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Religious and Spiritual Struggles as a Mediator of the Link between Stressful Life Events and
Psychological Adjustment in a Nationwide Sample

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Abstract

The experience of major life stressors has been robustly linked to greater risk for depression, anxiety, and a decline in well-being. R/s struggles commonly occur in response to major life stressors and have been associated with greater levels of psychological distress and lower well-being. This pattern of findings suggests that stressful life events may exert their deleterious effects on adjustment, in part, through the r/s struggles they elicit. This study represents the first attempt to test this mediational model in a nationally representative sample of adults in the United States exposed to a wide range of life stressors. In a sample of 2076 adults from the Landmark Spirituality and Health Survey, this study tested whether r/s struggles partially mediated the effect of stressful life events on psychological adjustment. Results showed support for the proposed partial mediation model. These findings support our theory that in the wake of stressful life events, many people find that their most deeply held values and beliefs are shaken, and these r/s struggles tend to be linked to the distress experienced from stressful life events. Implications for research, practice, and the community are discussed.

Keywords: Stress, anxiety; well-being; religious/spiritual struggles, spirituality, religion

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Stressful Life Events and Psychological Adjustment

Research has extensively examined the role of stressful life events in triggering and maintaining psychological distress and maladjustment. Stressful life events have been consistently associated with increased risk of depressive symptoms as well as the onset of major depression (Hammen, 2005; Kessler, 1997, Mazure, 1998, Michl, McLaughlin Shepherd, & Nolen-Hoeksema, 2013; Phillips, Carroll, & Der, 2015). Stressful life experiences also contribute to other forms of general psychological distress, such as greater anxiety and less well-being (Kendler, Karkowski, & Prescott, 1999; Monroe & Reid, 2009). However, the magnitude of these effects is not so high as to indicate that people invariably experience maladjustment following significant life stressors.

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The critical question that follows is how and why some individuals become more distressed than others following stressful life events. Several mediating factors have been explored, such as genetic predisposition, personality characteristics, social support, resilience, and coping. In one especially important work in this area of study, Janoff-Bulman (1992) proposed that traumatic events impact psychological adjustment by shattering the individual's core assumptions about life, such as the belief that the world, both people and events, are basically benevolent; the belief that there is a meaningful connection between who the person is and what happens to him or her, and; the belief in one's own basic self-worth, goodness, and decency. Empirical studies have provided support for the idea that trauma and other major life stressors create psychological distress when the individual's world assumptions, including cognitions about self, others, and the world are shaken (Edmondson, Chaudoir, Mills et al., 2011; Foa et al., 1999; Moser, Hajcak, Simons, & Foa, 2007; Park, Riley, George et al., 2016; Schuler & Boals, 2016). However, with some notable exceptions (see Exline, 2013; Pargament, 1997; Park, Currier, Harris, & Slaterry, 2017), theory and research in this area has largely overlooked the spiritual dimension of the individual's assumptive world, and more specifically, the possibility that stressful life events lead to distress, in part, because of their ability to shake and shatter the individual's spiritual orientation and values.

Spiritual Struggles

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Pargament (2007) has written about spiritual struggles within the context of his larger conceptual model of spirituality. In brief, he assumes that: (a) people are proactive beings who are motivated to seek out significance in life; (b) people are guided in their search for significance by an orienting system of beliefs, practices, experiences, and relationships, both spiritual and nonspiritual in character; (c) major life stressors can shake or shatter an individual's orienting system and significant goals and values leading to spiritual struggles; and (d) spiritual struggles generally result in distress and disorientation. Similarly, Park and her colleagues have proposed that traumatic events can at times be assimilated into one's global meaning system of beliefs, practices, and values without struggle or distress (Park, 2010; Park, Currier, Harris, & Slattery, 2017). However, in some instances, major life stressors can rupture one's global meaning system leading to struggles in the spiritual sphere. Unless the individual is able to accommodate successfully to the trauma by making shifts in situational and global meaning, then he/she is vulnerable to subsequent mental health problems.

Empirical research has provided support for aspects of these conceptual frameworks. Of particular relevance to the present investigation are advances in the measurement and study of r/s struggles. Six distinct types of r/s struggles have been identified through the development and validation of the Religious and Spiritual Struggles scale (RSS), though only five are considered in this investigation (Exline, Pargament, Grubbs, & Yali, 2014). These struggles represent three

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overarching categories: struggles within oneself (intrapsychic), struggles with others (interpersonal), and struggles with God or demonic forces (supernatural). Three types of intrapsychic struggles have been delineated. Moral struggles involve an internal attempt to reconcile one's actions with higher order moral values (e.g., "I felt torn between what I wanted and what I knew was morally right"). Struggles with ultimate meaning are centered on questions about the ultimate purpose of life (e.g., "I questioned whether life really matters"). Doubt struggles involve feeling troubled by questions or doubts about one's religious/spiritual beliefs. However, the doubt subscale was not included in the following study as it had not been developed at the time the data were gathered. Interpersonal struggles refer to difficulties experienced in relationships because of religious/spiritual issues (e.g., "I felt hurt, mistreated, or offended by religious/spiritual people"). Two forms of supernatural struggles have also been identified. Demonic struggles consist of feeling "attacked by the devil or evil spirits," whereas Divine struggles focus on feeling angry, abandoned, or punished by God (Exline et al., 2014). Although these six types of r/s struggles have been identified, higher order factor analysis has also revealed a common underlying factor (Stauner, Exline, Grubbs, Pargament, Bradley & Uzdavines, 2016). Thus, it is meaningful to examine r/s struggles in individual or aggregated form.

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Empirical studies have shown that r/s struggles are common, with prevalence rates that can range from 30% to 80%, among groups facing various life stressors, such as medical illness (e.g., Sherman, Plante, Simonton, Latif, & Anaisse, 2009), sexual assault (Ahrens, Abeling, Ahman, & Hinman, 2010), divorce (Krumrei, Mahoney, & Pargament (2011), and natural disaster (Chan & Rhodes, 2013). Consistent with Pargament's (2007) assertion that r/s struggles may grow out of events that lead to a shaken orienting system and purpose in life, higher levels of spiritual struggle have been associated with exposure to more serious life stressors. For example, in one study of college students those who reported more stressful experiences were more likely to face r/s struggles a year later (Wortmann, Park, & Edmondson, 2011). Similarly, in studies of military veterans from Iraq and Afghanistan, higher levels of r/s struggles were related to more morally injurious experiences in the wars (Currier, Holland, & Malott, 2015; Currier, Holland, & Drescher, 2015; Currier, Smith, & Kuhlman, 2017) and higher levels of combat (Park, Smith, Lee, Mazure, McKee et al., 2017).

There is also robust support for the assertion that r/s struggles are associated with signs of greater psychological distress and lower well-being. These findings grow out of studies of the general population (Abu-Raiya, Pargament, Krause, & Ironson, 2015) and people dealing with physical illness (e.g., Exline, Park, Smyth, & Carey, 2011), mental illness (e.g., Rosmarin,

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Bigda-Peyton, Ongur, Pargament, & Bjorgvisson, 2013), and major life events (e.g., Exline et al., 2011; Lee, Roberts, & Gibbons, 2013).

The findings that exposure to more stressful life events is associated with greater r/s struggles and that r/s struggles are linked to higher levels of psychological distress and lower well-being suggest that spiritual struggles may partially mediate the effects of stressful life events on adjustment. Clearly, many other factors play a role in mediating the tie between stressful life events and distress and well-being (e.g., coping, social support, personality, self-efficacy, physical health). Thus, we are not hypothesizing that r/s struggles will fully mediate the stressful life events – adjustment connection. Rather, we expect that struggles will partially explain the relationship between stressful life events and psychological adjustment.

A few studies have tested this mediation model within specific sub-groups of people grappling with specific life stressors. A few cross-sectional studies suggest that stressful life events appear to work through r/s struggles to produce poorer adjustment. Bradley, Schwartz, and Kaslow (2005) found that the relationship between child and domestic partner abuse and PTSD symptoms among low-income African American women was significantly reduced when r/s struggles were entered into the equation. Working with a nationwide sample of clergy from the Presbyterian Church (USA), Ellison, Roalson, Guillory, Flannelly, and Marcum (2010) found that r/s struggles reduced the effect of stressful life events on clergy distress. Similar findings

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have emerged from a small set of longitudinal studies. Working with divorced people from the community, Krumrei et al. (2011) found that r/s struggles mediated the relationship between appraisals of the divorce as a sacred loss or violation and depression one year later.

Magyar-Russell, Pargament, Trevino and Sherman (2013) followed a group of medical rehabilitation patients from admission to 6 – 8 weeks post-discharge and also reported that r/s struggles helped to explain the relationship between appraisals of the stressor as a sacred loss or desecration and depression and anxiety at post-discharge. Wortmann, Park, and Edmondson (2011) reported that r/s struggles among college freshmen partially mediated the link between the experience of trauma and PTSD symptoms at the end of the academic year, after controlling for initial PTSD symptomatology. Hill, Christie-Mizell, Vaghela, Mossakowski and Johnson (2017) found that r/s struggles mediate the link between experiences of day-to-day discrimination and depressive symptoms. As yet, however, no studies have tested whether r/s struggles mediate the relationship between stressful life events and adjustment in a nationally representative sample of adults facing a broad range of life stressors. The general proposed mediation model is shown in Figure 1.

Methods

Procedure

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The data for this investigation come from the Landmark Spirituality and Health Survey. This is a representative nationwide face-to-face survey of adults who reside in the United States. The study (protocol number 13.11.01) received full Institutional Review Board (IRB) approval at the University of Chicago's National Opinion Research Center (NORC). Individual interviews were conducted by NORC and the study was completed in 2014. 6020 individuals were contacted and 3010 agreed to complete the study, so the response rate was 50%.

Sample

For the purpose of this investigation, we limited our sample to participants who met the following two criteria: 1) identified as neither atheists nor agnostics and 2) had experienced at least one life stressor in the past 18 months. Only participants who had met these criteria had been asked to complete the Religious and Spiritual Struggles Scale in the original survey (refer to Measures). 9.1% of participants in the overall sample endorsed identifying as an atheist or agnostic ($n = 272$) and 22.3% of the overall sample ($n = 672$) endorsed having experienced no life stressors in the past 18 months. Less than 1% of participants ($n = 27$) were not able to be included in the analyses due to a high amount of missing data on the measures used for this study. A total of 934 cases in total were not included in the sample due to these criteria, with 37 participants both identifying as atheist/agnostic and endorsing no life stressors. The remaining

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participants constituted 69% of the sample ($n = 2,076$) and were included in the analyses. Refer to Table 1 for this sample's demographic information.

Measures

Stressful life events. The degree of exposure to stress was measured using a checklist of 12 undesirable life events (e.g., death of a spouse or close friend, conflict with family members, separation or divorce, assault or robbery). This scale was adapted from the work of Moos, Cronkite, Billings and Finney (1984), and asked participants to rate whether or not they had experienced each event within the 18 months prior to completing the survey. The responses were aggregated into a simple count of the number of events experienced by each participant. The average number of events that were encountered by the participants in this study was 3.1 ($SD = 1.9$ events), with the most common events being serious illness of a family member (46.7%), trouble with family members (44.6%), and death of a close friend (38.7%).

Religious and spiritual struggles (RSS). R/s struggles were measured using a shortened 15-item form of the original 26-item Religious and Spiritual Struggles Scale (RSS) (Exline et al., 2014). Pargament, Exline, and colleagues conducted unpublished analyses which indicate that the correlation between the shorter and longer version of the RSS was .94 and thus the short form provides a similar account of this construct as does the longer scale. Participants were asked to consider the most stressful life event that they had experienced over the past 18 months, and then

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were instructed as follows: “Please think about the specific event you just identified. To what extent have you responded to this event in each of the following ways: (1) *not at all*; (2) *a little bit*; (3) *somewhat*; (4) *quite a lot*; (5) *a great deal*?” These 15 items comprise five 3-item r/s struggles subscales: Divine ($\alpha = .81$; sample item: “Felt as though God had abandoned me”); Demonic ($\alpha = .90$; sample item: “Worried that the problems I was facing were the work of the devil or evil spirits”); Interpersonal ($\alpha = .69$; sample item: “Was concerned that other people did not respect my religious/spiritual beliefs”); Moral struggle ($\alpha = .81$; sample item: “Worried that my actions were morally or spiritually wrong”) and Ultimate Meaning struggle ($\alpha = .80$; sample item: “Felt as though my life had no deep meaning”). Subscale scores were computed by summing the responses to the three items that comprise the subscale.¹

Depressive symptoms. Participants’ depressive symptoms were assessed with the 8-item version of the Center for Epidemiological Studies - Depression Scale (CES-D; Andersen, Malmgren, Carter, & Patrick, 1994). Items were rated on a 4-point scale from (1) *rarely or none of the time* to (4) *most or all of the time*, positive items were reverse scored, and all items were summed to create a total depression score ($\alpha = .86$).

¹ The RSS scale used in this study was a shortened, 15-item version of the original 26-item RSS scale (Exline et al., 2014). Because of the shortened form, a series of factor analyses were conducted to confirm that the five subscales loaded onto a single, overall struggles factor. An exploratory factor analysis supported that the scale was best explained by a single factor. A confirmatory factor analysis showed acceptable fit with the five subscales loading onto an overall r/s struggles latent factor. This confirms previous literature that has supported the viability of considering the RSS scale as unidimensional, though it is comprised of multiple subscales (Stauner et al., 2016.)

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Generalized anxiety. The Generalized Anxiety Scale-7 (Spitzer, Kroenke, Williams, & Löwe, 2006) was used to measure generalized anxiety. Participants rated the extent to which seven symptoms of generalized anxiety (e.g., feeling nervous, anxious or on edge) have bothered them in the past 2 weeks. Responses were on a 4-point scale ranging from (0) *not at all* to (3) *nearly every day*, and summed to create a total anxiety score ($\alpha = .89$).

Social isolation. Social isolation was assessed using a 3-item version of the UCLA Loneliness Scale (Russell, 1996). Participants rated their answers to three questions (e.g., “How often do you feel left out?”) on a 3-point scale ranging from (1) *not at all* to (3) *more than half the days*. Responses were totaled with a higher score indicating greater social isolation ($\alpha = .77$).

Life satisfaction. Life satisfaction was measured by a 3-item version of the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larson, & Griffin, 1985). Participants were asked to rate their agreement with three statements (e.g., “In most ways my life is close to ideal”) on a 5-point scale ranging from (1) *strongly disagree* to (5) *strongly agree*. Responses were summed to create a total score, with higher scores indicating higher life satisfaction ($\alpha = .84$).

Happiness. Happiness was measured by a 3-item version of the Subjective Happiness Scale (Lyubomirsky & Lepper, 1999). For items such as “In general, I consider myself a very happy person,” participants were instructed to choose the number that best described them on a

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7-point scale ranging from (1) *low levels of happiness* to (7) *high levels of happiness*. Scores were summed with higher scores indicating higher levels of happiness ($\alpha = .83$).

Analyses

Initial analyses assessed variable distributions for normality and checked for outliers. The distributions appeared to be normal and no significant abnormalities were detected. Because the proportion of missing values was quite low, listwise deletion was used to remove any participants who did not complete an entire subscale. Otherwise, within the structural equation model, missing data were specified and estimated using full information maximum likelihood (FIML) method.

In order to investigate the indirect effects of r/s struggles, these analyses tested a mediation model displayed in Figure 2. This model was comprised of 11 observed variables loading onto four latent factors as follows: 1) stressful life events (equivalent to indicator variable) 2) r/s struggles (divine, demonic, interpersonal, moral, and ultimate meaning), 3) positive adjustment (life satisfaction and happiness); and 4) negative adjustment (depression, anxiety, and social isolation). This model also included three covariates, age, sex, and income, because initial analyses indicated that these demographic variables tended to correlate significantly with level of stressful life events, r/s struggles, and/or positive and negative adjustment.

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To test whether r/s struggles partially mediated the link between stressful life events and psychological adjustment, a series of models were examined using the MPLUS program (Muthén & Muthén). Due to the inclusion of latent variables, the first step was to determine acceptable fit for the measurement model through a confirmatory factor analysis. Two absolute fit indices, the chi-square statistic and the root mean square error of approximation (RMSEA), and one incremental fit index, the comparative fit index (CFI), were used to determine acceptable model fit. Though researchers have not firmly established cutoff points for the RMSEA and CFI values to establish goodness of fit, many agree with Hu and Bentler's (1999) suggestion that values of .06 or below for the RMSEA and values close to .95 for the CFI indicate good fit. Thus, we adopted these criteria to assess model fit for this study's data.

After examining the measurement model fit, a structural model then examined the following parameters: direct paths between stressful life events (IV) and positive and negative adjustment (DVs), stressful life events and r/s struggles (mediator), and r/s struggles and positive and negative adjustment. This model represents a partial mediation model. Bootstrapping analyses using 5000 iterations were also conducted to confirm evidence of an indirect model. If the analysis supported a partial mediation model, no more subsequent mediation models would be tested. However, if there was evidence of full mediation, a subsequent model would test the path between the stressful life events and psychological adjustment variables to determine which

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best fits the data. Finally, in order to confirm the evidence of mediation, the final mediator model was compared to a model that did not include a link between stressful life events and r/s struggles to determine if a more parsimonious direct model was more appropriate.

Results

Descriptive Statistics

Table 2 displays descriptive statistics for the main study variables. Participants reported experiencing an average of 3 stressful life events over the past 18 months. Overall, r/s struggle scores were low; the most endorsed struggles were moral struggles ($M = 4.73$), demonic struggles ($M = 4.69$), and struggles of ultimate meaning ($M = 4.60$). As expected in a non-clinical national sample, participants' negative psychological adjustment scores (i.e., depression, anxiety, and social isolation) were generally low and participants' mean positive psychological adjustment scores (i.e., life satisfaction and happiness) were high.

Bivariate Correlations

Table 2 presents a correlation matrix displaying the bivariate relationships between key study variables. In support of the measurement model, the five r/s struggles subscales showed moderate to large positive intercorrelations. Also, there were moderate to large correlations among the negative adjustment variables (depression, anxiety, and social isolation) and between the two positive adjustment variables (life satisfaction and happiness). However, none of these

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correlations fell above the .70 level, and thus there was no evidence of multicollinearity. These results also showed support for the proposed model parameters. First, stressful life events were correlated in a moderately positive fashion with the negative psychological adjustment variables and moderately negatively with the indicators of positive psychological adjustment. Second, stressful life events were moderately correlated with the proposed mediator, r/s struggle. Finally, r/s struggle showed small to moderate positive correlations with the negative adjustment variables and negative correlations with the positive adjustment variables. Thus, this pattern of correlations supported the proposed partial mediation model.

Confirmatory Factor Analysis

Overall, the measurement model showed acceptable fit. Refer to Table 3 for fit statistics. Though the chi-square value was significant, the incremental fit statistics were acceptable, with a CFI of .93 and a lower bound RMSEA of .06, supporting the close-fit hypothesis. All factor loadings for the three latent variables were significant and approximated the standard magnitude of .60 or greater. The fourth latent variable, stressful life events, had just one indicator variable, so its factor loading was fixed to one and the error was fixed to 0. The factor loadings explained between 52 and 73% of the variance. All latent variables were significantly correlated with all other latent variables: stressful life events and negative adjustment ($r = .36; p < .01$), stressful life events and positive adjustment ($r = -.27; p < .01$), stressful life events and r/s struggles ($r = .29; p$

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$< .01$), r/s struggles and negative adjustment ($r = .65; p < .01$), r/s struggles and positive adjustment ($r = -.45; p < .01$). The error variance of moral and demonic struggles were allowed to covary in order to promote more acceptable model fit, which is consistent with the theoretical proposition that certain religious beliefs may influence both of these types of struggles.

Partial v. Full Mediation

Having established an acceptable measurement model, Model 2 tested a partial mediation model based on the hypothesis that r/s struggles mediate the effects of stressful life events on adjustment. Overall, model fit remained acceptable. Though the chi-square value was again significant, the incremental fit indices showed good fit as the CFI remained close to .95. The RMSEA value of .06 and 90% confidence interval (.06-.07) also indicated acceptable fit. There was a small but insignificant increase in chi-square from the original CFA model.

Stressful life events showed significant direct paths to negative adjustment ($\beta = .18; p < .01$) and positive adjustment ($\beta = -.15; p < .01$) and a significant path to r/s struggle ($\beta = .29; p < .01$). R/s struggles showed a significant path to negative adjustment ($\beta = .58; p < .01$) and positive adjustment ($\beta = -.41; p < .01$). Also, bootstrapping analysis using 5000 iterations indicated significant indirect paths of stressful life events with negative adjustment through r/s struggle ($\beta = .17, p < .001$) and positive adjustment through r/s struggle ($\beta = -.12; p < .001$). 95% confidence intervals were used to further examine these indirect pathways. Results showed that

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neither the indirect path of stressful life events and negative adjustment ($\beta = .11$ to $.22$) nor stressful life events and positive adjustment ($\beta = -.16$ to $-.07$) included 0 within their respective confidence intervals. These results provide evidence that these indirect pathways are present even when accounting for error variance. Together, these results show evidence that r/s struggles act as a mediator between stressful life events and psychological adjustment. The presence of both significant direct and indirect paths between stressful life events and adjustment supports a model in which r/s struggle partially mediates this relationship.

In order to further confirm partial mediation as the best fitting model, Model 3 tested a full mediation model by removing the direct pathway between stressful life events and positive and negative adjustment. Overall, the model fit was significantly poorer than the previous model as the chi-square value increased significantly. The incremental fit indices showed somewhat poorer fit as the CFI decreased and RMSEA value increased. These results support the partial mediation hypothesis because model fit worsened with the more parsimonious model that removed the direct path between stress and psychological adjustment. Finally, the partial mediation model was compared to a non-mediation model, removing the path between stress and r/s struggles. Model 4 showed significantly poorer fit, with a significant increase in chi-square and poorer incremental fit indices.

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Thus, the results support Model 2 in which r/s struggles partially mediates the relationship between stressful life events and positive and negative psychological adjustment. The findings show strong evidence for r/s mediating the effects of stressful life events on r/s struggles. The percentage of the total effect that operates indirectly through the model was computed by dividing the indirect effect by the total effect. Results indicate that the standardized total effect of stressful life events on negative adjustment is .36, and about 47% of this total effect (.17) operates indirectly through r/s struggles. The standardized total effect of stressful life events on positive adjustment is -.27, and about 44% of this total effect (-.12) operates indirectly through r/s struggles. The final model can be seen in Figure 2.

Discussion

Given past research findings indicating that r/s struggles have shown links to exposure to more stressful life events and higher levels of psychological distress, we expected that r/s struggles would partially mediate the effects of stressful life events on psychological adjustment and well-being. Though several studies have found support for this relationship in smaller samples with specific stressors (e.g., Bradley et al., 2005; Ellison et al., 2010; Krumrei et al., 2011), this study was the first to investigate this mediational model in a nationally representative sample of adults in the United States exposed to a wide range of life stressors.

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Results showed support for a partial mediation model in which the direct path between life stressors and struggles remained significant and the indirect path through r/s struggles explained a moderate amount of this relationship. These findings support theories that in the wake of stressful life events, many people find that their most deeply held values and beliefs are shaken and they experience tensions, questions, and conflicts about sacred matters (Pargament, 2007; Park et al., 2017). In turn, these r/s struggles tend to be partially responsible for the distress experienced from stressful life events.

These findings make a unique and meaningful contribution to our knowledge about r/s struggles. They are consistent with the notion that spiritual tension and conflicts play a pivotal role in the experience of nearly any type of life stressors. Principally, these findings indicate that r/s struggles are responsible for a significant portion of the psychological toll experienced in the wake of stressful life events, even in a non-clinical population. While these findings support theories that major life stressors create psychological distress when the individual's world assumptions are shaken (Edmondson, Chaudoir, Mills et al., 2011; Moser, Hajcak, Simons, & Foa, 2007; Schuler & Boals, 2016), they encourage a broadening of theories to encompass the potential spiritual impact of life stressors and their detrimental effects on psychological health and well-being (see work of Pargament, 2007; Park et al., 2017).

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Further research is called for in this area. Because these findings are limited by their reliance on cross-sectional data, longitudinal studies are needed to confirm this mediating model in a national sample. Studies are also needed to pinpoint the specific forms of r/s struggle (e.g., divine struggles, moral struggles, ultimate meaning struggles, interpersonal struggles) that may be most salient as mediators of the links between stressful life events and adjustment. Future research should also consider any changes in the model links given different types of stressful life events.

Another significant limitation is that the study sample did not include people who identified as atheist or agnostic. Subsequent research that has emerged following the time when this survey was devised has shown that individuals who hold atheist and agnostic views also experience religious and spiritual struggles (Stauner, Exline, Grubbs, Pargament, Bradley & Uzdavines, 2016). Thus, we recommend that future research in this area should be broadly inclusive, not limiting the study of religious and spiritual struggles to individuals who hold a religious affiliation.

Though the data in this study were cross-sectional, and thus causal implications could not be determined, the survey design and the underlying theory suggest that this model provides a reasonable explanation of the relationship between the variables of interest. For example, alternatively, one could propose that stressful life events mediates the relationship between r/s

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struggle and psychological adjustment. However, because participants were instructed to report on their r/s struggle *in reaction to* their most stressful past life events these events chronologically preceded the r/s struggle. Regardless, as stated above, analyses compared partial and full mediation models as well as a non-mediation model and the partial mediation model emerged as the most adequate fit for these data. One limitation of our model is that it did not take into account possible moderators. Though beyond the scope of this study, future research should also consider specific demographic and religiousness variables that may moderate these relationships. Promising initial studies have identified moderators of the links between stressful life event and r/s struggles (Trevino, Pargament, Krause, Ironson, & Hill, in press) and between better r/s struggles and psychological adjustment (Abu-Raiya, Pargament, & Krause, 2016).

These findings have practical implications for several groups. People in the larger community including parents, educators, and religious congregation members should be cognizant of the potential for r/s struggles following the encounter with many kinds of life stressors. R/s struggles are not rare and can be understood as a natural aspect of spiritual life, though they can be the source of great pain and distress (Exline, 2013; Pargament et al., 2005). Further education could be helpful to increase general awareness about r/s struggles and to provide greater understanding and support rather than stigma to those facing these tensions and conflicts.

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Mental health professionals should be aware of the ways varied life stressors and presenting problems of clients may impact people not only emotionally, socially, and physically but spiritually as well. As part of the assessment process, practitioners should inquire into how the problems that bring people to treatment have affected them spiritually (Pargament, 2007). The topic of r/s struggles could then be integrated into the process of counseling. By expressing an interest in r/s struggles, clinicians open the door to a conversation about deeper sources of distress and suffering. Clinicians could then help individuals identify and access resources that may facilitate growth and transformation through r/s struggles. Preliminary studies of spiritually integrated interventions have begun to show support for the effectiveness of treatments designed to help people address their r/s struggles (e.g., Ano, Pargament, Wong, & Pomerleau, 2017; Dworsky et al., 2013). When practitioners feel the topic of r/s struggles falls beyond their skills, they should refer clients to clergy or professionals with background in spiritually integrated psychotherapy.

Hospital chaplains and pastors should also be sure to attend to the possibility of r/s struggles among patients and congregation members experiencing stressors such as medical illness, death, divorce, accident, and injury. R/s struggles have been reported by people at all levels of religiousness, including atheists (Exline et al., 2014). Thus, it cannot be assumed that the experience of r/s struggles will be limited to one particular religious or nonreligious group.

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Several methods have been developed for assessing r/s struggles and distress in the context of healthcare chaplaincy (e.g., Fitchett & Risk, 2009; King et al., 2017).

In sum, these findings highlight the important role that spiritual tension and conflicts play in the experience of a wide range of life stressors. Researchers and practitioners should pay greater attention to r/s struggles because they appear to be responsible for a significant portion of the detrimental effects of stressful life events, even in a non-clinical population.

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Tables and Figures

Table 1. *Sample Characteristics*

Age	$M = 51.30, SD = 18.93, R = 18-96$
Gender	% Female = 60.1 ($n = 1248$)
	% Male = 39.9 ($n = 828$)
Highest grade completed	$M = 13.40, SD = 3.17$
Race	% Caucasian = 66.6 ($n = 1384$)
	% African American = 18.6 ($n = 387$)
	% Asian or Pacific Islander = 2.5 ($n = 53$)
	% Other = 12.3 ($n = 255$)
Religious Preference	% Protestant = 30.3 ($n = 636$)
	% Catholic or Roman Catholic = 23.4 ($n = 491$)
	% Buddhist = 1.8 ($n = 37$)
	% Jewish = 1.5 ($n = 32$)
	% Muslim = .5 ($n = 11$)
	% Hindu = .1 ($n = 2$)
	% Other = 30.6 ($n = 642$)
	% "No religious preference" = 11.9 ($n = 250$)

Note: M = Mean; SD = Standard deviation; R = Range; n = number (Total $N = 2076$)

Table 2. *Bivariate Correlations of Key Study Variables*

	1	2	3	4	5	6	7	8	9	10	11
1. Stressful life events	1										
2. Divine struggle	.18**	1									
3. Demonic struggle	.22**	.27**	1								
4. Interpersonal struggle	.23**	.37**	.31**	1							
5. Moral struggle	.27**	.34**	.55**	.36**	1						
6. Ultim. meaning struggle	.21**	.42**	.38**	.35**	.51**	1					
7. Depressive symptoms	.28**	.29**	.25**	.20**	.31**	.38**	1				
8. Generalized anxiety	.34**	.29**	.27**	.23**	.35**	.38**	.64**	1			
9. Satisfaction with life	-.30**	-.22**	-.20**	-.13**	-.26**	-.30**	-.42**	-.43**	1		
10. Happiness	-.13**	-.20**	-.08**	-.11**	-.19**	-.29**	-.44**	-.42**	.50**	1	
11. Social isolation	.26**	.27**	.22**	.24**	.28**	.38**	.47**	.43**	-.45**	-.42**	1
<i>M</i>	3.08	3.87	4.69	3.95	4.73	4.60	6.30	11.10	10.52	16.58	4.45
<i>SD</i>	1.90	1.89	2.96	1.91	2.54	2.47	2.73	4.55	2.66	3.45	1.69
<i>R</i>	1-11	3-15	3-15	3-15	3-15	3-15	4-16	7-28	3-15	3-21	3-9
α	--	.81	.90	.69	.81	.80	.86	.89	.84	.83	.77

N = 2047-2076 **p* < .05 ***p* < .01

Table 3. Fit Statistic for Models 1-4 (controlling for age, sex, and income)

	Chi-square (df)	RMSEA (90% C.I.)	CFI	Change in Chi-square compared to prev. model
Model 1 (CFA)	501.25(59)*	.06 (.06-.07)	.93	---
Model 2 (Partial Mediation)	502.62 (61)*	.06 (.06-.07)	.93	1.37
Model 3 (Full Mediation)	560.58 (63)*	.07 (.06-.07)	.92	57.96*
Model 4 (No Mediation)	616.68 (53)*	.07 (.07-.08)	.91	56.10*

* p < .05

Figure 1. Proposed Partial Mediation Model

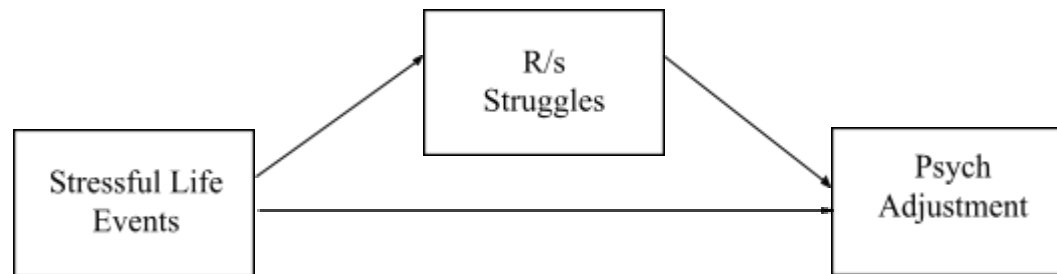
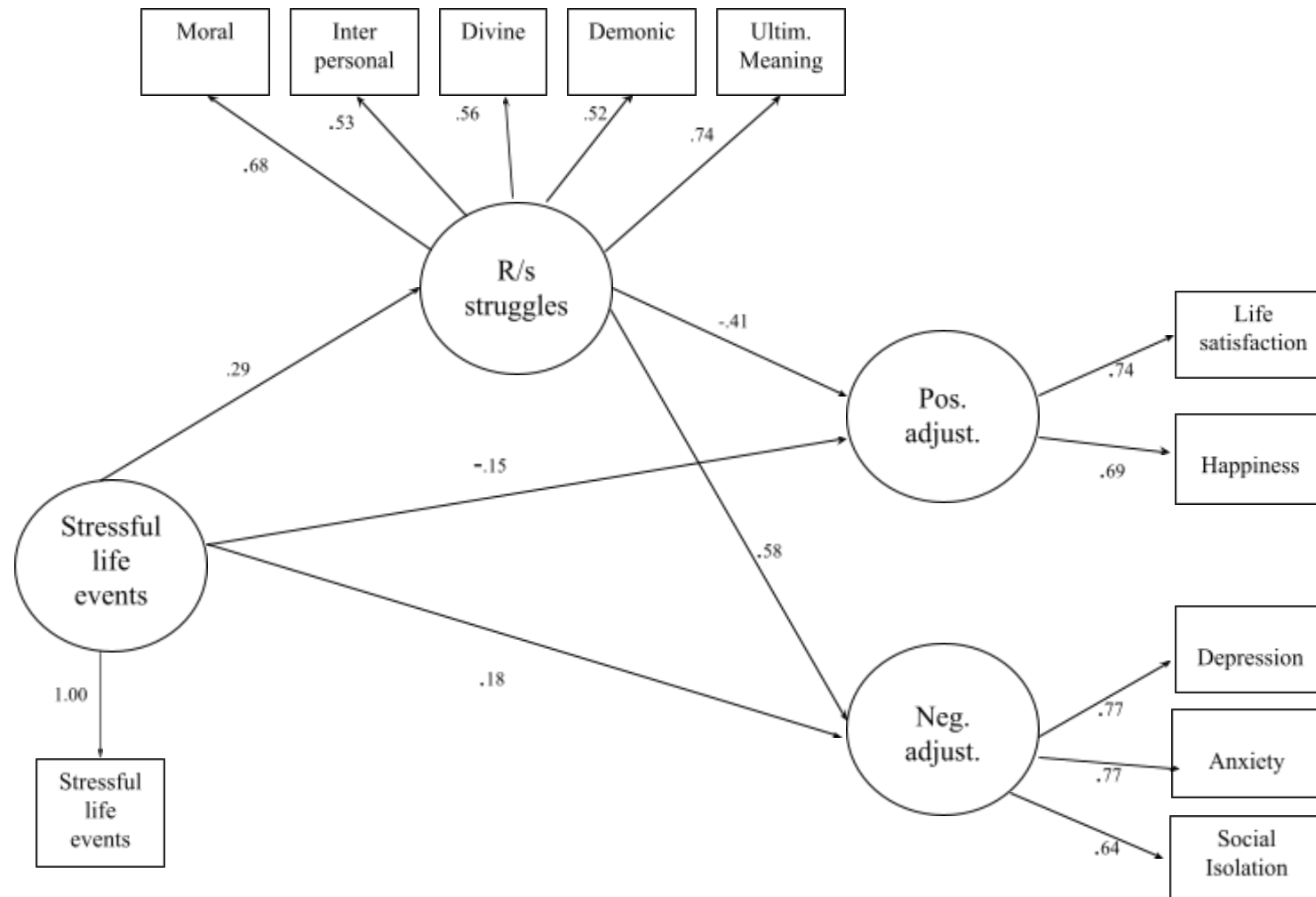


Figure 2. *Structural Model (controlling for age, sex, and income)*

*All paths displayed in model were significant ($n = 1848$)