereas cold or hostile displays invite hostility. Dominant behavior invites submissiveness, whereas submissiveness invites dominance. A large body of research supports this principle in both momentary social behavior and the interpersonal styles of relationship partners, although more so for the affiliation dimension than for control (Sadler, Ethier, & Woody, 2011).

The processes underlying complementarity are described in the transactional cycle (Kiesler, 1996). Aspects of an actor’s covert experience (e.g., goals, motives, expectations) guide overt or expressive behavior, as when trusting persons are open, warm, straightforward, and cooperative. This expressive behavior restricts the likely reactions or experiences of interaction partners, as when they appraise the trusting actor as pleasant or even kind. Those covert reactions lead that partner to be more likely to express behavior that is complementary to the actor’s initial expectations; after the actor’s open and warm behavior, warmth from partners becomes more likely and hostility less so. Such transactional processes can shape the tone of interactions across many contexts, including close relationships (T. W. Smith et al., 2004).

**Interpersonal Analysis of Religiousness and Spirituality**

This brief review provides the outline for the application of the interpersonal perspective to individual differences in R/S. The IPC provides a framework for comparing, contrasting, and integrating various measures of R/S by examining their associations with the affiliation and control dimensions of interpersonal style. Hence, in the first step of this application, associations with the IPC affiliation and control dimensions describe the interpersonal style associated with a given R/S measure (i.e., degree of warmth vs. hostility and dominance vs. submissiveness), and its multiple correlation with these dimensions indicates the relative “interpersonalness” of the measure, or the extent to which it is related to interpersonal processes (Gurtman, 1991; Wiggins & Broughton, 1991). The degree of interpersonalness and the interpersonal style are key points of comparison in understanding the similarities and differences among R/S scales.

The IPC also has more direct implications for understanding influences on health. Whether considered as aspects of personality or as aspects of personal relationships, low levels of warmth and high levels of hostility are associated with increased risk of health problems, as are high levels of dominance (T. W. Smith et al., 2008; T. W. Smith et al., 2011; for a review, see T. W. Smith & Cundiff, 2011). Hence, aspects of R/S associated with a warm social style would be expected to predict better health and well-being, whereas those associated with a hostile or dominant style would be expected to predict poor health and emotional outcomes.

The interpersonal style associated with a given measure of R/S, in turn, provides the basis for predictions about likely interpersonal correlates of that aspect of R/S. On the basis of the complementarity and transactional elements of the interpersonal perspective, aspects of R/S associated with a warm interpersonal style would be expected to be associated with positive features of social context, such as higher levels of social support and lower levels of social isolation and conflict with others. Those social correlates, in turn, could suggest interpersonal processes contributing to the association of R/S with health and well-being. The variety of interpersonal processes described above identified as possible mechanisms linking R/S with health and well-being could share a basic common mechanism involving levels of exposure to warmth and hostility in daily experience. Finally, associations of aspects of R/S with IPC-based measures of social goals could identify a key element of the transactional processes underlying associations of R/S with recurring patterns of risky or protective interpersonal experience.

Studies 1, 2, and 3 were conducted as initial applications of this approach, using different measures of R/S. Measures of R/S previously associated with better health and well-being should be associated with a warm interpersonal style, whereas those associated with poor health and emotional distress should be associated with a hostile interpersonal style. Study 2 also examined associations of aspects of R/S with an IPC-based measure of goals and with social characteristics known to influence health and well-being (e.g., social support, isolation, interpersonal conflict).
STUDY 1: SELF-REPORTED RELIGIOUSNESS AND INTERPERSONAL STYLE

If religiousness has beneficial effects on health and well-being through interpersonal processes, then it should be associated with a warm interpersonal style (T. W. Smith et al., 2010). As an initial test of this hypothesis, we related a single-item measure of religiousness to affiliation and control in three samples. Much of the research documenting associations of religiousness with subsequent physical health and well-being uses similar single-item measures. Hence, the IPC description of this common, albeit clearly limited, assessment of religiousness provides an important test of its association with the hypothesized warm interpersonal style. It also serves as an important point of comparison for IPC descriptions of other measures of R/S.

Method

Participants. All samples were collected at the University of Utah. Sample 1 consisted of 161 undergraduates (77 females; mean age = 22.2 years, SD = 5.7). Eighty-four percent were Caucasian, 7% were Asian/Pacific Islander, 4% were Hispanic/Latino, and the remaining were other ethnicity or not reported. Regarding religion, 60% were Church of Jesus Christ of Latter-Day Saints (LDS; Mormons), 7% were Catholic, 3% were Protestant, 3% were Buddhist, and 1% each were Jewish and Muslim, and 25% other or none. Sample 2 included 239 undergraduates (143 females; mean age = 22.1 years, SD = 4.6). Eighty-nine percent were Caucasian, 5% were Asian/Pacific Islander, 3% were Hispanic/Latino, and the remaining were other ethnicity or not reported. In regard to religious faith, 64% were LDS, 7% were Catholic, 3% were Protestant, 1% each were Jewish and Buddhist, and 24% other or none. Sample 3 included 237 undergraduates (124 females; mean age = 21.8 years, SD = 4.0). Eighty-three percent were Caucasian, 7% were Asian/Pacific Islander, 3% were Hispanic/Latino, and the remaining were other ethnicity or not reported. In regard to religious faith, 59% were LDS, 8% Catholic, 4% Protestant, 3% Muslim, 1% Buddhist, and 25% other or none.

Procedure and Measures. In small groups, informed consent was obtained and questionnaires were administered in pencil-and-paper format. All studies reported here were approved by the Institutional Review Board. Participants responded to the item “How religious do you consider yourself?” on a 4-point Likert-type scale (not at all, somewhat, moderately, very much so). The Revised Interpersonal Adjectives Scales–Big Five (IASR-B5) include IPC-based measures of affiliation and control (Wiggins & Trobst, 2002). Octant scores (i.e., Dominant, Friendly-Dominant, Friendly, Friendly-Submissive, Submissive, Hostile-Submissive, Hostile, and Hostile-Dominant) are derived from 64 adjectives. Standardized octant scores were combined to form affiliation and control scale scores. These scales have demonstrated high levels of internal consistency, expected circumplex structure, and construct validity (Wiggins & Trobst, 2002). In our sample, internal consistency ranged from .89 to .92 for the affiliation scale scores and .90 to .92 for the control scale scores.

Results and Discussion

To determine the degree of “interpersonalness” and the specific interpersonal style associated with self-reported religiousness, we regressed this variable on the IASR-B5 scores for affiliation and control. Results for Sample 1 indicated a significant overall effect, multiple \( R = .28, F(2, 156) = 6.55, p < .01 \), suggesting a moderate degree of interpersonal content. In terms of interpersonal style, religiousness was associated with affiliation, \( \beta = .27, t(156) = 3.41, p < .001 \), but not control, \( \beta = .06, t(156) = 0.81 \), indicating a warm style. These results (as well as the results for the following samples) did not change when controlling LDS affiliation. Results for Sample 2 indicated a significant overall effect, multiple \( R = .26, F(2, 235) = 8.77, p < .01 \), and religiousness was again associated with affiliation, \( \beta = .24, t(235) = 3.82, p < .001 \), but not control, \( \beta = .09, t(235) = 1.42 \). Finally, results for Sample 3 indicated a significant overall effect, multiple \( R = .21, F(2, 236) = 5.21, p < .01 \). Religiousness was associated with affiliation, \( \beta = .20, t(236) = 3.20, p < .01 \), but not control, \( \beta = .01, t(236) = 0.20 \).

Hence, a single-item measure of religiousness similar to that in many epidemiologic studies of health and well-being (Chida et al., 2009; T. B. Smith et al., 2003) was associated with a warm interpersonal style. The \( R \) values suggest only a moderate degree of “interpersonalness,” but this likely reflects in part the limited reliability of the single-item measure. The principle of complementarity suggests that the warm social behavior of individuals endorsing a high degree of religiousness would likely increase their exposure to positive interpersonal experiences (e.g., social support) and reduce their exposure to negative interpersonal experiences (e.g., isolation, conflict). These results are clearly limited by the use of a simple measure of religiousness, and by the neglect of individual differences in spirituality.

STUDY 2: THE INTERPERSONAL STYLES, GOALS, AND PROBLEMS ASSOCIATED WITH RELIGIOUSNESS/SPIRITUALITY, COMPASSION, GRATITUDE, AND FORGIVENESS

To extend the results of Study 1, we examined the IPC descriptions of more sophisticated measures of R/S. We also examined IPC descriptions of less explicitly religious characteristics (i.e., compassion, forgiveness, gratitude) that are endorsed in a
variety of religious and spiritual traditions. If these characteristics are positive influences on health and well-being, they should be associated with a warm interpersonal style. Further, we examined associations of these measures of R/S with interpersonal goals or values (Locke, 2000), a key element of the transactional process through which characteristics of individuals are associated with important features of social contexts. For example, warm interpersonal goals emphasize connection to others, approval from others (i.e., warm-submissive goals), or cooperation and respect from others (i.e., warm-dominant goals). In contrast, cold and hostile goals include staying distant from others, keeping the upper hand in interactions (i.e., hostile-dominant goals), and avoiding criticism and humiliation (i.e., hostile-submissive goals). Aspects of R/S that are conducive to health and well-being should be associated with greater endorsement of warm goals and less endorsement of hostile goals. Finally, we examined associations of R/S with health-relevant interpersonal outcomes, including interpersonal problems, social support, and negative social experiences.

**Method**

**Participants.** Undergraduates (N = 165; 103 females; mean age = 21.2 years, SD = 4.3) at the University of Utah participated in this study, receiving partial course credit. Sixty-four percent were Caucasian, 20% were Asian/Pacific Islander, 4% were multiracial, 4% were African American, 3% were Latino, and the remaining 5% were of other ethnicity. In regard to religious faith, 38% were LDS, 12% were Catholic, 10% were Atheist, 4% were Protestant, 4% were Buddhist, 2% were Muslim, 1% each were Hindu, Jewish, and New Age, and the remaining participants were “other or none of the above.”

**Procedure and Measures.** The questionnaires were administered via computer in small groups. Informed consent was acquired, followed by instructions in completing the following questionnaires.

**IPC Dimensions and Interpersonal Goals.** As in Study 1, the IASR-B5 was used to assess the IPC dimensions of affiliation and control. Reliabilities were .93 and .92, respectively. The Circumplex Scales of Interpersonal Values (CSIV) were used to assess interpersonal goals (Locke, 2000); scales are included for each IPC octant, with high levels of internal consistency and considerable evidence of construct validity (Locke, 2000). We formed overall affiliation and control goal scores through circumplex weighting of standardized scores for the octant scales. Internal consistency was .80 for affiliation and .78 for control goal scores.

**Measure of Spiritual Well-Being.** The 23-item Functional Assessment of Chronic Illness Therapy-Extended Spiritual Well-Being Scale (FACIT-Sp-Ex) measures meaning/peace (e.g., “I feel a sense of purpose in my life”), faith (e.g., “I find strength in my faith or spiritual beliefs”), and additional spiritual concerns (e.g., “Throughout the course of my day, I feel a sense of thankfulness for my life”; Brady et al., 1999). Steffen and Masters (2005) identified a compassion dimension within the FACIT-Sp-Ex (e.g., “I feel compassion for others in the difficulties they are facing”). The FACIT-Sp-Ex (hereafter referred to as FACIT) can be used with spiritual and/or religious individuals, and spirituality is often conceived to be an important aspect of intrinsic religiosity (Nelson, Rosenfeld, Breitbart, & Galietta, 2002). In the present sample, reliabilities for each subscale were acceptable (see Table 1).

**Measures of R/S-Related Variables.** Forgiveness and gratitude are often identified as key aspects of R/S. The Heartland Forgiveness Scale (HFS) includes subscales for Forgiveness of Others and Forgiveness of Self (Thompson et al., 2005), which demonstrate construct validity (Thompson et al., 2005). The Gratitude Questionnaire (GQ) measures one’s degree of dispositional gratitude (McCullough, Emmons, & Tsang, 2002). The GQ has unique predictive validity and convergent validity with other positive individual differences (McCullough et al., 2002). In the present sample, reliabilities for each subscale were acceptable (see Table 1).

### Table 1 Study 2: Multiple Regression Results for Individual Religiousness and Spirituality Scales Predicted by IAS-R Control and Affiliation Scores

<table>
<thead>
<tr>
<th>Scale</th>
<th>α</th>
<th>R</th>
<th>F(2, 163)</th>
<th>β Control</th>
<th>β Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACIT Total Score</td>
<td>.90</td>
<td>.45</td>
<td>19.84***</td>
<td>.14</td>
<td>.44***</td>
</tr>
<tr>
<td>Meaning and Peace</td>
<td>.81</td>
<td>.33</td>
<td>9.62***</td>
<td>.24**</td>
<td>.25**</td>
</tr>
<tr>
<td>Faith</td>
<td>.84</td>
<td>.27</td>
<td>6.42**</td>
<td>-.07</td>
<td>.26**</td>
</tr>
<tr>
<td>Spiritual Concerns</td>
<td>.83</td>
<td>.52</td>
<td>29.91***</td>
<td>.14*</td>
<td>.52***</td>
</tr>
<tr>
<td>Compass</td>
<td>.75</td>
<td>.59</td>
<td>41.57***</td>
<td>.20**</td>
<td>.57***</td>
</tr>
<tr>
<td>HFS Forgiveness of Self</td>
<td>.77</td>
<td>.19</td>
<td>3.06*</td>
<td>.19*</td>
<td>.02</td>
</tr>
<tr>
<td>HFS Forgiveness of Others</td>
<td>.81</td>
<td>.28</td>
<td>6.65***</td>
<td>-.12</td>
<td>.24***</td>
</tr>
<tr>
<td>Gratitude Questionnaire</td>
<td>.73</td>
<td>.49</td>
<td>25.62***</td>
<td>.20**</td>
<td>.47***</td>
</tr>
</tbody>
</table>

Note. IAS-R = Revised Interpersonal Adjectives Scales; FACIT = Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being Scale; HFS = Heartland Forgiveness Scale.

*p < .05, **p < .01, ***p < .001 (two-tailed).
Measures of Interpersonal Correlates. The Revised UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980) assesses the subjective experience of loneliness. The Test of Negative Social Exchanges (TENSE) measures exposure to aversive social experiences (Ruehlman & Karoly, 1991). The Interpersonal Support Evaluation List–12 (ISEL-12) measures social support (Cohen, 2008). The total score from the Inventory of Interpersonal Problems–Short Circumplex form (IIP-SC) provides a measure of general interpersonal difficulties (Soldz, Budman, Demby, & Merry, 1995). The internal consistency of each of these scales was acceptable in the present sample.

Results and Discussion

Regression analyses determined the interpersonal style and goals associated with the FACIT scales (i.e., total, Meaning/Peace, Faith, Spiritual Concerns, Compassion), Forgiveness of Self, Forgiveness of Others, and the GQ (Gratitude). Correlational analyses tested the hypotheses regarding their associations with interpersonal problems, loneliness, negative social exchanges, and social support. Statistical control of LDS faith did not alter any results reported below.

As presented in Table 1 and depicted in Figure 2, distinct interpersonal styles emerged for the R/S variables. The FACIT total score, Meaning/Peace, Spiritual Concerns, Compassion, and Gratitude were associated with a strongly warm and somewhat dominant interpersonal style. The FACIT Faith subscale was also associated with a warm interpersonal style, but it was not associated with the control dimension. Forgiveness of Others was associated with a warm and somewhat submissive interpersonal style. Hence, warmth is a consistent correlate of these individual differences, though they vary in their associations with the control axis of the IPC. In contrast, Forgiveness of Self is associated with a dominant interpersonal style.

Results for regression of the R/S variables on affiliation and control goal scores are presented in Table 2. The FACIT total score, Meaning/Peace, Spiritual Concerns, Compassion, and Gratitude show a similar pattern, with strong associations with friendly interpersonal goals suggesting a general value placed on positive interactions with others and minimizing negative interactions. The FACIT Meaning/Peace subscale was also positively associated with the control dimension, whereas the FACIT Faith subscale was negatively associated with control. Forgiveness of Others was associated with friendly interpersonal goals, but its inverse association with control goals was distinct from the other R/S variables (with the exception of the FACIT Faith subscale). This pattern of goals suggests a general value placed on seeking approval from others. Forgiveness of Self was associated with friendly interpersonal goals but positively associated with the control goal score. This pattern suggests a general goal of being respected and having a positive impact on others, clearly distinguishing Forgiveness of Self from the other subscales.

Correlations with the interpersonal outcomes are presented in Table 3. In general, the R/S measures were consistently associated with greater social support and fewer interpersonal difficulties. These associations were stronger for the FACIT total, Meaning/Peace, Spiritual Concerns, and Compassion subscales and the Gratitude scale than for the forgiveness measures. Interestingly, the FACIT Faith subscale had the weakest associations.

The principle of complementarity suggests that the warm and somewhat dominant interpersonal style and friendly...
interpersonal goals associated with R/S would invite or evoke warm and perhaps cooperative behavior from others. The associations of higher FACIT total, Meaning/Peace, Spiritual Concerns, and Compassion scores; Gratitude; and Forgiveness of Others with more social support, fewer aversive interpersonal experiences, and less loneliness are consistent with this prediction. Given that Forgiveness of Self was associated with a dominant interpersonal style, its association with a similar profile of interpersonal outcomes is somewhat unexpected, though it may suggest some benefits of this aspect of forgiveness.

**STUDY 3: ANALYSES OF ADDITIONAL ASPECTS OF RELIGIOUSNESS AND SPIRITUALITY IN A DIVERSE SAMPLE**

Although the results are generally consistent with predictions based in the interpersonal perspective, Studies 1 and 2 have potentially important limitations. First, the samples were drawn from an undergraduate population with a large proportion of individuals affiliated with the LDS faith. Although statistical control of LDS affiliation did not alter the findings, it is important to replicate these findings in an older population with more varied religious backgrounds.

Second, the R/S scales examined in Studies 1 and 2 are limited in several ways. For example, they do not include R/S constructs expected to contrast adaptive and less adaptive characteristics. A long-standing example is Allport’s distinction between intrinsic (IR) and extrinsic (ER) religiousness (Allport & Ross, 1967). Individuals high in IR view religion as an end in itself or a master motive, and they are motivated to embrace a religious creed, internalize it, and attempt to follow it. IR has a variety of positive associations with physical health and mental health variables (Masters, Hill, Kircher, Benson, & Fallon, 2004; McCullough & Willoughby, 2009). In contrast, ER is characterized by the use of religion to serve instrumental purposes such as enhancing security or status, providing self-justification for actions, or promoting social aims. ER has been found to be inversely associated with well-being (T. B. Smith et al., 2003). If the distinct associations of IR and ER with physical health and well-being are due, at least in part, to interpersonal processes, then they should be associated with quite different interpersonal styles. Specifically, they should be associated with warm and hostile styles, respectively.

The R/S measures in Studies 1 and 2 also fail to assess this domain in a comprehensive and multidimensional manner. As noted previously, current views identify religiousness with institutions that have formal beliefs, creeds, and rituals regarding the proper way to conceive of and worship God, whereas spirituality is identified as a more personal and subjective search for meaning or connection with the sacred (ultimate reality, ultimate truth), nature, or others (Hill & Edwards, 2013). R/S are both often experienced within an interpersonal context. Religions instruct on proper relations with others, organize in social groups, and adopt agreed-upon views of important aspects of social life. Spirituality is also often experienced in a social context, has a core component of connectedness between people, and often strives to find a broader social and teleological context for understanding life. Yet, commonly used measures of R/S were developed without reference to a unifying conceptual framework that included these possible interpersonal commonalities. To address these issues, we administered the IASR-B5 affiliation and control scales along with a battery of influential measures of aspects of R/S to a more diverse sample.

**Method**

**Participants.** A total of 152 adults (71 females) participated in Study 3 (mean age = 44 years, SD = 13.0). The sample was mostly White, not Hispanic (86%) followed by Black, not Hispanic (3.9%), Hispanic or Latina/o, (3.3%), Asian/Pacific Islander (3.9%), or other (2.6%). The majority was married or unmarried with a partner (70.4%), whereas 15.8% had never been married. Over 40% (42.8%) reported achieving a bachelor’s degree or higher. More than two-thirds (71.7%) reported a current religious preference of Christianity. Of those, 41% reported a preference for the Protestant faith, 34% reported a preference for the Catholic faith, and the others reported a nondenominational Christian preference. The rest reported a preference for Judaism (5.9%), Buddhism (2.0%), other (11.8%), or having no religious preference (8.6%).

**Procedure and Measures.** Adults were recruited through the StudyResponse panel, a national group of individuals who previously registered to receive requests to participate in research studies online. Sampling was stratified by gender and education, followed by race and geographic location (restricted to the United States). Selected panelists who were 18 years or
older were sent an email request inviting them to participate in the study, with a link to the Web-based survey. Participants were screened by the question, “Do you consider yourself to be somewhat spiritual or religious?” If they answered yes, they were included in the study and completed the following measures. This screening was intended to ensure that the wording of the questionnaires would be sensible for participants. Those who completed the survey were given $30 as compensation for their time.

**IPC Dimensions.** The IASR-B5 was used again to measure the dimensions of affiliation and control. Internal consistency was .90 and .90, respectively.

**R/S Measures.** As in Study 2, the FACIT was used to measure meaning/peace, faith, spiritual concerns, and compassion. The Assessment of Spirituality and Religious Sentiments Scale (ASPIRES) assessed underlying motivational aspects of religion, including religiosity (i.e., religious involvement, such as reading scripture), religious crisis (i.e., feeling abandoned by God), connectedness to something greater than the self, prayer fulfillment (i.e., ability to create a positive connection to a larger reality), and universality (i.e., belief in a larger sense of meaning or purpose; Piedmont, 2004). The Connectedness, Prayer Fulfillment, and Universality subscales are combined to create the Spiritual Transcendence Scale.

The Brief Multidimensional Measure of Religiousness and Spirituality (BMMRS) assessed multiple R/S dimensions (Fetzer Institute/NIA, 1999). Masters et al. (2009) identified seven factors in the BMMRS. The first, Experiential Comforting Faith, taps the extent to which individuals feel comforted by R/S. Personal Spirituality measures the sense of union or harmony with the universe, or the extent to which individuals feel part of something greater than themselves. The Religious Community Support factor measures the extent to which individuals in one’s religious group offer practical or emotional support. The Private Religious Practices factor measures how often individuals participate in private religious behaviors. Negative Religious Interaction measures critical or demanding relationships with members of individuals’ religious group. The Punishing God factor measures the extent to which participants believe God is punishing him or her. The seventh factor, Forgiveness, measures the extent to which individuals feel that they can forgive themselves or others or that God has forgiven them.

The Spiritual Connection Questionnaire (SCQ) measured spirituality, implicit connection (items that do not reference “spiritual”), and explicit connection (items that reference “spiritual”; Hyland, Wheeler, Kamble, & Masters, 2010). The total score represents overall ratings of spirituality. The Spiritual Well-Being Scale (SWB) measured religious (items that contain references to God) and existential well-being, defined as a sense of well-being in relation to God and to the self (C. W. Ellison, 1983). The Intrinsic/Extrinsic Scale–Revised (I/E-R) measured intrinsic and extrinsic religious motivation (Gorsuch & McPherson, 1989). The Spiritual Meaning Scale (SMS) measured “the extent to which an individual believes that life has a purpose, will, or way in which individuals participate” (Mascaro, Rosen, & Morey, 2004, p. 847). The SMS has considerable evidence of construct validity (Mascaro et al., 2004). The internal consistency for each R/S measure used in Study 3 is reported in Table 4.

**Results and Discussion.**

We regressed the R/S scales on IASR-B5 affiliation and control. Results are presented in Table 4. The top panel of Figure 3 depicts results for the religiousness measures; the bottom panel depicts results for the spirituality measures. Four general observations stand out: (a) Most—but clearly not all—of the measures show a significant degree of “interpersonalness”; (b) compared with the religiousness measures, spirituality measures generally were more strongly associated with the IPC dimensions (i.e., greater “interpersonalness”); (c) there are notable differences across the R/S measures in the associated interpersonal styles; and (d) spirituality measures were consistently clustered in the Dominant-Friendly quadrant, whereas measures of religiousness were associated with a wide range of both warm and hostile interpersonal styles.

Pertaining to observation (a), although the multiple correlations of most scales with the IPC dimensions were significant, for some scales this was not the case. The ASPIRES Religiousity subscale and the BMMRS Religious Support and Private Religious Practices factors were weakly associated with the control and affiliation dimensions. Perhaps the private religious behaviors in the ASPIRES Religiousity subscale and the BMMRS Private Religious Practices factor are what a person does in his or her “solitariness” (Whitehead, 1926), and hence, there is less “interpersonalness” associated with these scales compared to other aspects of religiousness. As described in observation (b), compared to the religiousness measures, the spirituality measures were more consistently and strongly associated with the IPC dimensions. This may be due to the more consistent and homogeneous content in spirituality scales relating to connections with others, gratitude, thankfulness, and forgiveness. Although these values and concerns are central aspects of religiousness (Adler, 1937), as described above the religiousness measures include more varied and private content that may not have a strong interpersonal component.

A more specific look at the interpersonal styles associated with individual religiousness scales reveals considerable variation (observation c). For example, as predicted, intrinsic religious orientation was associated with a warm interpersonal style, whereas extrinsic religious orientation was associated with a hostile-dominant style. This difference is consistent with the distinct associations of these characteristics with health and well-being. Similarly, the BMMRS factors had varying IPC correlates. For example, Experiential Comforting Faith was associated mostly with warmth, whereas Negative...
Religious Interaction was mostly associated with hostility in the IPC. The BMMRS Forgiveness factor, which includes items assessing forgiveness of others and self as well as being forgiven by God, was associated with the Dominant-Friendly quadrant, similar to the Forgiveness of Self factor on the HFS in Study 2. Importantly, as predicted, the Punishing God factor was associated with a quite distinct interpersonal style, specifically, hostile-submissiveness. Supporting this finding are the results for the ASPIRES Religious Crisis subscale. It contains items assessing feeling punished or abandoned by God as well as isolated from others in one’s faith group and was similarly characterized by hostile-submissiveness.

In contrast to the widely varied interpersonal styles associated with religiousness scales, spirituality scales were much more consistent in their associations with a warm and dominant style. This suggests that individuals characterized as having a meaningful connection with others that is grounded in a transcendent orientation (i.e., spirituality) would likely display an interpersonal style that invites or evokes warm and perhaps cooperative behavior from others. As a result, they are likely to experience higher levels of social support and lower levels of isolation and interpersonal conflict—experiences known to enhance health and well-being.

Hence, in a more diverse sample using a more comprehensive set of measures of a variety of R/S constructs, a wide range of interpersonal style correlates emerged. Several scales were located in the warm-dominant quadrant, and taken as a whole they portray an intrinsic R/S orientation that includes existential well-being in relation to God, spiritual meaning and peace, and feeling connected to and loved by God and others. Other measures that assessed constructs such as extrinsic R/S orientation and having negative interactions with one’s faith group were associated with a hostile-dominant interpersonal style, and scales measuring a view of God as punishing or experiencing religious crisis were associated with a hostile-submissive style. Again, the principle of complementarity in

Table 4: Study 3: Multiple Regression Results for Individual Religiousness and Spirituality Scales Predicted by IAS-R Control and Affiliation Scores

<table>
<thead>
<tr>
<th>Scale</th>
<th>α</th>
<th>R</th>
<th>F(2, 150)</th>
<th>β Control</th>
<th>β Affiliation</th>
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<td>FACIT</td>
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<td></td>
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<tr>
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<td>.44</td>
<td>17.3***</td>
<td>.37***</td>
<td>.21***</td>
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<td>Meaning and Peace</td>
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<td>.41</td>
<td>14.9***</td>
<td>.35***</td>
<td>.19***</td>
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<td>Faith</td>
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<td>.31</td>
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<td>.14</td>
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<tr>
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<td>.42</td>
<td>15.71***</td>
<td>.33***</td>
<td>.24***</td>
</tr>
<tr>
<td>Compassion</td>
<td>.82</td>
<td>.42</td>
<td>16.39***</td>
<td>.31***</td>
<td>.27***</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Crisis</td>
<td>.82</td>
<td>.54</td>
<td>29.68***</td>
<td>−.18***</td>
<td>−.50***</td>
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<td>Connectedness</td>
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<td>.31</td>
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<td>.21**</td>
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<tr>
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<td>Comforting Faith</td>
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<td>3.83*</td>
<td>.08</td>
<td>.20*</td>
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<td>Personal Spirituality</td>
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<td>Punishing God</td>
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<td>Forgiveness</td>
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<td>.33</td>
<td>9.30***</td>
<td>.16*</td>
<td>.28***</td>
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<td>Intrinsic</td>
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<td>.24</td>
<td>4.39*</td>
<td>.07</td>
<td>.22**</td>
</tr>
<tr>
<td>Extrinsic</td>
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<td>.31</td>
<td>7.99***</td>
<td>.16*</td>
<td>−.28***</td>
</tr>
<tr>
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<td>.39</td>
<td>12.72***</td>
<td>.20*</td>
<td>.32***</td>
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</tbody>
</table>

Note. IAS-R = Revised Interpersonal Adjectives Scales; FACIT = Functional Assessment of Chronic Illness Therapy; ASPIRES = Assessment of Spirituality and Religious Sentiments Scale; BMMRS = Brief Multidimensional Measure of Religiousness and Spirituality; SCQ = Spiritual Connection Questionnaire; I/E = Intrinsic/Extrinsic Scale. *p < .05. **p < .01. ***p < .001 (two-tailed).
interpersonal theory suggests that these varied styles would invite similarly varied responses. For R/S scales associated with a warm interpersonal style, positive social experiences could enhance health and emotional adjustment. For scales associated with a hostile style, the related interpersonal experiences could undermine health and adjustment. For scales with minimal associations with the IPC dimensions (i.e., low “interpersonalness”), social processes should be less involved in any associations they have with these outcomes.

**GENERAL CONCLUSIONS**

Across these three studies, aspects of R/S were associated with differing interpersonal styles and goals. Many were associated with a warm style and goals reflecting a desire to maintain and enhance positive relationships with others. As expected, in Study 2, aspects of R/S and related constructs were associated with positive interpersonal outcomes, including higher levels of social support and lower levels of interpersonal problems, loneliness, and aversive interpersonal experiences. These interpersonal processes could contribute to the positive effects of R/S on health. Importantly, some aspects of R/S were associated with a hostile interpersonal style. Hence, interpersonal concepts and methods could help to clarify why some aspects of R/S have benefits for health and well-being whereas others do not.

It is interesting to note that compared to measures of religiosity, measures of spirituality were more consistently and more strongly related to a dominant-friendly style, suggesting that individuals high in spirituality would generally “invite” warm and cooperative responses from others. Some measures of religiosity were also associated with this style, although generally less strongly so. Importantly, other measures of religiosity were associated with hostile-dominant and hostile-submissive styles, which would “invite” cold, unfriendly, and quarrelsome responses. Again, these varied interpersonal correlates could explain some of the heterogeneity in associations between aspects of religiosity with health and well-being.

The present studies have potentially important limitations. First, all three were cross-sectional and did not include assessments of emotional adjustment or physical health. Hence, they provide only preliminary evidence of the potential relevance of interpersonal processes in the association of R/S with these outcomes. Second, they relied on self-report measures of R/S, which may be conflated with social desirability (Hadaway, Marler, & Chaves, 1993) and often contain content reflecting emotional adjustment, social functioning, and other aspects of adaptation (de Jager Meezenbroek et al., 2012). These artifacts and common method variance could contribute to associations of R/S measures with interpersonal style, goals, and outcomes. Third, we did not measure actual interpersonal behavior. Assessments of actual interpersonal transactions would address method artifacts, but they also could address a significant alternative explanation regarding the interpersonal styles and outcomes associated with R/S. The self-reported social

**Figure 3** Study 3: Interpersonal circumplex locations of religiousness scales (top panel) and spirituality scales (bottom panel). Top Panel: 1 = ASPIRES Relig; 2 = ASPIRES Relig Crisis; 3 = BMMRS Comforting Faith; 4 = BMMRS Relig Support; 5 = BMMRS Priv Relig Practices; 6 = BMMRS Neg Interaction; 7 = BMMRS Punishing God; 8 = BMMRS Forgive; 9 = SWB Relig; 10 = Intrinsic; 11 = Extrinsic. Bottom Panel: 1 = ASPIRES Connect; 2 = ASPIRES Prayer Fulfill; 3 = ASPIRES Universal; 4 = ASPIRES Spiritual Transcend; 5 = BMMRS Personal Spiritual; 6 = FACIT Total; 7 = FACIT Meaning/Pace; 8 = FACIT Faith; 9 = FACIT Spirit Concerns; 10 = FACIT Compassion; 11 = SCQ Total; 12 = SWB Existential; 13 = SMS Total.
behavior across the three studies, as well as the interpersonal outcomes reported in Study 2, could be due to attributional processes of religious/spiritual individuals (Lupfer, Brock, & DePaola, 1992). Individuals high in R/S could be biased to perceive friendliness in the social environment, rather than actually experiencing greater objective levels of warmth during everyday interactions. This potential perceiver bias should be addressed in future research. Also, it is important to note that despite specific interpersonal styles and goals associated with various measures of R/S, any given aspect of R/S could be associated with different interpersonal motives and responses across individuals (Pincus & Ansell, 2013; Wright, Pincus, Conroy, & Elliot, 2009). For example, some persons may experience a transcendent sense of meaning and purpose when helping others; others may have such experiences in response to significant achievements. Finally, the findings should be replicated in additional, diverse samples. Studies 1 and 2 have particular demographic, geographic, and religious limitations. Study 3 had a more diverse sample, but the screening for at least some level of religiousness and spirituality excluded important segments of the population and may have attenuated associations or altered them in other ways.

It is important to note that our consideration of interpersonal mechanisms potentially linking R/S with health and well-being is not novel (C. G. Ellison et al., 2009). However, these mechanisms are less commonly emphasized and studied than intrapersonal mechanisms. Further, prior studies and discussions of interpersonal mechanisms have largely focused on social support and related concepts, without an integrative conceptual framework. Hence, the present studies do not suggest a new mechanism, but instead illustrate the potential value of an integrative conceptual and measurement framework in pursuing this relatively understudied issue.

As illustrated here, a wide variety of measures of R/S are used in studies of health and well-being, often with little attention paid to the similarities and differences among them. If continued, this practice could impede the identification of basic aspects of this multifaceted domain that are responsible for important associations with health and well-being. That is, robust associations involving a smaller set of broad dimensions of R/S might be masked by what appears to be a large number of seemingly distinct aspects of this domain (T. W. Smith, 2001). Systematic efforts to catalogue similarities and differences among R/S constructs and scales can bring much-needed integration and order to this literature and facilitate cumulative progress. The IPC and related measurement approaches are valuable in this regard.

In addition to replications of the present findings with a greater range of R/S measures and more diverse samples, future research could examine additional elements of the transactional cycle to explicate interpersonal processes associated with R/S. Such studies should include actual social behavior and interpersonal transactions during daily experience (Galen, 2012). The interpersonal perspective may also be useful in explicating the effects of religious and spiritual social contexts, communities, or environments (Krause & Ellison, 2009). Finally, concepts and methods in the interpersonal tradition can facilitate tests of mechanisms linking R/S with health and well-being that go beyond the individual. That is, measures of interpersonal style and outcomes (e.g., social support, loneliness, conflict) could be used in clinical and epidemiologic studies to determine whether and when aspects of R/S are associated with physical health, emotional adjustment, and well-being in part through these processes. Hence, the interpersonal perspective provides well-established concepts and methods that are likely to be useful in pursuing the possibility that the varied effects of multiple aspects of R/S on health and well-being reflect processes that operate not only within individuals, but between them as well.

References
Interpersonal Approach to Religiousness/Spirituality


