

Partnering with God:

Religious Coping and Perceptions of Divine Intervention Predict Spiritual Transformation in  
Response to Religious/Spiritual Struggle

Joshua A. Wilt<sup>1</sup>, Nick Stauner<sup>1</sup>, Valencia A. Harriott<sup>1</sup>,  
Julie J. Exline<sup>1</sup>, and Kenneth I. Pargament<sup>2</sup>

1 Case Western Reserve University

2 Bowling Green State University

Author Note

We are grateful for funding support from the John Templeton Foundation, Grants #36094 and #59916.

Correspondence concerning this article should be addressed to Joshua A. Wilt, Department of Psychological Sciences, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, Ohio 44106-7123. Phone: (216)-368-6476. FAX: (216) 368-4891. E-mail: [joshua.wilt@case.edu](mailto:joshua.wilt@case.edu).

## Abstract

When coping with challenges in life, including religious/spiritual (r/s) struggles, those who believe in a relational deity (referred to here as God) may see themselves and God as active partners in engaging with the problem. We examined whether (i) attempts to engage with God via religious coping and (ii) perceptions of receiving help from God were related to r/s struggle resolution and spiritual transformation in the wake of such struggles. Adults from the U.S. ( $N = 3,142$ ; 59% women) experiencing r/s struggles completed an initial online survey, and random subsamples of participants completed follow-up surveys two weeks and four weeks later. Latent autoregressive models showed that, among methods of God-focused religious coping, *collaborative religious coping* related to positive struggle-related outcome variables (spiritual growth and struggle resolution) most consistently and strongly, followed by *active religious surrender*, and then by *passive religious deferral*, which related to both spiritual growth and spiritual decline. Perceptions of divine intervention also predicted spiritual growth and struggle resolution independently of self-initiated engagement with God. Importantly, then, both self-initiated religious coping efforts and perceptions of divine action explained unique variance. Results held when controlling for extraversion and emotional stability. These findings suggest that when people who believe in a relational God experience r/s struggles, they may benefit from fostering a sense of partnership with God—one in which they strive to engage with God, work together with God as collaborators, and consider ways in which God may be actively intervening to help solve the problem.

*Keywords:* Religious/spiritual struggle; divine intervention; religious coping; spiritual growth/decline

Partnering with God: Religious Coping and Perceptions of Divine Intervention Predict Spiritual Transformation in Response to Religious/Spiritual Struggle

Religious and spiritual (r/s)<sup>1</sup> life can be marked by periods of relative peace and well-being, but it may also be fraught with strife (Pargament, Magyar-Russell, & Murray-Swank, 2005). Difficulties, tensions, and strains concerning sacred matters are referred to as *r/s struggles* (Exline, 2013; Pargament, 2007; Stauner, Exline, & Pargament, 2016). R/s struggles can be turning points in life (Pargament, 2007); that is, in response to r/s struggles, people can increase devotion to r/s and experience spiritual growth, or they can sink deeper into spiritual despair or lose faith (de Castella & Simmonds, 2013; Exline, 2002). In this project, we examined how this process of *spiritual transformation*—spiritual growth or decline following a stressful life event (Schultz, Altmaier, Ali, & Tallman, 2014)—related to God-focused religious coping methods and perceptions of divine intervention. We also evaluated these actions and perceptions as predictors of resolutions to r/s struggles.

During r/s struggles, people who believe in a deity (referred to here as God)<sup>2</sup> might seek divine help to resolve the struggle or to turn it into a growth opportunity (Pargament, 1997). The potential for r/s struggles to engender growth is an intriguing yet understudied idea, though it is common in theological discussions across faith traditions and in philosophical and psychological considerations of r/s (e.g., Chittister, 2003; Fowler, 1981). Research on seeking divine help has focused primarily on *religious coping* (RC)—understanding and dealing with stressful situations by using r/s beliefs and practices (see Pargament, Falb, Ano, & Wachholtz, 2013), including seeking God’s help directly (Pargament et al., 1988). However, little research has directly examined people’s perceptions of divine responses and interventions in times of duress (Dein & Littlewood, 2007, 2008). This study examined concurrent and longitudinal relations between

spiritual transformation during a specific r/s struggle following (i) God-focused religious coping efforts and (ii) perceptions of receiving help from God. We next provide a general overview of r/s struggles and then explain our rationale for why God-focused religious coping methods and perceptions of divine intervention may predict adjustment to r/s struggles.

### **Seeking and Receiving Divine Help during R/S Struggles**

R/s struggles can occur in a number of domains (see Exline & Rose, 2013, for a review). People may perceive conflicts with a supernatural entity (divine or demonic) or conflicts with other people or institutions pertaining to r/s issues, or they may experience personal turmoil around morality, doubts about r/s beliefs, or a lack of ultimate meaning in life (Exline, Pargament, Grubbs, & Yali, 2014).<sup>3</sup> A large body of research on r/s struggles documents their relations to psychological distress and lower well-being both in cross-sectional data and in a growing number of prospective, longitudinal studies (see Exline & Rose, 2013; Stauner, Exline, & Pargament, 2016 for reviews). As related yet distinct constructs, r/s struggles bridge the intermediary psychological domain between distress and religion: they often involve distress and religion, but only correlate moderately on average, and clearly represent separate latent constructs (Stauner, Exline, Grubbs, et al., 2016). R/s struggles relate to cumulative life stress independently of religiousness: people who have experienced more stressful life events tend to report more of all r/s struggles regardless of how religious they are (Stauner, Exline, Pargament, Wilt, & Grubbs, 2017). Preliminary evidence suggests that some struggles may engender spiritual growth (i.e., perceptions that one's faith is becoming deeper, more mature, and more of a positive guiding influence) and psychological benefits (Koenig, Pargament, & Nielsen, 1998; Pargament, Desai, & McConnell, 2006; Pargament, Magyar, Benore, & Mahoney, 2005).

As r/s struggles may lead to both desirable and undesirable psychological and spiritual consequences, it is important to examine factors that predict adjustment to struggles. Furthermore, as r/s struggles are a common (Johnson & Hayes, 2003) and natural part of r/s life (Pargament, 2007), any strategies that facilitate engagement with struggles in ways that promote health could be critical. For people who believe in God, different ways of relating to God during an r/s struggle might influence whether well-being deteriorates or improves during struggle.

**Religious coping methods involving God.** *Collaborative RC* is the pursuit of partnership with God during conflict, working together to resolve the problem (Pargament et al., 1988, 1990, 2000). This style, which centers around the idea that oneself and God both have active roles to play in problem resolution, is thought to be adaptive. It relates to better physical, mental, and spiritual health for people facing a wide range of stressors (Koenig et al., 1998; Pargament et al., 1990; Pargament, Koenig, & Perez, 2000). The theological notion that people can become co-creators with God (Smith, 1994) captures this idea of humans and God in dynamic partnership.

*Active religious surrender* also involves efforts initiated by the person and reliance on help from God, but in contrast to the collaborative style, the person and deity do not work together; rather, the person assumes responsibility for some aspects of the situation, then leaves the rest up to God (Pargament et al., 2000). This style also has positive associations with well-being, but these associations tend to be somewhat weaker as compared to collaborative RC (Koenig et al., 1998; Pargament et al., 2000; Wong-McDonald & Gorsuch, 2000). Due to these positive associations with well-being, collaborative RC and active religious surrender are conceptualized as *positive RC* methods that express healthy spirituality (Pargament, Smith, Koenig, & Perez, 1998a).

In *passive religious deferral*, the person assumes little responsibility, expecting that God will resolve the situation completely (Pargament et al., 2000). Empirical work has revealed mostly positive associations between passive religious deferral and well-being, though with weaker effect sizes than for collaborative RC and active religious surrender (Koenig et al., 1998; Pargament et al., 1990; Pargament et al., 2000; Wong-McDonald & Gorsuch, 2000).

A person may rely on any or all of these religious coping methods at some point during an r/s struggle. Given that each method is intended to help a person navigate through duress and each method has shown associations with overall well-being, it is plausible that all of these methods could help to resolve r/s struggles and possibly engender spiritual well-being. These coping methods all emphasize actions initiated by the person, with varying degrees of responsibility for solving the problem assigned to the person and to God. Each method also assumes that God plays an integral, active part in solving the problem. That is, the person not only chooses an active or passive role, but also asks for and expects help from God. However, it is unclear whether people who employ these methods perceive that God assists them when needed, and if so, whether this resolves their problems. We assessed perceptions of divine aid to test this possibility.

**Perceived divine intervention.** People sometimes believe that God interacts with or intervenes for them during difficult times. Though few have researched these perceptions (Dein & Littlewood, 2007, 2008), they may be common during prayer (Poloma & Lee, 2012) and in daily life (Lee, Poloma, & Post, 2013; Luhrmann, 2012). Johnson (2004) and Harriott (2016) have documented several ways in which people perceive messages from God: internally through silence, thoughts, emotions, imagination, visions, and dreams, as well as externally through religious texts, serendipitous events, other people, or seeing beauty in nature. When asked to

reflect on times when they have heard from God, some people describe otherworldly and extreme experiences (Sears, 2015), but most describe them as ordinary, akin to being gently nudged or encouraged (Dein & Cook, 2015; Underwood, 2006).

People report receiving a variety of messages from God, such as advice with mundane or practical circumstances, insights on emotionally stressful situations, and guidance in approaching future events (Dein & Littlewood, 2007; Dein & Cook, 2015). People often see God as being actively engaged in their lives and in the world in general, bringing about positive events and causing negative events to happen for ultimately benevolent purposes (Hale-Smith, Park, & Edmondson, 2012; Ray, Lockman, Jones, & Kelly, 2015).

Perceived divine intervention may be psychologically valuable. It relates to well-being (Degelman & Lynn, 1995; Pollner, 1989) and can be experienced as a form of potent support with stressors (de Castella & Simmonds, 2013). In an interview-based study, many participants noted that God's voice offered comfort during stressful times (Dein & Littlewood, 2007), while others reported that divine involvement helped them find meaning in their traumatic experiences and fostered posttraumatic growth (de Castella & Simmonds, 2013). Thus, perceived help from God may carry benefits during r/s struggles.

### **Working with the Divine May Predict Spiritual Growth and Decline**

The literature supports the hypotheses that God-focused religious coping and perceptions of divine intervention might shape how people cope with r/s struggles. Preliminary evidence exists: among recently diagnosed cancer patients, positive RC relates to spiritual growth, whereas negative RC relates to spiritual decline (Cole, Hopkins, Tisak, Steel, & Carr, 2008). This result relating positive RC to spiritual growth in cancer patients has been replicated, both concurrently and at a 9-month follow-up (Allmon, Tallman, & Altmaier, 2013); however, this

study found no relationship of negative RC to spiritual decline. In the context of specific r/s struggles, a composite measure of positive RC that included collaborative RC related to higher spiritual growth and lower spiritual decline concurrently and over a 4–6-week follow-up period in an undergraduate sample (Desai & Pargament, 2015). Among Christian undergraduates who reported a recent r/s struggle (Exline, Hall, Pargament, & Harriott, 2016), spiritual growth related to the positive RC subscale of the Brief RCOPE (Pargament et al., 1998b). Importantly, reports of spiritual growth in this study were related not only to self-initiated action (via religious coping) but also to perceptions that God had supported them (e.g., “loved”, “comforted”) with specific, helpful actions (e.g., “spoke to me”, “healed me”).

### **The Present Study**

We examined whether God-focused religious coping and perceptions of divine help predicted spiritual growth or decline in the context of r/s struggles, as well as the degree of struggle resolution. In an important advance over prior work, we used a large, longitudinal sample of U.S. adults who reported r/s struggles and who completed measures of predictors (God-focused coping strategies and perceptions of divine aid) and struggle-related outcome variables (struggle resolution and spiritual growth and decline) three times over a four-week period (at baseline, 2-week follow-up, and 4-week follow-up). For brevity, we refer to these variables as *outcome variables* or *outcomes* for the remainder of the paper. Although these variables are not strictly assessed following the conclusion of r/s struggles (i.e., they may not meet a strict definition of outcome variables), they do refer to effects or outcomes of the struggle as reported by participants. Additionally, the measures of spiritual transformation and struggle resolution allow the participants to indicate themselves whether they perceive positive or negative outcomes (i.e., growth, decline, resolution) as a result of their struggles (without



imposing our own definitions of positive/negative on them). This design allowed us to test a range of associations between predictors and outcome variables. We tested correlations of concurrent states, correlations of changes over time, and predictions of later outcome variables. We explored reciprocal effects from outcome variables to predictors.

Furthermore, we included the traits of extraversion and emotional stability as covariates in SEM analyses. As basic personality traits, extraversion and neuroticism represent broad individual differences in patterns of affect, behavior, and cognition over time and situation (Revelle, Wilt, & Condon, 2011). Testing whether associations between r/s variables (religious coping, perceptions of divine help, adjustment to r/s struggles) persist when more basic personality factors are controlled statistically is in line with the incremental validity paradigm in r/s research (Piedmont, 2005): statistically controlling for these factors represents a rigorous method for examining whether there is something uniquely gained by focusing on patterns of interacting with the world that are r/s in nature.

In general, we hypothesized that each RC method would predict positive adjustment to r/s struggles: higher spiritual growth, lower spiritual decline, and higher struggle resolution. Based on the research reviewed above regarding the relations between different RC methods and adjustment, we expected the largest effects for collaborative RC, followed by weaker effects of active religious surrender, and weakest effects for passive religious deferral. We also expected that perceptions of receiving divine help would predict positive adjustment to r/s struggles when controlling for each RC method. Finally, we expected these effects to be robust when controlling for the personality traits of extraversion and neuroticism.

## **Method**

### **Procedure**

All methods in this study were approved by the university IRB. All recruitment procedures were carried out by Qualtrics, an online research firm that uses several methods to recruit targeted samples: for example, e-mail lists, websites, social media, affiliate networks, and ad campaigns. Qualtrics aimed to recruit a sample that was roughly split between women and men, with at least 50% of respondents over the age of 40. Adults from the U.S. were invited to complete an online survey entitled “Five-Part Study of Personality Beliefs and Behavior.” Participants received monetary compensation commensurate with their rate of participation and was determined independently by Qualtrics.

On the initial survey, all people completed demographic information and a screening questionnaire to identify those experiencing r/s struggles. Adults first read the prompt, “Over the past few weeks, have you had any of these experiences?” Then they rated an item for each of six domains of r/s struggles: divine (“anger or disappointment with God”), demonic (“worried that problems you were facing were caused by the devil or evil spirits”), interpersonal (“conflicts with other people about religious/spiritual matters”), moral (“felt guilty for not living up to my moral standards”), ultimate meaning (“questioning whether life really matters”), and doubt (“feeling troubled by doubts or questions about religion/spirituality”). Participants rated their experiences of these r/s struggles with five response options ordered from least to greatest: *Not at all / Does not apply, A little bit, Somewhat, Quite a bit, and A great deal.*

Those who rated any r/s struggle *Somewhat* or greater continued the survey,<sup>4</sup> which asked next: “What is the most serious religious/spiritual struggle that you have experienced in the last few weeks?” Further instructions read, “It might be a struggle from the list (i.e., divine, demonic, interpersonal, moral, ultimate meaning, and doubt) above, or it could be a different type of struggle not included in our list. Please give a brief description of the struggle below.”

Response options included an open-ended text box for a description of the struggle and options to report, “I haven’t had any religious/spiritual struggles in the last few weeks,” and, “I would prefer not to describe any of my religious/spiritual struggles.” Eligibility for the Time 1 (T1) survey was determined by the presence of a typed description of a r/s struggle.

Participants who completed the T1 survey were selected randomly to be contacted at two follow-up times: T2 (two weeks after baseline) and T3 (four weeks after baseline). Recruitment quotas at each time point (T2 = 1,500, T3 = 950) were based on sample size recommendations for structural equation modeling (Wolf, Harrington, Clark, & Miller, 2013).

### **Participants**

Of the 21,847 people who received the screening questionnaire, 2,890 met our eligibility criteria (self-reported gender: 1,147 men, 1,643 women, 7 transgender men, and 3 transgender women), reported at least some belief in God (or gods), and were retained for further analyses. At T1, religious affiliations included Christian (71%), Jewish (3%), Hindu (1%), Muslim (1%), and Buddhist (1%). Though all participants endorsed some belief in a deity, some identified primarily as atheist (1%) or agnostic (6%). Others identified their religious affiliation as “spiritual” (2%), “none” (2%), or reported another religious affiliation (10%). Ethnicities included Caucasian (82%), Black/African-American (9%), Latino/Hispanic (7%), Asian/Pacific Islander (4%), American-Indian/Native-American (2%), and others (2%).<sup>5</sup>

The sample was diverse in terms of socioeconomic status. Highest level of education completed was: grammar/elementary school (1%), high school or equivalent (13%), vocational/technical school/2-year community college (9%), “some college” (26%), 4-year college graduate (31%), master’s degree (13%), doctoral degree (1%), and professional degree

(3%). The median income for the sample was \$50,000, with a median absolute deviation of \$37,510 and an interquartile range of \$27,525 to \$85,000.

## Measures

**Religious/spiritual measures.** For the following measures, participants were asked to respond about the specific r/s struggle they described at T1. Their struggle description was displayed before measures related to the struggle on the T2 and T3 surveys. These surveys prompted participants to describe their experiences since the previous survey (“over the past two weeks”). Scale or subscale scores used for descriptive statistics and zero-order correlations were computed by averaging across items.

***Actions toward God.*** Actions toward God were assessed using 3-item RCOPE subscales (Pargament et al., 1998b) rated from 1 (*not at all*) to 4 (*a great deal*). Instructions read, “In relation to this specific religious/spiritual struggle: To what extent have you responded in each of these ways?” Items measured collaborative religious coping (e.g., “tried to put my plans into action together with God”), active religious surrender (“did my best and then turned the situation over to God”) and passive religious deferral (“didn’t do much, just expected God to solve my problems”). Many studies attest to the RCOPE’s validity (see Pargament et al., 2013).

***Perceptions of divine help.*** Participants read the prompt, “How often do you believe that God has intervened in your struggle in each of these ways?” Items captured five ways in which people perceive divine intervention: “by guiding me to a religious/spiritual book,” “by leading me to an interaction with another person,” “by giving me a dream, vision, intuition,” “by protecting me from some external obstacle,” and, “by helping me to develop some inner quality or virtue.” These items were modified from a longer scale based on literature reviewed in the introduction that assesses perceived actions by a deity. Preliminary evidence supports the

reliability and validity of this longer scale (Harriott, 2016) and of scores computed from similar items (Exline et al., 2016). Items were rated from 1 (*not at all*) to 4 (*many times*).

***Spiritual transformation (growth and decline).*** An abbreviated version of the Spiritual Transformation Scale (STS; Cole et al., 2008) assessed spiritual growth and decline. Instructions read, “Please indicate the extent to which these statements are true for you as a result of the struggle.” Spiritual growth (e.g., “I have grown spiritually”) and decline (e.g., “I feel I’ve lost some important spiritual meaning that I had before”) were assessed with four items each, rated from 1 (*not at all true*) to 7 (*very true*) to indicate the degree to which participants felt that the items represented their experiences in their r/s struggles. Scores on this scale have shown evidence of reliability and validity in samples of individuals who are coping with a variety of difficult life circumstances (e.g., Allmon et al., 2013; Cole et al., 2008; Schultz et al., 2014), and scores from abbreviated versions of this scale have shown reliability and validity in samples experiencing r/s struggles (Exline et al., 2016; Wilt, Grubbs, Exline, & Pargament, in press).

***Struggle resolution.*** We measured struggle resolution with one item: “Do you think that your religious/spiritual struggle has been resolved?” Participants rated it on a 5-point scale from 1 (*No, it is getting worse*) to 5 (*Yes, it is totally resolved*).<sup>6</sup> This allowed us to test whether God-focused coping efforts and perceived divine aid predicted resolution of specific r/s struggles.

**Personality covariates: Extraversion and emotional stability.** At baseline, we used the Ten Item Personality Inventory (TIPI; Gosling, Rentfrow, & Swann, 2003) measures of extraversion and emotional stability. Instructions read “Please choose a number next to each statement to indicate the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.” Two items were used to assess extraversion, and two items were

used to assess emotional stability. Extraversion was measured with two pairs of traits: “extraverted, enthusiastic” and “reserved, quiet” (reverse scored). Emotional stability was measured with the following pairs of traits: “anxious, easily upset” (reverse scored) and “calm, emotionally stable”. Ratings were made on a 7-point scale from 1 (*Strongly disagree*) to 7 (*Strongly agree*). Scores from this scale have shown reliability and predictive validity across many diverse samples (Gosling, 2017). In the current sample, people reported moderate levels of extraversion ( $M = 3.72$ ,  $SD = 1.47$ ) and emotional stability ( $M = 4.35$ ,  $SD = 1.46$ ) on average.

## Results

### Preliminary Analyses

Preliminary analyses (Table 1) were conducted using the *psych* package (Revelle, 2016) and base functions in R (R Core Team, 2016). Across time, all r/s measures showed relatively high reliabilities ( $\alpha > .75$ ) and consistent mean levels with substantial variability ( $SDs = .88$ – $1.90$ ), particularly spiritual growth and spiritual decline. Relative to scale midpoints, participants reported moderate levels of collaborative religious coping and active religious surrender, and modest levels of passive deferral, as well as modest levels of perceived divine intervention related to their struggle over previous weeks. People typically rated items about spiritual growth as a result of the struggle at the midpoint between *not true at all* and *very true*, whereas they rated spiritual decline items as slightly less true. On average, at each time point, people reported that their r/s struggles were closer to *partly resolved* than to *staying about the same*.

Bivariate Pearson correlations between measures were similar across time (see Table 1). Among predictors, collaborative religious coping, active religious surrender, and perceptions of divine intervention correlated highly, and they correlated moderately with passive religious deferral. Among outcome variables, spiritual growth correlated moderately with resolution of

struggle, and both had modest, negative correlations with spiritual decline. As for correlations between predictors and outcome variables, collaborative religious coping, active religious surrender, and perceptions of divine intervention showed similar patterns of relatively strong, positive links to spiritual growth and struggle resolution, whereas they had modest, negative links with spiritual decline. In contrast, passive religious deferral had positive links with each outcome variable.

In sum, people who reported God-focused coping involving collaboration and active surrender perceived higher degrees of divine intervention in their struggles and more positive adjustment to r/s struggles in terms of spiritual transformation and struggle resolution. Those reporting more deferral in their coping style perceived some divine intervention in their struggle, both positive and negative spiritual transformation, and slightly higher degrees of struggle resolution. These cross-sectional results lend some support to our hypotheses that collaborative religious coping, active religious surrender, and perceptions of divine intervention relate to more positive adjustment during struggles. Results also partially supported the hypothesis that passive religious deferral relates to more positive adjustment to r/s struggles. In order to test these hypotheses more rigorously, and to test the hypothesis that perceptions of divine intervention would have unique effects on outcome variables, we analyzed the longitudinal data using latent autoregressive models.

### **Latent Autoregressive Models**

We fit latent autoregressive models using the *lavaan* package (Rosseel, 2012) in R. Figure 1 illustrates the univariate, bivariate, and trivariate models. Models estimated rank-order stability effects for each latent factor from T to T+1, latent correlations within time points, correlations of changes in latent factors over time, predictions of outcome variables at T+1 based

on T, and reciprocal effects of outcome variables at T on predictors at T+1. We set each factor's first loading to equal one and estimated other loadings freely. Based on recommendations for longitudinal analyses with missing data (Graham, 2009), we used full-information maximum likelihood estimation (FIML). FIML uses all available data more efficiently and with less bias than other methods of treating data missing at random (Allison, 2012; Enders & Bandalos, 2001).<sup>7</sup>

The univariate models fit the data acceptably (all CFIs = .93–.99, RMSEAs = .03–.07; Kenny, 2016). All latent factors had relatively high rank-order stability ( $\beta_s = .74$ –.93). Next, 12 bivariate models predicted each outcome variable from each predictor individually (see Table 2); all fit acceptably (all CFIs > .92; all RMSEAs < .06). Results supported our hypothesis that collaborative religious coping, active religious surrender, and perceptions of divine intervention relate to more positive outcome variables. We base this conclusion on results that showed the majority of concurrent, correlation of change, and prospective paths relating these factors to spiritual growth and struggle resolution were significantly positive. Additional support comes from inverse concurrent relations between these factors and spiritual decline.

In line with our hypothesis that passive religious deferral predicts positive outcome variables, concurrent paths relating passive religious deferral to spiritual growth and resolution of struggle were positive, as were correlations of changes between passive religious deferral and spiritual growth. However, passive religious deferral was also positively, concurrently related to spiritual decline, and, as indicated by the correlation of change paths relating these variables, increases in passive religious deferral and in spiritual decline related positively over time. Although we had no prior expectations regarding reciprocal paths, higher levels of spiritual



growth consistently predicted increases in active religious surrender and perceptions of divine intervention over time.

Trivariate models predicted each outcome variable from one religious coping factor and perceived divine intervention simultaneously (see Table 3) – results were nearly substantively identical when controlling for extraversion and emotional stability.<sup>8</sup> These models estimate regressions of outcome factors on God-focused coping and perceptions of divine aid. We estimated nine trivariate models; all fit acceptably (all CFIs > .93; all RMSEAs < .05). Concurrent and correlation of change path coefficients mostly mirrored results from bivariate models. Collaborative religious coping, active religious surrender, and perceived divine intervention predicted positive outcome variables independently. Passive religious deferral related uniquely to positive and negative outcome variables.

Prospective paths showed a nuanced pattern of results. When accounting for perceived divine intervention, collaborative religious coping related consistently to increases in spiritual growth over time but no longer related to struggle resolution (row number 13 in Table 3); active religious surrender no longer predicted spiritual growth (row 15); and passive religious deferral no longer predicted struggle resolution (row 17). Perceived divine intervention uniquely predicted spiritual growth and struggle resolution when entered in the same models as active religious surrender (row 16) and passive religious deferral (row 18). When entered in the same model as collaborative religious coping, perceived divine intervention had weaker and less consistent prospective associations with spiritual growth and struggle resolution (row 14). As with the bivariate models, reciprocal paths showed that spiritual growth consistently predicted increases in active religious surrender (row 21) and perceptions of divine intervention (rows 20, 22, and 24).

### General Discussion

In the context of r/s struggles and other life difficulties, people who believe in a personal, relational God may see God as an active partner in the resolution of their problems (Pargament et al., 1988, 2000). They might imagine the problem resolution process as a co-creative one (Smith, 1994), one that engages their own efforts as well as those of God. When people see God as an active partner in problem-solving, they may take steps to engage with God around the problem and also take note of events that could signal divine assistance. In this study, we examined whether God-focused religious coping efforts and perceptions of divine help would predict adaptive outcome variables over time: namely, resolution of r/s struggles and spiritual transformation. Results generally supported our hypotheses, as described below.

In the bivariate latent autoregressive models, among methods of God-focused religious coping, collaborative religious coping related most consistently and positively to spiritual growth and struggle resolution, followed by active religious surrender, and then by passive religious deferral, which related positively to both spiritual growth and decline. Perceptions of receiving God's help also related positively to spiritual growth and struggle resolution through many paths (concurrent, correlation of change, and prospective), even when controlling for religious coping predictors in trivariate models. In these models, collaborative religious coping predicted spiritual growth prospectively, whereas active religious surrender and passive religious deferral did not retain consistent, prospective relations with outcome variables. In sum, these results suggest that people report the most positive adjustment to r/s struggles if they adopt a stance of divine partnership, taking steps to engage with God via religious coping but also noting ways in which God has seemingly intervened to help (e.g., de Castella & Simmonds, 2013; Exline et al., 2016).

Before discussing the main questions of this study in more detail, we first turn to some general implications of our results. Roughly 16% of the screening sample reported being at least *somewhat* distressed by a struggle and were willing describe the struggle briefly. This estimate is lower than the 26% of undergraduates in Johnson and Hayes (2003) with *moderate* distress about r/s concerns and much lower than the 44% in this study who reported at least *a little bit* of distress. All these estimates were lower than the 69% of undergraduates who endorsed at least *a little bit* of struggle related to God or their religious beliefs (Desai & Pargament, 2015). Our lower prevalence rate probably reflects our recruitment strategy and screening methodology. Regardless, the estimate from the current study may be relatively accurate because this study included the largest sample of individuals ( $N = 3,142$ ) reporting a specific struggle to date (to our knowledge), a wide range of ages, and large numbers of participants from minority ethnic groups or religious affiliations.

Greater r/s struggles relate to other life difficulties (Johnson & Hayes, 2003; Stauner et al., 2017) and lower mental and spiritual health across many domains (see for review Exline & Rose, 2013). Thus, many of our participants were likely to be experiencing considerable life challenges. Consistent with this idea, participants reported moderate amounts of spiritual decline on average at each time point. Yet they also reported spiritual growth due to their struggles—even more than decline—and some progress toward resolving struggles over the course of the study. These findings indicate that r/s struggles might provide opportunities for the cultivation of spiritual maturity (Greyson & Khanna, 2014), an oft-noted but little-studied sentiment in the literature on r/s struggles (Stauner, Exline, & Pargament, 2016). Struggles may thus represent a choice point between alternative trajectories of spiritual decline or growth (Pargament, 2007). In some cases, growth and decline could also coexist, with people perceiving growth in some

domains and decline in others. For example, a person who exits organized religion to pursue personal spirituality might feel a deepened sense of sacred connection while still feeling the intense pain of losing one's religious community along with valued beliefs and practices.

In line with past research on religious coping (see Pargament, 2013), many sought help from God in dealing with their r/s struggles and generally favored collaborative religious coping and active religious surrender rather than passive religious deferral. It seems that people prefer to take responsibility for resolving struggles rather than to let God control all outcome variables. Positive correlations between religious coping and divine intervention variables also suggest that these processes relate generally. That is, people who sought out God's help in one form or another were more likely to believe that they received divine intervention. Perhaps inviting help prepares one to perceive its delivery, or perhaps perceived divine aid increases reliance on it.

People also typically perceived some assistance from God related to r/s struggles. These findings build on previous work (e.g., Dein & Littlewood, 2007; Hall & Sarazin, 2011; Harriott, 2016; Johnson, 2004; Peacock & Poloma, 1998; Underwood & Teresi, 2002) showing that perceptions of divine intervention are rather common experiences for those who believe in a deity (e.g., being guided to a book on r/s topics, interactions with other people through dreams or visions, receiving protection from external circumstance, through cultivation of inner strengths). These perceptions are not necessarily symptoms of psychosis (Cottam et al., 2011) or distress (Luhmann, 2012). Perceived divine help can be rather ordinary (Underwood, 2006), comforting (Beck & McDonald, 2004), and supportive during difficult times (Dein & Littlewood, 2007).

### **God-Focused Religious Coping and Perceptions of Divine Intervention**

Results pertaining to our main questions differed somewhat according to the predictor and outcome variables in question, the paths relating them (i.e., concurrent, correlation of

change, or prospective), and whether religious coping and divine intervention were both included as predictors. Nevertheless, many patterns emerged that have broader implications for theory and research. To facilitate clarity, we organized our discussion of these patterns around each method of self-initiated action in conjunction with perceptions of divine intervention.

***Collaborative religious coping and perceived divine intervention.*** These variables showed positive concurrent and correlation of change paths with spiritual growth and resolution of struggles independently of divine intervention. Thus, perceived reciprocal interaction with God could be adaptive over the course of an r/s struggle; at least, it suggests a good prognosis. These findings build on work conceptualizing the interaction between an individual and God as a mutual relationship (Beck & McDonald, 2004; Exline et al., 2016; Pargament et al., 1988, 1990, 2000; Sandage & Shults, 2007; Smith, 1994). This view emphasizes both the action of the person and the perceived actions made by God as integral to the relationship. This type of partnership is thought to support well-being more than when a person takes only an active or passive role. Prospective paths in bivariate models also supported this interpretation, though when including perceived divine intervention as a predictor, some prospective paths for each predictor did not maintain significance. This is likely due to conceptual and empirical overlap between this pair of predictors; collaborative religious coping items assume some perceived help from God. Distinctions aside, prospective paths generally suggested that active engagement with God that one perceives as mutually helpful will predict more adaptive courses through r/s struggles, and could be directly beneficial.

***Active religious surrender and perceived divine intervention.*** The pattern of findings for active religious surrender resembled that for collaborative religious coping with the exception of prospective paths in the trivariate models. When accounting for perceived divine intervention,

active religious surrender no longer prospectively predicted struggle resolution. As active surrender implies that one is expecting God to provide aid (Pargament et al., 2000), this result is intuitive and highlights advantages of considering unique contributions from both sides of the person-deity relationship over time (Exline et al., 2016). Additionally, though we did not predict reciprocal effects (from outcome variables to predictors across time), spiritual growth predicted future increases in active religious surrender and perceived divine intervention. This might imply that spiritual growth increases belief that God has aided in a struggle and can be trusted to do so.

***Passive religious deferral and perceived divine intervention.*** The concurrent and correlation of change paths relating passive religious deferral to spiritual growth and struggle resolution revealed positive but weaker effects than for active surrender and collaborative religious coping. Unlike those coping styles, passive religious deferral also related positively to spiritual decline. Prospective paths from passive religious deferral to outcome variables were weak and inconsistent. Thus, people who waited passively for God to handle everything claimed fewer spiritual and struggle-related benefits than those who engaged their r/s struggles more directly. These findings suggest that shifting one's locus of control toward an external source during difficult times might have both detrimental and beneficial effects (Hayward, Krause, Ironson, & Pargament, 2016). Doing so could decrease motivation to proactively confront one's challenges and lead to spiritual decline, but externalizing responsibility might also reduce one's immediate psychological burden and reinforce trust in the divine forces perceived to be in control.

***Summary, potential explanations, and implications for counseling.*** This study aimed to determine if perceiving help from God predicted adaptation to r/s struggles above and beyond God-focused religious coping efforts. Results indicated the general answer is yes. Prior work

has shown that those who believe in a deity typically attribute positive events to it (Ray et al., 2015), believe that it may bring about negative events for a purpose (Hale-Smith et al., 2012; Wilt et al., in press), and believe that it actively provides help when requested (Lee et al., 2013). Our results suggest potential benefits of perceived divine intervention for r/s struggles concurrently and over time.

Several plausible mechanisms might explain any such benefits. Attributing experiences to God might strengthen r/s faith (de Castella & Simmonds, 2013) or build the senses of meaning in the events, one's life, and in reality (Park, 2013; Pollner, 1989; Schultz et al., 2014). The comfort of divine support could elicit the strength to confront challenges confidently (Hayward et al., 2016; Pargament et al., 2006). Future research should examine mediators such as these.

People experiencing r/s struggles might seek help in the form of counseling in secular or religious settings (Johnson, Hayes, & Wade, 2007; Post & Wade, 2014). Therapies focusing on r/s issues can be effective for treating mental health problems in general (Worthington, Hook, Davis, & McDaniel, 2011) and r/s struggles in particular (Dworsky et al., 2013).

In addition to broad recommendations that counselors be sensitive and tolerant toward clients with r/s struggles (Pargament, 2007), we believe our results carry specific implications regarding how therapists may profitably engage with clients' perceived relationships with deities. For example, therapists might open discussion around how clients who believe in a personal God can pursue a collaboration with God (Smith, 1994). If therapists sense that a client wants to rely on God, this could prompt them to explore the reasons for such a choice; therapists may note that more interactive methods have been associated with greater resolution of r/s struggles and more positive spiritual transformation. These findings support previous research suggesting that RC interventions focused on facilitating positive interactions with God result in improved

psychological and spiritual health (see Pargament et al., 2013, for a review). Additionally, therapists may encourage such clients to consider how God may be assisting during the struggle, as such perceptions independently predicted more positive struggle-related outcomes in the current study. Skillful employment of these suggestions might help to foster spiritual growth, prevent spiritual decline, and facilitate the resolution of r/s struggles.

### **Limitations and Future Directions**

There are some important limitations to the design of the current study. First, we cannot make strong claims of causality due to the correlational design. Experimental work or randomized control trials aimed at increasing RC methods or perceptions of divine intervention are needed. Another limitation to causality is due to the two-week time lag between assessments. It is possible that other variables that we did not assess causally intervened between these periods; this limitation may be ameliorated by employing more frequent (daily or weekly) assessments.

Our reliance on self-report might have allowed social desirability to bias our findings. This bias could be more pronounced when focusing on subjective r/s variables (e.g., spiritual growth and decline) and questions about deities in particular. Believers might be motivated to see or describe God as present and supportive, especially if this agrees with one's religious group. Future studies might benefit by including more objective outcome variables (e.g., physical health, occupational performance) or obtaining peer reports of psychological or spiritual health (e.g., asking close peers to report on a target's preferred r/s coping methods).

Our new, five-item measure of perceived divine intervention exhibited good internal consistency (see *alphas* in Table 1) and predictive validity (associations with theoretically relevant constructs) in this study; however, it is likely that this measure does not encompass all



of the ways that people believe that God intervenes in their lives. Preliminary theoretical and empirical research is being conducted in order to cover the components of perceived divine communication more comprehensively (Harriott, 2016). For example, in addition to the perceptions that God communicates through the means assessed by our short measure (e.g., guidance, via communication from others, protection), people might perceive the God intervenes directly through scripture, through audible voices or visions, or through artistic means such as music or paintings.

The specificity of our findings is somewhat limited because we did not distinguish among the different types of r/s struggles that participants experienced. Rather, our screener included people who were experiencing r/s struggles from various domains: divine, demonic, interpersonal, moral, doubt, and ultimate meaning. Thus, we cannot say with confidence whether our findings are differentially applicable across different types of r/s struggles. Because our methods focused on God as a potential source of help in the struggle, future research may benefit from exploring whether our findings differ among people experiencing divine struggles as compared to other struggles. Further, demonic struggles could also be a fruitful area to explore, as many people may turn to God for help in coping with these struggles (Harriott & Exline, 2018).

There are several limitations to consider regarding our sample. Expanding studies of perceived communication from God to include participants of more diverse cultural and r/s backgrounds would increase generalizability of results outside of Western, predominantly Christian populations (Dein & Cook, 2015). Further, though results from online research may be able to avoid the routine caveat that findings may only be generalizable to a small subset of the population (Wilt, Condon, & Revelle, 2011), this advantage must be considered along with the

possibility that internet users may not comprise a representative sample of individuals experiencing r/s struggles. Finally, we were financially constrained from obtaining follow-up assessments with all of the initial sample. Although the large sample and modern statistical techniques lighten this concern somewhat, it is possible that self-selection biased our findings to some degree. Limitations aside, this study builds on work related to divine interactions in several important ways. The study used a large, longitudinal sample of people experiencing r/s struggles. Furthermore, our results from the trivariate models held when conducting a stringent test of incremental validity, controlling for basic personality traits of extraversion and emotional stability (Piedmont, 2005). For this population, our results highlight the mutually unique relevance of seeking God's help and of perceiving oneself as the recipient of divine intervention. This study also reinforced the importance of distinctions between different ways of approaching God. Our evidence slightly favors more active, collaborative partnerships with God as more conducive, or at least more coincident with positive spiritual progress through struggles. If r/s struggles represent decision points between paths leading to spiritual growth or decline, decisions to resolve struggles proactively and persistently may be preferable. Yet for those who believe in a personal God, it may not be necessary to resolve one's struggles alone.

## References

- Allison, P. D. (2012, April 23). *Handling missing data by maximum likelihood*. Keynote presentation at the SAS Global Forum, Orlando, Florida. Available at <http://www.statisticalhorizons.com/wp-content/uploads/MissingDataByML.pdf>.
- Allmon, A. L., Tallman, B. A., & Altmaier, E. M. (2013). Spiritual growth and decline among patients with cancer. *Oncology Nursing Forum*, *40*, 559–565. DOI: [10.1188/13.ONF.559-565](https://doi.org/10.1188/13.ONF.559-565)
- Beck, R., & McDonald, A. (2004). Attachment to God: The Attachment to God Inventory, tests of working model correspondence, and an exploration of faith group differences. *Journal of Psychology & Theology*, *32*, 92–103.
- Chittister, J. (2003). *Scarred by struggle, transformed by hope*. Wm. B. Eerdmans Publishing.
- Cole, B. S., Hopkins, C. M., Tisak, J., Steel, J. L., & Carr, B. I. (2008). Assessing spiritual growth and spiritual decline following a diagnosis of cancer: Reliability and validity of the Spiritual Transformation Scale. *Psycho-Oncology*, *17*, 112–121. DOI: [10.1002/pon.1207](https://doi.org/10.1002/pon.1207)
- Cottam, S., Paul, S. N., Doughty, O. J., Carpenter, L., Al-Mousawi, A., Karvounis, S., & Done, D. J. (2011). Does religious belief enable positive interpretation of auditory hallucinations? A comparison of religious voice hearers with and without psychosis. *Cognitive Neuropsychiatry*, *16*, 403–421.
- de Castella, R., & Simmonds, J. G. (2013). “There's a deeper level of meaning as to what suffering's all about”: Experiences of religious and spiritual growth following trauma. *Mental Health, Religion & Culture*, *16*, 536–556. DOI: [10.1080/13674676.2012.702738](https://doi.org/10.1080/13674676.2012.702738)
- Degelman, D., & Lynn, D. (1995). The development and preliminary validation of the Belief in Divine Intervention Scale. *Journal of Psychology and Theology*, *23*, 37–44.

- Dein, S., & Cook, C. C. H. (2015). God put a thought into my mind: The charismatic Christian experience of receiving communications from God. *Mental Health, Religion & Culture, 18*, 97–113. DOI: [10.1080/13674676.2014.1002761](https://doi.org/10.1080/13674676.2014.1002761)
- Dein, S., & Littlewood, R. (2007). The voice of God. *Anthropology and Medicine, 14*, 213–228.
- Dein, S., & Littlewood, R. (2008). The psychology of prayer and the development of the Prayer Experience Questionnaire. *Mental Health, Religion & Culture, 11*, 39–52. DOI: [10.1080/13674670701384396](https://doi.org/10.1080/13674670701384396)
- Desai, K. M., & Pargament, K. I. (2015). Predictors of growth and decline following spiritual struggles. *International Journal for the Psychology of Religion, 25*, 42–56. DOI: [10.1080/10508619.2013.847697](https://doi.org/10.1080/10508619.2013.847697)
- Dworsky, C. K. O., Pargament, K. I., Gibbel, M. R., Krumrei, E. J., Faigin, C. A., Haugan, M. R. G., Desai, K. M., Lauricella, S. K., Lynn, Q., & Warner, H. (2013). Winding Road: Preliminary support for a spiritually integrated intervention addressing college students' spiritual struggles. *Research in the Social Scientific Study of Religion, 24*, 309–340.
- Enders, C. K., & Bandalos, D. L. (2001). The relative performance of full information maximum likelihood estimation for missing data in structural equation models. *Structural Equation Modeling, 8*, 430–457.
- Exline, J. J. (2002). Stumbling blocks on the religious road: Fractured relationships, nagging vices, and the inner struggle to believe. *Psychological Inquiry, 13*, 182–189.
- Exline, J. J. (2013). Religious and spiritual struggles. In K. I. Pargament, J. J. Exline & J. W. Jones (Eds.), *APA handbook of psychology, religion, and spirituality (Vol 1): Context, theory, and research*. (pp. 459–475). Washington, DC: American Psychological Association.

- Exline, J. J., Pargament, K. I., Hall, T. W., & Harriott, V. A. (2016). Predictors of growth from spiritual struggle among Christian undergraduates: Religious coping and perceptions of helpful action by God are both important. *Journal of Positive Psychology*. DOI: [10.1080/17439760.2016.1228007](https://doi.org/10.1080/17439760.2016.1228007). Advance online publication.
- Exline, J. J., Pargament, K. I., Grubbs, J. B., & Yali, A. M. (2014). The Religious and Spiritual Struggles Scale: Development and initial validation. *Psychology of Religion and Spirituality*, 6, 208–222. DOI: [10.1037/a0036465](https://doi.org/10.1037/a0036465)
- Exline, J. J., & Rose, E. (2013). Religious and spiritual struggles. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (2nd ed., pp. 380–398). New York, NY: Guilford Press.
- Fowler, J. W. (1981). *Stages of faith the psychology of human development and the quest for meaning*. New York, NY: Harper & Row.
- Gosling, S. D. (2017). Ten Item Personality Measure (TIPI). Retrieved from <https://gosling.psy.utexas.edu/scales-weve-developed/ten-item-personality-measure-tipi/>
- Graham, J. W. (2009). Missing data analysis: Making it work in the real world. *Annual Review of Psychology*, 60, 549–576.
- Greyson, B., & Khanna, S. (2014). Spiritual transformation after near-death experiences. *Spirituality in Clinical Practice*, 1, 43.
- Hale-Smith, A., Park, C. L., & Edmondson, D. (2012). Measuring beliefs about suffering: Development of the Views of Suffering Scale. *Psychological Assessment*, 24, 855–866. DOI: [10.1037/a0027399.supp](https://doi.org/10.1037/a0027399.supp) (Supplemental)
- Hall, T. W., & Sarazin, J. (2011). *The Spiritual Transformation Inventory (STI): Theoretical and psychometric foundations for a measure of relational spirituality*. Unpublished manuscript, Biola

University.

Harriott, V. A. (2016). *Towards a scientific understanding of perceived communication from God: Scale development and preliminary validation*. Unpublished Master's thesis, Case Western Reserve University. Retrieved from <https://etd.ohiolink.edu/>

Harriot, V. A., & Exline, J. J. (2018). To light the dark: A review of the literature on demonic attribution. Manuscript in preparation.

Hayward, R. D., Krause, N., Ironson, G., & Pargament, K. I. (2016). Externalizing religious health beliefs and health and well-being outcome variables. *Journal of Behavioral Medicine*, *39*, 887–895. DOI: [10.1007/s10865-016-9761-7](https://doi.org/10.1007/s10865-016-9761-7)

Hill, P. C., Pargament, K. I., Hood, R. W., Jr., McCullough, M. E., Swyers, J. P., Larson, D. B., & Zinnbauer, B. J. (2000). Conceptualizing religion and spirituality: Points of commonality, points of departure. *Journal for the Theory of Social Behaviour*, *30*, 51-77.

Jamshidian, M., Jalal, S., & Jansen, C. (2014). Miss-Mech: An R package for testing homoscedasticity, multivariate normality, and missing completely at random (MCAR). *Journal of Statistical Software*, *56*(6), 1–31. URL: <http://www.jstatsoft.org/v56/i06/>

Johnson, B. C. (2004). *The God who speaks: Learning the language of God*. Grand Rapids, MI: Eerdmans.

Johnson, C. V., & Hayes, J. A. (2003). Troubled spirits. *Journal of Counseling Psychology*, *50*, 409–419. DOI: [10.1037/0022-0167.50.4.409](https://doi.org/10.1037/0022-0167.50.4.409)

Johnson, C. V., Hayes, J. A., & Wade, N. G. (2007). Psychotherapy with troubled spirits: A qualitative investigation. *Psychotherapy Research*, *17*, 450–460.

Kenny, D. A. (2016, October 6). *Measuring model fit*. Retrieved from <http://davidakenny.net/cm/fit.htm>

Koenig, H. G., Pargament, K. I., & Nielsen, J. (1998). Religious coping and health status in medically ill hospitalized older adults. *The Journal of nervous and mental disease*, *186*, 513–521.

- Lee, M. T., Poloma, M. M. & Post, S. G. (2013). *The heart of religion: Spiritual empowerment, benevolence, and the experience of God's love*. New York, NY: Oxford University Press.
- Luhrmann, T. M. (2012). *When God talks back: Understanding the American evangelical relationship with God*. New York, NY: Alfred A. Knopf.
- Ozer, D. J., & Benet-Martínez, V. (2006). Personality and the prediction of consequential outcomes. *Annual Review of Psychology, 57*, 401–421.
- Pargament, K. I. (2007). *Spiritually integrated psychotherapy: Understanding and addressing the sacred*. New York, NY: Guilford Press.
- Pargament, K. I., Desai, K. M., & McConnell, K. M. (2006). Spirituality: A pathway to posttraumatic growth or decline? In L. G. Calhoun & R. G. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research & practice* (pp. 121–137). Mahwah, NH: Erlbaum.
- Pargament, K. I., Ensing, D. S., Falgout, K., Olsen, H., Reilly, B., Haitsma, K., & Warren, R. (1990). God help me: (I): Religious coping efforts as predictors of the outcome variables to significant negative life events. *American Journal of Community Psychology, 18*, 793–824. DOI: [10.1007/BF00938065](https://doi.org/10.1007/BF00938065)
- Pargament, K. I., Falb, M. D., Ano, G. G., & Wachholtz, A. B. (2013). The religious dimension of coping: Advances in theory, research, and practice. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 560–579). New York, NY: Guilford.
- Pargament, K. I., Kennell, J., Hathaway, W., Grevengoed, N., Newman, J., & Jones, W. (1988). Religion and the problem-solving process: Three styles of coping. *Journal for the Scientific Study of Religion, 27*, 90–104.
- Pargament, K. I., Koenig, H. G., & Perez, L. M. (2000). The many methods of religious coping: Development and initial validation of the RCOPE. *Journal of Clinical Psychology, 56*, 519–543.

- Pargament, K. I., Magyar, G. M., Benore, E., & Mahoney, A. (2005a). Sacrilege: A study of sacred loss and desecration and their implications for health and well-being in a community sample. *Journal for the Scientific Study of Religion*, *44*, 59–78. DOI: [10.1111/j.1468-5906.2005.00265.x](https://doi.org/10.1111/j.1468-5906.2005.00265.x)
- Pargament, K. I., Magyar-Russell, G. M., & Murray-Swank, N. A. (2005b). The sacred and the search for significance: Religion as a unique process. *Journal of Social Issues*, *61*, 665–687.
- Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998b). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion*, *37*, 710–724. DOI: [10.2307/1388152](https://doi.org/10.2307/1388152)
- Park, C. L. (2013). Religion and meaning. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 357–379). New York, NY: Guilford Press.
- Peacock, J. R., & Poloma, M. M. (1999). Religiosity and life satisfaction across the life course. *Social Indicators Research*, *48*, 319–343.
- Piedmont, R. L. (2005). The role of personality in understanding religious and spiritual constructs. In R. F. Paloutzian & C. L. Park (Eds.), *The handbook of the psychology of religion and spirituality* (pp. 253–273). New York, NY: Guilford Press.
- Pollner, M. (1989). Divine relations, social relations, and well-being. *Journal of Health and Social Behavior*, 92–104.
- Poloma, M. M., & Lee, M. T. (2012). Prophetic prayer as two-way communication with the divine. *Journal of Communication and Religion*, *35*, 271–294.
- Post, B. C., & Wade, N. G. (2014). Client perspectives about religion and spirituality in group counseling. *The Counseling Psychologist*, *42*, 601–627.
- R Development Core Team (2016). *R: A language and environment for statistical computing*. R foundation for statistical computing, Vienna, Austria. Retrieved from <http://www.R-project.org>



- Ray, S. D., Lockman, J. D., Jones, E. J., & Kelly, M. H. (2015). Attributions to God and Satan about life-altering events. *Psychology of Religion and Spirituality*, 7, 60–69. DOI: [10.1037/a0037884](https://doi.org/10.1037/a0037884)
- Revelle, W. (2016) *psych: Procedures for psychological, psychometric, and personality research*. Evanston, Illinois: Northwestern University (R package version 1.6.8).
- Revelle, W., Wilt, J., & Condon, D. M. (2011). Individual differences and differential psychology. *The Wiley-Blackwell handbook of individual differences*, 1-38.
- Sandage, S. J., & Shults, F. L. (2007). Relational spirituality and transformation: A relational integration model. *Journal of Psychology & Christianity*, 26, 261–269.
- Schultz, J. M., Altmaier, E., Ali, S., & Tallman, B. (2014). A study of posttraumatic spiritual transformation and forgiveness among victims of significant interpersonal offences. *Mental Health, Religion & Culture*, 17, 122–135. DOI: [10.1080/13674676.2012.755616](https://doi.org/10.1080/13674676.2012.755616)
- Smith, M. L. (1994). *Co-creators with God*. Cambridge, MA: Cowley Publications.
- Stauner, N., Exline, J. J., Grubbs, J. B., Pargament, K. I., Bradley, D. F., & Uzdavines, A. (2016). Bifactor model of religious and spiritual struggles: Distinct from religiousness and distress. *Religions*, 7(6), 68. DOI: [10.3390/rel7060068](https://doi.org/10.3390/rel7060068)
- Stauner, N., Exline, J. J., & Pargament, K. I. (2016). Religious and spiritual struggles as concerns for health and well-being. *Horizonte*, 14, 48–75. DOI: [10.5752/P.2175-5841.2016v14n41p48](https://doi.org/10.5752/P.2175-5841.2016v14n41p48)
- [Stauner, N., Exline, J. J., Pargament, K. I., Wilt, J. A., & Grubbs, J. B. \(2017\). \*Stressful Life events and religiousness predict struggles about religion and spirituality\*. Submitted for publication.](#)
- Underwood, L. G. (2006). Ordinary spiritual experience: Qualitative research, interpretive guidelines, and population distribution for the Daily Spiritual Experience Scale. *Archive for the Psychology of Religion*, 28, 181–218.
- Underwood, L. G., & Teresi, J. A. (2002). The daily spiritual experience scale: development, theoretical

- description, reliability, exploratory factor analysis, and preliminary construct validity using health-related data. *Annals of Behavioral Medicine*, 24, 22–33.
- Wilt, J., Condon, D. M., & Revelle, W. (2011). Telemetrics and online data collection: Collecting data at a distance. In B. Laursen, T. D. Little & N. A. Card (Eds.), *Handbook of Developmental Research Methods* (pp. 163–180). New York: Guildford Press.
- Wilt, J. A., Exline, J. J., Lindberg, M. J., Park, C. L., & Pargament, K. I. (in press). Theological beliefs about suffering and interactions with the divine. *Psychology of Religion and Spirituality*.
- Wong-McDonald, A., & Gorsuch, R. L. (2000). Surrender to God: An additional coping style? *Journal of Psychology & Theology*, 28, 149–161.
- Worthington, E. L., Hook, J. N., Davis, D. E., & McDaniel, M. A. (2011). Religion and spirituality. *Journal of Clinical Psychology*, 67, 204–214. DOI: [10.1002/jclp.20760](https://doi.org/10.1002/jclp.20760)

## Footnotes

<sup>1</sup> Following Hill et al. (2000), we see religion and spirituality as closely related constructs. Spirituality concerns the search for the sacred (i.e., the divine, ultimate reality, or ultimate truth), which can occur independently from or within a religious context. Religious contexts constitute identifiable groups of people who support or prescribe specific behaviors and means that facilitate the search for the sacred.

<sup>2</sup> Most of the research on this topic to date has been conducted in Western, monotheistic contexts and thus refers to a single God. Although we will use the terminology of God here as well for consistency, we acknowledge that belief in multiple gods is common as well, especially outside Western contexts.

<sup>3</sup> As we see religion and spirituality as closely related constructs (see Footnote 1), the term religious and spiritual struggle does not distinguish between "religious struggles" and "spiritual struggles." Rather, religious and spiritual struggles comprise a number of related struggles that fall within the r/s domain of life.

<sup>4</sup> The numbers of participants reporting each struggle at least *Somewhat* (in decreasing order): moral ( $n = 1,593$ ), ultimate meaning ( $n = 1,500$ ), doubt ( $n = 1,365$ ), interpersonal ( $n = 1,329$ ), divine ( $n = 1,272$ ), demonic ( $n = 1,159$ ).

<sup>5</sup> Ethnicities summed to over 100% because some chose more than one category. Religious affiliations summed to less than 100% due to rounding in each category.

<sup>6</sup> Intermediate response options were (2) *No, it is staying about the same* and *Yes, it is* (3) *partly* or (4) *mostly resolved*.

<sup>7</sup> Using the *MissMech* package (Jamshidian, Jalal, & Jansen, 2014), we rejected the null hypothesis that data were missing completely at random. Outside of contacting non-respondents, there is no test to determine whether data are missing at random versus missing not at random. As compared with people who provided complete data, those who provided incomplete data had slightly lower levels of perceived divine intervention (2.16 vs. 2.28,  $t_{(2,658)} = 2.90$ ,  $p < .01$ , Cohen's  $d = .11$ ) and struggle resolution (2.51 vs. 2.61,  $t_{(2,747)} = 2.90$ ,  $p < .05$ , Cohen's  $d = .11$ ) at baseline. No other comparisons among baseline variables were significant between those who provided complete data and those who did not. As the missing data could be modeled as a function of observed data, we therefore had reason to believe that the data were missing at random and thus could be modeled appropriately using FIML procedures.

<sup>8</sup> As a stringent test of incremental validity, we re-ran all models controlling for the effects of baseline extraversion and emotional stability. Baseline r/s measures were specified to correlate with extraversion and emotional stability, and follow-up r/s measures were regressed on extraversion and emotional stability. There were no changes in statistical significance among any paths between r/s variables in the trivariate models when including personality variables. Extraversion and emotional stability had modest associations with r/s variables at baseline (magnitudes generally between  $|.0|$  to  $|.2|$ ), but no prospective associations between personality and r/s variables were significant (see supplemental materials for full results).

Table 1  
*Descriptive Statistics, Alpha Reliabilities, and Pearson Correlations for R/S Measures*

Baseline	N	M	SD	Range	Alpha	Correlations					
						1.	2.	3.	4.	5.	6.
1. Collaborative religious coping	2,661	2.49	0.87	1-4	.79						
2. Active religious surrender	2,660	2.60	0.94	1-4	.88	.72					
3. Passive religious deferral	2,660	1.69	0.79	1-4	.82	.26	.27				
4. Divine intervention	2,660	2.25	0.92	1-4	.87	.65	.56	.30			
5. Spiritual growth	2,799	4.16	1.83	1-7	.91	.61	.54	.21	.65		
6. Spiritual decline	2799	3.11	1.80	1-7	.88	-.16	-.23	.27	-.18	-.26	
7. Resolution of struggle	2749	2.59	1.03	1-5	—	.31	.29	.16	.40	.39	-.21
Two-week	N	M	SD	Range	Alpha	8.	9.	10.	11.	12.	13.
8. Collaborative religious coping	1,589	2.24	0.90	1-4	.82						
9. Active religious surrender	1,589	2.47	0.97	1-4	.90	.73					
10. Passive religious deferral	1,590	1.59	0.73	1-4	.82	.25	.27				
11. Divine intervention	1,590	2.01	0.88	1-4	.87	.67	.58	.26			
12. Spiritual growth	1,667	3.92	1.81	1-7	.92	.62	.55	.19	.63		
13. Spiritual decline	1,668	2.88	1.79	1-7	.89	-.17	-.24	.26	-.19	-.23	
14. Resolution of struggle	1,644	2.61	0.97	1-5	—	.30	.28	.09	.39	.34	-.20
Four-week	N	M	SD	Range	Alpha	15.	16.	17.	18.	19.	20.
15. Collaborative religious coping	699	2.21	0.92	1-4	.85						
16. Active religious surrender	699	2.41	0.98	1-4	.90	.76					
17. Passive religious deferral	699	1.57	0.73	1-4	.83	.28	.27				
18. Divine intervention	698	1.92	0.89	1-4	.89	.71	.63	.32			
19. Spiritual growth	735	3.83	1.91	1-7	.93	.66	.62	.22	.67		
20. Spiritual decline	735	2.82	1.77	1-7	.88	-.18	-.24	.26	-.12	-.18	
21. Resolution of struggle	715	2.70	1.08	1-5	—	.32	.33	.09	.35	.35	-.19

*Note.* All correlations differed from zero with  $p < .001$  except those at four weeks between divine intervention and spiritual decline ( $r = -.12, p < .01$ ), and between passive religious deferral and resolution of struggle ( $r = .09, p < .05$ ).

Table 2  
*Path Coefficients (and Standard Errors) from Bivariate Latent Autoregressive Models*

	Spiritual Growth		Spiritual Decline		Resolution of Struggle	
Concurrent Path	Base ⇔ Base		Base ⇔ Base		Base ⇔ Base	
Collab	.74*** (.01)		-.22*** (.02)		.38*** (.02)	
Act Surr	.63*** (.01)		-.26*** (.02)		.31*** (.02)	
Pass Defer	.24*** (.02)		.31** (.02)		.18*** (.02)	
Divine int	.75*** (.01)		-.21*** (.02)		.43*** (.02)	
Change Path	Base → 2wk	2wk → 4wk	Base → 2wk	2wk → 4wk	Base → 2wk	2wk → 4wk
Collab	.39*** (.04)	.34*** (.08)	-.03 (.05)	.04 (.09)	.15*** (.04)	.06 (.07)
Act Surr	.31*** (.03)	.30*** (.06)	-.07 (.04)	-.05 (.06)	.12*** (.03)	.10* (.05)
Pass Defer	.12** (.04)	.13* (.06)	.20*** (.04)	.35*** (.06)	.00 (.03)	-.00 (.05)
Divine int	.44*** (.03)	.42*** (.06)	-.04 (.04)	-.08 (.07)	.21*** (.03)	.05 (.05)
Prospective Path	Base → 2wk	2wk → 4wk	Base → 2wk	2wk → 4wk	Base → 2wk	2wk → 4wk
Collab	.14*** (.03)	.21*** (.04)	.02 (.02)	-.06* (.03)	.18*** (.03)	.15*** (.03)
Act Surr	.07** (.03)	.11** (.03)	.04 (.02)	-.06 (.03)	.13*** (.02)	.14*** (.03)
Pass Defer	.03 (.02)	.03 (.03)	.06** (.02)	.01 (.03)	.09** (.03)	.02 (.03)
Divine int	.11*** (.03)	.13** (.04)	.00 (.02)	.00 (.03)	.21*** (.03)	.16*** (.03)
Reciprocal Path	Base → 2wk	2wk → 4wk	Base → 2wk	2wk → 4wk	Base → 2wk	2wk → 4wk
Collab	.12*** (.03)	.04 (.04)	-.04 (.02)	-.01 (.03)	.02 (.02)	-.02 (.03)
Act Surr	.18*** (.03)	.21*** (.04)	-.09*** (.03)	-.02 (.03)	.07** (.02)	.06* (.03)
Pass Defer	.02 (.03)	.07* (.03)	.04 (.03)	-.04 (.04)	.00 (.02)	.04 (.03)
Divine int	.13*** (.03)	.13** (.04)	-.03 (.02)	.06* (.03)	.02 (.02)	-.01 (.03)

Note. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ . Predictor variables were: “Collab” = *collaborative religious coping*; “Act Surr” = *active religious surrender*; “Pass Defer” = *passive religious deferral*; “Divine int” = *perceived divine intervention*. Models predicted each outcome variable (spiritual growth, spiritual decline, resolution of struggle) from each predictor variable individually (see Figure 1).

Table 3  
*Path Coefficients (and Standard Errors) from Trivariate Latent Autoregressive Models*

	Spiritual Growth		Spiritual Decline		Resolution of Struggle	
Concurrent Path	Base ⇌ Base		Base ⇌ Base		Base ⇌ Base	
1. Collab	.74*** (.01)		-.22*** (.02)		.38*** (.02)	
2. Divine int	.75*** (.01)		-.21*** (.02)		.43*** (.02)	
3. Act Surr	.63*** (.01)		-.26*** (.02)		.31*** (.02)	
4. Divine int	.75*** (.01)		-.21*** (.02)		.43*** (.02)	
5. Pass Defer	.25*** (.02)		.31*** (.02)		.18*** (.02)	
6. Divine int	.75*** (.01)		-.21*** (.02)		.43*** (.02)	
Change Path	Base → 2wk	2wk → 4wk	Base → 2wk	2wk → 4wk	Base → 2wk	2wk → 4wk
7. Collab	.39*** (.04)	.34*** (.08)	-.03 (.05)	.03 (.09)	.15*** (.04)	.05 (.07)
8. Divine int	.44*** (.04)	.41*** (.06)	-.06 (.04)	-.05 (.07)	.20*** (.03)	.04 (.05)
9. Act Surr	.32*** (.03)	.29*** (.06)	-.06 (.04)	-.08 (.06)	.10** (.03)	.08 (.05)
10. Divine int	.44*** (.03)	.43*** (.06)	-.06 (.04)	-.07 (.07)	.21*** (.03)	.04 (.05)
11. Pass Defer	.12** (.04)	.13* (.06)	.20*** (.04)	.35*** (.06)	.00 (.03)	-.02 (.05)
12. Divine int	.44*** (.04)	.42*** (.06)	-.05 (.04)	-.08 (.07)	.21*** (.03)	.05 (.05)
Prospective Path	Base → 2wk	2wk → 4wk	Base → 2wk	2wk → 4wk	Base → 2wk	2wk → 4wk
13. Collab	.12** (.04)	.21*** (.05)	.05 (.04)	-.16** (.05)	.04 (.05)	.10 (.06)
14. Divine int	.04 (.04)	.01 (.05)	-.04 (.04)	.13* (.05)	.18*** (.05)	.08 (.06)
15. Act Surr	.04 (.03)	.08* (.04)	.06* (.03)	-.11** (.04)	.01 (.03)	.08 (.04)
16. Divine int	.09** (.03)	.10* (.04)	-.04 (.03)	.07 (.04)	.21*** (.04)	.10* (.05)
17. Pass Defer	.01 (.02)	.01 (.03)	.08** (.02)	.02 (.04)	.03 (.03)	-.03 (.03)
18. Divine int	.11** (.03)	.13** (.04)	-.04 (.02)	-.01 (.03)	.21*** (.03)	.16*** (.04)
Reciprocal Path	Base → 2wk	2wk → 4wk	Base → 2wk	2wk → 4wk	Base → 2wk	2wk → 4wk
19. Collab	.13*** (.04)	.01 (.04)	-.04 (.02)	-.01 (.03)	.02 (.02)	-.04 (.03)
20. Divine int	.09* (.04)	.08 (.05)	-.01 (.02)	.07* (.03)	.01 (.02)	-.02 (.03)
21. Act Surr	.15*** (.04)	.14** (.04)	-.07** (.02)	-.01 (.03)	.04 (.02)	.01 (.03)
22. Divine int	.11** (.03)	.11** (.04)	-.02 (.02)	.07* (.03)	.02 (.02)	-.01 (.03)
23. Pass Defer	.02 (.04)	.04 (.05)	.06* (.03)	-.02 (.04)	-.01 (.03)	.01 (.04)
24. Divine int	.14*** (.03)	.12** (.04)	-.05* (.02)	.04 (.03)	.02 (.02)	-.01 (.03)

*Note.* \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ . Predictor variables were: “Collab” = *collaborative religious coping*; “Act Surr” = *active religious surrender*; “Pass Defer” = *passive religious deferral*; “Divine int” = *perceived divine intervention*. Models predicted each outcome variable (spiritual growth, spiritual decline, resolution of struggle) individually from one religious coping variable and the perceived divine intervention variable (see Figure 1). Variables are numbered to increase ease of referencing effects in the text.

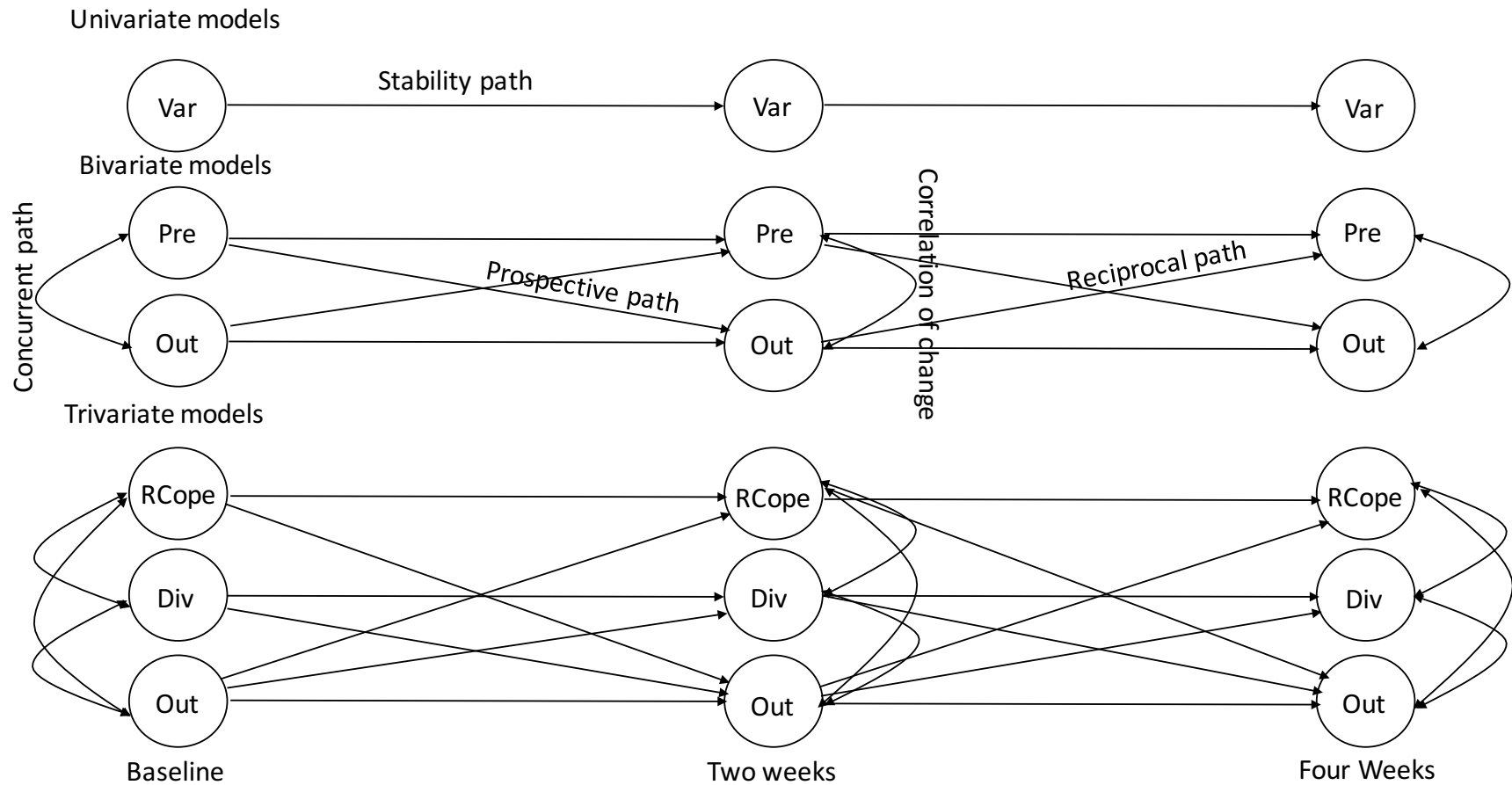


Figure 1. Conceptual scheme for univariate, bivariate and trivariate latent autoregressive models. We estimated separate univariate models for each latent variable (“Var”) in the study. Each bivariate model included one predictor (“Pre”; RCOPE factors and perceived divine intervention) and one outcome variable (“Out”; spiritual growth, spiritual decline, and struggle resolution). Each trivariate model included one RCOPE factor (“RCope”), the perceived divine intervention variable (“Div”), and one outcome (“Out”; spiritual growth, spiritual decline, and struggle resolution). To facilitate interpretation, the figure omits the observed indicators for the latent factors; we set the first loading for every factor to one and estimated other loadings freely. Models estimated Concurrent paths at Baseline, the rank-order Stability paths for each variable across time, Correlations of change between predictors and outcome variables, Prospective paths from predictors to outcome variables, and Reciprocal paths from outcome variables to predictors.