

BRIEF REPORT

Stressful Life Events and Religiousness Predict Struggles About Religion and Spirituality

Nick Stauner and Julie J. Exline
Case Western Reserve University

Kenneth I. Pargament
Bowling Green State University

Joshua A. Wilt
Case Western Reserve University

Joshua B. Grubbs
Bowling Green State University

Many people experience religious/spiritual (R/S) struggles following specific stressful life events (SLE). However, SLE may aggregate, gradually undermining individuals' orienting systems. Does SLE accumulation predict greater R/S struggles? Might general religiousness buffer cumulative effects of SLE on R/S struggles? We tested these hypotheses using religiousness and 19 kinds of SLE as predictors of the 6-factor Religious and Spiritual Struggles Scale. Using measurement invariance constraints on four samples from 3 universities and the Internet (total $N = 4,675$), cumulative SLE independently predicted greater R/S struggles of all kinds in all samples equally. Thus, heightened R/S struggles tend to accompany accumulated SLE. However, the interaction of religiousness and SLE failed to predict R/S struggles, yielding no support for the buffering hypothesis. Stress-exposed populations face R/S struggles of many kinds, regardless of religiousness. We recommend tests of the buffering hypothesis targeting aspects of religious orienting systems that connect more directly to R/S struggles.

Keywords: struggle, religiousness, spirituality, stress, trauma

Many people report religious/spiritual (R/S) struggles, which are experiences of negative emotion, tensions, or conflict about R/S issues (for reviews, see Exline & Rose, 2013; Exline, 2013; Pargament, 2007; Stauner, Exline, & Pargament, 2016). R/S struggles can arise in many forms. The Religious and Spiritual Struggles Scale (RSS; Exline, Pargament, Grubbs, & Yali, 2014) measures six common kinds of R/S struggles: divine (difficulties with a deity), demonic (perceived persecution by the devil or evil spirits), interpersonal (R/S conflicts with people), moral (concerns with one's actions and desires), ultimate meaning (doubting the importance, purpose, or meaning of one's life), and doubt (discomfort with R/S doubts and questions).

R/S struggles often relate to indicators of psychological distress. R/S struggles predict more distress about specific stressors (e.g., relationship breakups and sexual assault; Johnson & Hayes, 2003) and symptoms of posttraumatic stress (e.g., Harris et al., 2012; Wortmann, Park, & Edmondson, 2011) as well as higher perceived general stress, neuroticism, anxiety, and depression (e.g., Ano & Pargament, 2013; Grubbs, Wilt, Stauner, Exline, & Pargament, 2016; Stauner, Exline, Grubbs, et al., 2016; Wilt, Grubbs, Pargament, & Exline, 2017; Abu-Raiya, Pargament, Krause, & Ironson, 2015). Yet R/S struggles entail more than religiously contextualized distress. R/S struggles often focus on ultimate concerns, including supernatural beliefs, value conflicts, and existential questions and generally relate moderately to distress as distinct latent factors (Stauner, Exline, Grubbs, et al., 2016). R/S struggles have health implications as well: They predict physical symptoms, functional disabilities, and poorer adaptation to stress (for review, see Exline, 2013). Evidence that R/S struggles relate to mortality and suicidality underscores the importance of R/S struggles to health and well-being (Pargament, Koenig, Tarakeshwar, & Hahn, 2001; Trevino, Balboni, Zollfrank, Balboni, & Prigerson, 2014).

Stress as a Predictor of Religious/Spiritual Struggle: Direct-Effects Hypothesis

Although R/S struggles could cause distress, stress could also cause R/S struggles (stress theoretically leads to distress; they are distinct terms). Many studies of religious coping (Pargament,

This article was published Online First May 21, 2018.

Nick Stauner and Julie J. Exline, Department of Psychological Sciences, Case Western Reserve University; Kenneth I. Pargament, Department of Psychology, Bowling Green State University; Joshua A. Wilt, Department of Psychological Sciences, Case Western Reserve University; Joshua B. Grubbs, Department of Psychology, Bowling Green State University.

We thank Professor Todd Hall for help with collecting data, and we thank the John Templeton Foundation for generous funding in support of this research (grants 36094 and 59916).

Correspondence concerning this article should be addressed to Nick Stauner, Case Western Reserve University College of Arts and Sciences, 10900 Euclid Avenue, Cleveland, OH 44106. E-mail: nickstauner@gmail.com

1997; Pargament, Smith, Koenig, & Perez, 1998; for review, see Pargament, Falb, Ano, & Wachholtz, 2013) describe acute R/S struggles after specific stressful life events (SLEs; e.g., serious illnesses, losses, disasters, and conflicts). Despite this wealth of associative evidence, important questions remain about the relation of SLEs to R/S struggles. Specific SLEs can predict R/S struggles, but could R/S struggles also arise in the course of normal development or daily life without acute SLEs? Although most studies to date have focused on R/S struggles in response to specific, single SLEs (e.g., chronic illness), R/S struggles could also emerge from cumulative exposure to several life stressors. Exposure to several different SLEs predicts more complex posttraumatic stress symptoms (Cloitre et al., 2009; note that not all SLEs are traumatic or cause posttraumatic stress). This may result indirectly from cumulative effects of SLE on R/S struggles (Wortmann, Park, & Edmondson, 2011).

We tested the direct-effects hypothesis that exposure to a greater quantity of SLEs predicts greater R/S struggles. We had three reasons for this hypothesis. First, multiple SLE experiences, considered individually, should provide more potential causes or catalysts for R/S struggles. Second, an accumulation of stressors could overwhelm persons, severely taxing their religious orienting systems and coping resources (see Pargament, 1997, 2007), increasing the odds of R/S struggles because of any one SLE or their sum. Third, a large number of SLEs, especially early in life, could foster a view of the world as fundamentally chaotic and unsafe (Janoff-Bulman, 1992) and might negatively affect personal images of God. These perceptions could trigger R/S struggles.

Two longitudinal studies of college students have tested the direct-effects hypothesis. Haugen (2011) found that cumulative SLEs between the first and fourth college years predicted increased R/S struggles over that same period. Wortmann, Park, & Edmondson (2011) also used SLEs during the first year of college to predict greater R/S struggles, which in turn predicted increasing posttraumatic stress disorder symptoms. Thus, both studies supported the direct-effects hypothesis. However, both studies used single-university samples, and both measured only divine and demonic struggles. Neither addressed the potential role of religiousness in the relationship of SLEs to R/S struggles. Our study also expands coverage to moral, interpersonal, ultimate meaning and doubt struggles.

Religiousness as a Buffer: A Moderation Hypothesis

Might religiousness weaken the link between SLEs and R/S struggles? Religion can provide a meaning framework that helps people to manage emotional and behavioral reactions to stress (Park, 2013) as well as a vehicle for social support (Ellison & George, 1994; Koenig et al., 1997). Hence, a strong religious orienting system might buffer effects of SLEs on R/S struggles (Pargament, 1997), weakening correlations between SLEs and the RSS among more religious individuals or communities. To our knowledge, only Trevino, Pargament, Krause, Ironson, and Hill (2017) have tested this buffering hypothesis but without a measure of religiousness per se. Using a large representative sample of the United States, a weakly positive interaction with insecure attachment to God increased the predictive effect of SLEs on R/S struggles; however, religious hope did not moderate the predictive effect of SLEs.

Given this equivocal potential for religiousness to affect coping processes, we estimated its interaction with SLEs as a predictor of R/S struggles. Interaction analysis required estimation of main effects of religiousness on R/S struggles, although no consistent relationship between the RSS factors and religiousness has emerged in the past. Prior studies have mostly linked general religiousness with higher levels of demonic and moral struggles and lower levels of ultimate meaning struggle (Exline et al., 2014). Stauner, Exline, Grubbs, et al. (2016) expanded reanalysis of these relationships and found all correlations between religiousness and the RSS to be more negative in a sample from a Christian university in the Pacific coastal United States compared with two religiously nonaffiliated university samples from the Great Lakes region and an Amazon Mechanical Turk sample. Primarily, divine, ultimate meaning, and doubt struggles correlated negatively with religiousness, whereas religiousness correlated less strongly with demonic and moral struggles. Individuals who are highly religious or from a religious subculture might experience R/S struggles differently from others, perhaps in different relation to SLEs as well. For instance, certain religious cultures might promote the internalization of responsibility for SLE, which could cause SLEs to correlate more to moral struggles than to divine struggles.

Given evidence of modest correlations between R/S struggles and religiousness, this study tested a less direct predictive role for religiousness as a control variable and moderator of SLE (Stauner, Exline, Grubbs, et al., 2016). This study drew from the same four large samples to test the independent relationship between SLE and R/S struggles (direct-effects hypothesis) and any differences in effects across samples or kinds of R/S struggles. We controlled direct effects of religiousness and tested for moderating effects (buffering hypothesis). We expected weaker effects of SLEs on R/S struggles for more religious participants and for the West Coast Christian university sample (referred to in Stauner, Exline, Grubbs, et al., 2016, described below).

Method

Participants

We recruited undergraduates (median age = 19 years, median average deviation = 1) from three universities—one Christian university on the Pacific coast ($N = 1,102$) and two religiously unaffiliated universities near the Midwestern Great Lakes (public university, $N = 1,946$; private university, $N = 1,019$)—and adult workers from Amazon Mechanical Turk (MTurk; $N = 1,397$; median age = 31 years, median average deviation = 6). We compensated undergraduates with partial course credit and MTurk workers with \$3 USD.

All participants lived in the United States and completed the survey in English between 2012 and 2015. Most identified as women (54–63%), heterosexual (87–97%), or ethnically White (63–74%). All samples had similar proportions of Black (6–8%), Latino (2–6%), and multiethnic (8–10%) participants, but MTurk participants included slightly fewer Asians (5% vs. 10–15% in university samples). Proportions of Christian and nonreligious affiliations varied, with 98% Christians and 1% nonreligious at the West Coast Christian university, 73/20%, respectively, at the Midwestern public university, 43/35% at the Midwestern private university, and 45/40% in the MTurk sample. Stauner, Exline,

Grubbs, et al. (2016) reported more demographic details of these samples and reviewed support for the comparability of data from the undergraduate and MTurk populations (published with open access). All samples spanned the full range of religiousness, but the West Coast Christian university had much higher latent means.

Measures

The RSS (Exline et al., 2014) includes 26 indicators of six factors (Divine, Demonic, Interpersonal, Moral, Ultimate Meaning, and Doubt struggles), each rated on a 5-point Likert-type scale for applicability over the past few months. Its total reliability was $\omega = .96-.97$ across our samples. Participants rated frequencies of 19 stressful life events in a widely used checklist by Turner and Lloyd (1995; e.g., “Did your parents get a divorce?” “Has a spouse, child, or other loved one died?” “Have you ever been sexually abused or sexually assaulted?” “Were you regularly physically abused by one of your parents?”) as either *no*; *yes, once*; or *yes, more than once* ($\omega = .90-.93$). We treated *yes, more than once* as equal to two. All samples’ medians = 2–4 and median average deviations = 3 (median average deviations = 5 in the MTurk sample). We used each participant’s average (not total) frequency of SLE experiences to avoid biasing scores downward because of missing responses.

We fit a bifactor model of general religiousness (see below) using belief salience (Blaine & Crocker, 1995) and participation (Exline, Yali, & Sanderson, 2000) measures ($\omega = .92-.97$). Four belief salience items (e.g., “My religious/spiritual beliefs lie behind my whole approach to life”) were rated on an 11-point scale from *strongly disagree*, 0, to *strongly agree*, 10. Frequencies of six R/S acts (e.g., “prayed or meditated”) in the past week were reported on a 6-point scale from *not at all* to *more than once per day*.

Results

We estimated a four-sample structural equation model (SEM) in R (R Core Team, 2015) using the *lavaan* package (Rosseel, 2012) and the unweighted least squares estimator with mean- and variance-adjusted standard errors and fit statistics (Yang-Wallentin, Jöreskog, & Luo, 2010). The SEM predicted all six latent RSS factors from average SLE frequency (treated as a roughly continuous measured variable), religiousness, and its latent interaction with SLE. To create indicators for interaction factors, we treated ratings of religiousness factor indicators as continuous interval measurements, multiplied each by average SLE frequency and estimated loadings for these product indicators on one common factor (Marsh, Wen, & Hau, 2004). The religiousness and RSS factors used polychoric correlations to represent ordinal covariances.¹ The six-factor RSS measurement model (Exline et al., 2014) has simple structure ($\lambda = .66-.92$).

Religious belief salience (RBS) and religious participation (RP) items correlated very strongly, but both sets of items also had internal covariance. Therefore, we used a restricted bifactor measurement model (Reise, Moore, & Haviland, 2010) to estimate a general latent factor of religiousness and two orthogonal group factors to explain and control covariance that was unique to indicators of either RBS or RP, not both (see Figure 1). We also

estimated the latent religiousness \times SLE interaction factor and interaction factors for RBS \times SLE and RP \times SLE as a restricted bifactor model. We defined the group factors for RBS, RP, and their interactions with SLE as orthogonal to all constructs to maintain a parsimonious model.

We reused criteria from Stauner, Exline, Grubbs, et al. (2016) to exclude participants with missing RSS or religiousness data, attention check errors, or extremely invariant RSS responses.² We excluded 360 more participants who did not answer the stressful life events (SLE) questionnaire and three who responded *Yes, more than once* to all 19 SLE items (we doubt these responses’ validity). We retained 998 west coastal Christian university participants, 1,716 from the Midwestern public university, 964 from the Midwestern private university, and 997 from MTurk.

To confirm the replicability and generalizability of our results, we used multisample SEM on all four data sets simultaneously with invariant measurement models. Previous research established measurement invariance for the RSS and religiousness across our samples, but latent means vary, with the west coastal Christian university scoring highest in all (Stauner, Exline, Grubbs, et al., 2016). This study’s SEM allowed latent factors’ variances to differ as well, achieving adequate scaled fit statistics with equality constraints on loadings ($\chi^2_{(4,086)} = 6,972$, CFI = .93, RMSEA = .03). We accepted this model with equal loadings across samples and examined path coefficients.

Religiousness predicted the RSS differently across samples and factors (see Table 1). Our regression model controlled effects of SLE and its interactions with religiousness, yielding effect sizes similar to latent correlations reported in Stauner, Exline, Grubbs, et al. (2016). SLE independently predicted slightly more R/S struggles of all kinds in all samples ($\beta_s = .08-.24$). The SLE \times religiousness interaction factor predicted RSS factors insignificantly, except Demonic struggle for the west coastal Christian university ($\beta = .08$, $p = .006$).

To test if SLE effects differed across samples and RSS factors, we constrained all SLE regression paths to be equal. This SEM’s fit differed insignificantly from the less constrained SEM (scaled difference test $\chi^2_{(1,86)} = 3.94$, $p = .12$), and other fit statistics improved ($\Delta CFI = .030$, $\Delta RMSEA = -.006$). Further constraining path coefficients for the SLE \times religiousness interaction

¹ This SEM with equal interaction effects across samples and RSS factors estimated negative variance ($s^2 = -.01$) for the RBS \times SLE interaction group factor in the West Coast Christian university sample. This casts minor doubt on the SEM’s validity in general, but all other fit statistics and parameters seemed optimal and very similar to the results without this constraint.

² An SEM using the unrestricted bifactor measurement model for the RSS (Stauner, Exline, Grubbs, et al., 2016) estimated independent effects of SLE, religiousness, and their interaction on the general RSS factor. SLE effects ranged from weakly positive to null ($\beta_s = -.02$ to $.16$ across samples). No effects of the SLE \times religiousness interaction emerged ($\beta_s = -.04$ to $.04$). We could not distinguish any effects on the general RSS factor from random noise (even two religiousness effects with $\beta_s > .80$), possibly because of the general RSS factor’s very small total variance ($s^2 = .13-.23$ across samples, including covariances and disturbance).

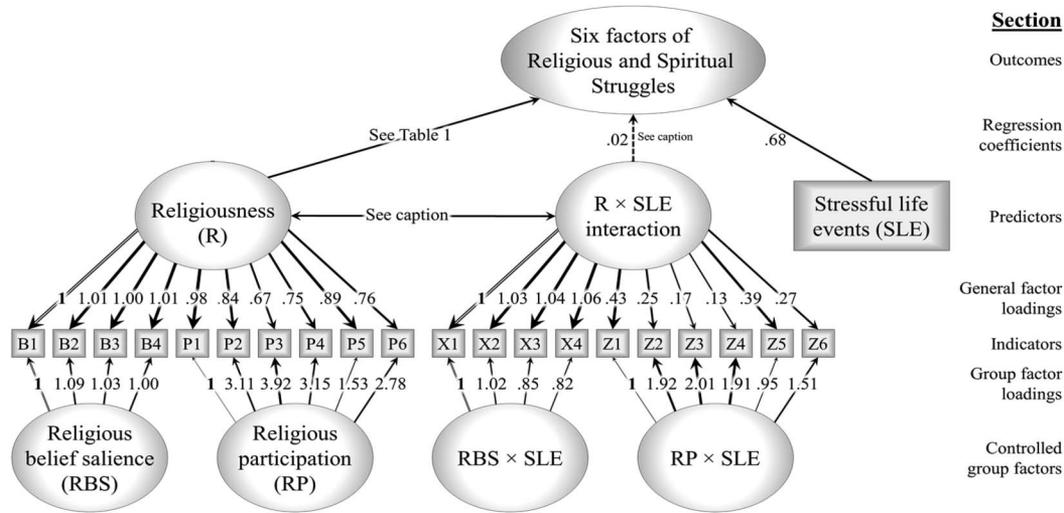


Figure 1. Restricted bifactor measurement models for religiousness and its interaction with SLE as predictors of RSS factors. The RSS factor represents all six RSS factors included in one SEM. These unstandardized path coefficients apply to all samples and RSS factors, except the R × SLE regression coefficient, which varied in this SEM. That path’s $\beta = .02$ ($p = .23$; dashed arrow) is based on a separate SEM with that path constrained across samples (see Footnote 3). For its unconstrained values and for the religiousness regression path, see Table 1. The correlation of religiousness with latent R × SLE varied across samples ($r = -.12$ to $.13$). The SEM set omitted pathways to zero. For identification, each factor’s first loading $\lambda_1 = 1$ (bold; hollow arrow). Loading line weights vary in proportion to their mean standardized coefficients across samples (standardized values varied with the latent variances). RBS × SLE interaction product indicators X1–X4 = B1–B4 × SLE. RP × SLE indicators Z1–Z6 = P1–P6 × SLE.

gave similar results ($\chi^2_{(2,20)} = 1.53, p = .51; \Delta CFI = .001, \Delta RMSEA = < .001$).³

To test for a nonlinear interaction of SLE and religiousness, we predicted regression scores from the SEM with constrained loadings and SLE effects. We added the product of religiousness and religiousness × SLE factor scores as a predictor in robust regressions. All quadratic interaction β s = $-.09$ – $.03$; only two were significant (p s = $.05$ and $.03$ using Holm corrections). Given only weak and inconsistent results, we did not interpret them further.

In sum, these tests replicated the main effects of SLE on R/S struggles and the lack of SLE × religiousness interaction effects across samples. SLE effects applied equally to all R/S struggles,⁴ unlike religiousness effects. Religiousness did not interact with SLE substantially.

Discussion

This study produced consistent support for the direct-effects hypothesis, albeit with a modest effect size: cumulative SLEs predicted somewhat greater R/S struggles independently of religiousness. This effect held stable across all four samples and all six RSS factors. This result extends the evidence from studies of divine and demonic struggles (Haugen, 2011; Wortmann, Park, & Edmondson, 2011) to other types of R/S struggles. Major life stressors can shake and shatter assumptions about oneself and the benevolence of the world (Janoff-Bulman, 1992); cumulative life stress may also disrupt core R/S beliefs, values, relationships, and practices. However, the modest effect indicates R/S struggles often occur without SLEs as well.

Future research may examine whether cumulative stress leads to R/S struggle through a weakened R/S orienting system, more chaotic worldviews, or less favorable images of God. New samples from different regions, age groups, cultures, and religions would help to evaluate the generalizability of these links. Surveys could ask whether participants explicitly relate specific R/S struggles to specific SLEs after collecting general data on R/S struggles and SLEs. If some people do not connect specific R/S struggles to specific SLEs, this design could support the hypothesis that SLEs can lead to R/S struggles indirectly, without conscious connections from specific SLEs that provoke R/S struggles. Stronger evidence of causality would also help reinforce this hypothesis, which rests on the assumption that R/S struggles will not generally cause SLEs. Exceptions probably exist—for example, R/S struggles might increase the risk of addictive behavior (Faigin, Pargament, & Abu-Raiya, 2014)—but we assume that SLEs generally precede R/S struggles. Still, our purely correlational data cannot rule out

³ As in that study, we excluded 328 participants for attention check failures and invariant responses, 98 more participants for missing religiousness or RSS data, and 611 participants who did not receive measures of religiousness in a second MTurk survey not mentioned above.

⁴ Polychoric correlations estimate relationships between normally distributed latent versions of ordinal measured items by estimating thresholds corresponding to transitions between response options (e.g., where a latent change would change a response from *agree* to *strongly agree*). Both R/S struggles and SLEs have skewed distributions. Bias introduced by treating their ordinal responses as continuous would exceed the small bias resulting from assuming latent normality.

Table 1

Standardized Multiple Regression Coefficients for Latent Religiousness and Stressful Life Events as Interacting Predictors of Religious and Spiritual Struggles

RSS factor	Predictor															
	Religiousness (R)				Stressful life events (SLE)				R × SLE interaction				Variance predicted R ²			
	WCC	MWU	MWR	GMT	WCC	MWU	MWR	GMT	WCC	MWU	MWR	GMT	WCC	MWU	MWR	GMT
Divine	-.33	.05	.31	.18	.14	.23	.19	.18	.00	.00	-.02	.02	.13	.04	.12	.08
Demonic	.15	.60	.69	.64	.17	.17	.16	.19	.08	.02	.04	.03	.05	.39	.49	.45
Interpersonal	-.19	.06	.22	-.03	.21	.24	.19	.22	.05	-.01	-.03	.04	.07	.05	.08	.07
Moral	-.06	.42	.48	.35	.08	.13	.19	.16	.06	-.04	-.02	.03	.03	.21	.26	.17
Ultimate meaning	-.40	-.12	.08	-.20	.13	.22	.22	.20	.06	.01	.02	.05	.18	.05	.03	.09
Doubt	-.34	.01	.26	.12	.08	.17	.15	.14	.02	.01	-.01	.03	.13	.03	.09	.06

Note. WCC = West Coast Christian university; MWU = Midwestern public university; MWR = Midwestern private university; GMT = general Mechanical Turk sample. In this structural equation model, all factor loadings were constrained to be equal across samples, but regression paths and variances were allowed to vary across samples and factors. All effects of size $\beta \geq .08$ differed significantly from zero ($p < .01$, except religiousness as a predictor of ultimate meaning struggle in the Midwestern private university sample: $p = .03$). Only effects of religiousness differed significantly across samples and factors of the Religious and Spiritual Struggles Scale.

third-variable issues such as other, potentially mutual causes of SLEs and R/S struggles (e.g., poverty, regional risks).

We found no support for the buffering hypothesis predicting a negative interaction effect of SLEs and general religiousness on R/S struggles. Of 24 path coefficients estimated (six each in four samples), only one differed significantly from zero, but in the direction opposite of our hypothesis, and very weakly at that. However, because we focused on general religiousness in this study, it remains possible that other, more proximal religious variables could serve as buffers against R/S struggles. Future work should consider factors such as religious coping or support or a perceived relationship with God as potential buffers of any effects of SLEs on R/S struggles. Religious hope has not received empirical support as such a buffer (Trevino et al., 2017).

Although R/S beliefs and communities provide comfort and support for many (e.g., a promise of ultimate salvation), ordinary experience and practice of R/S may be irrelevant for some people facing SLEs. Yet others may encounter R/S obstacles (e.g., taboos about divulging sexual abuse) when coping with SLEs, possibly in proportion to their embeddedness within R/S culture. Religiousness could also lead some people to appraise SLEs as threats, sacred losses, or desecrations (Pargament, Magyar, Benore, & Mahoney, 2005), which could increase rather than decrease the likelihood of subsequent R/S struggles in response to SLEs (e.g., questioning God's love). Any stress-exacerbating effects of religiousness (positive interactions, such as the moderating effect of insecure attachment to God; Trevino, Pargament, Krause, Ironson, & Hill, 2017) could suppress any buffering effect and result in a near-zero total interaction. Longitudinal research could support this idea if, after SLEs, religiousness predicts more R/S struggles that also resolve more quickly.

Overall, our results speak to the importance of cumulative life stressors in the phenomenology of many kinds of R/S struggles. Cumulative stress predicts well-being not only emotionally, socially, and physically but spiritually as well. This risk transcends differences among R/S struggles and individual differences in religiousness. These conclusions highlight the need for awareness of the diverse challenges people may face when coping with SLEs, regardless of the strength of their personal religious beliefs or practices.

References

- Abu-Raiya, H., Pargament, K. I., Krause, N., & Ironson, G. (2015). Robust links between religious/spiritual struggles, psychological distress, and well-being in a national sample of American adults. *American Journal of Orthopsychiatry*, 85, 565–575. <http://dx.doi.org/10.1037/ort0000084>
- Ano, G. G., & Pargament, K. I. (2013). Predictors of spiritual struggles: An exploratory study. *Mental Health, Religion & Culture*, 16, 419–434. <http://dx.doi.org/10.1080/13674676.2012.680434>
- Blaine, B., & Crocker, J. (1995). Religiousness, race, and psychological well-being: Exploring social psychological moderators. *Personality and Social Psychology Bulletin*, 21, 1031–1041. <http://dx.doi.org/10.1177/01461672952110004>
- Cloitre, M., Stolbach, B. C., Herman, J. L., van der Kolk, B., Pynoos, R., Wang, J., & Petkova, E. (2009). A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity. *Journal of Traumatic Stress*, 22, 399–408. <http://dx.doi.org/10.1002/jts.20444>
- Ellison, C. G., & George, L. K. (1994). Religious involvement, social ties, and social support in a southeastern community. *Journal for the Scientific Study of Religion*, 33, 46–61. <http://dx.doi.org/10.2307/1386636>
- Exline, J. J. (2013). Religious and spiritual struggles. In K. I. Pargament (Ed.-in-Chief), J. J. Exline, & J. W. Jones (Associate Eds.), *APA handbook of psychology, religion, and spirituality (Vol. 1: Context, theory, and research)*; pp. 459–475. Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/14045-025>
- 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. <http://dx.doi.org/10.1037/a0036465>
- Exline, J. J., & Rose, E. D. (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: Guilford Press.
- Exline, J. J., Yali, A. M., & Sanderson, W. C. (2000). Guilt, discord, and alienation: The role of religious strain in depression and suicidality. *Journal of Clinical Psychology*, 56, 1481–1496. [http://dx.doi.org/10.1002/1097-4679\(200012\)56:12<1481::AID-1>3.0.CO;2-A](http://dx.doi.org/10.1002/1097-4679(200012)56:12<1481::AID-1>3.0.CO;2-A)
- Faigin, C. A., Pargament, K. I., & Abu-Raiya, H. (2014). Spiritual struggles as a possible risk factor for addictive behaviors: An initial empirical investigation. *International Journal for the Psychology of Religion*, 24, 201–214. <http://dx.doi.org/10.1080/10508619.2013.837661>
- Grubbs, J. B., Wilt, J., Stauner, N., Exline, J. J., & Pargament, K. I. (2016). Self, struggle, and soul: Linking personality, self-concept, and religious/

- spiritual struggle. *Personality and Individual Differences*, 101, 144–152. <http://dx.doi.org/10.1016/j.paid.2016.05.365>
- Harris, J. I., Erbes, C. R., Engdahl, B. E., Ogden, H., Olson, R. H., Winkowski, A. M. M., . . . Mataas, S. (2012). Religious distress and coping with stressful life events: A longitudinal study. *Journal of Clinical Psychology*, 68, 1276–1286. <http://dx.doi.org/10.1002/jclp.21900>
- Haugen, M. R. G. (2011). *Does trauma lead to religiousness? A longitudinal study of the effects of traumatic events on religion and spirituality during the first three years at university* (Unpublished doctoral dissertation). Bowling Green State University, Bowling Green, Ohio.
- Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. New York, NY: Free Press.
- Johnson, C. V., & Hayes, J. A. (2003). Troubled Spirits: Prevalence and predictors of religious and spiritual concerns among university students and counseling center clients. *Journal of Counseling Psychology*, 50, 409–419. <http://dx.doi.org/10.1037/0022-0167.50.4.409>
- Koenig, H. G., Hays, J. C., George, L. K., Blazer, D. G., Larson, D. B., & Landerman, L. R. (1997). Modeling the cross-sectional relationships between religion, physical health, social support, and depressive symptoms. *American Journal of Geriatric Psychiatry*, 5, 131–144. <http://dx.doi.org/10.1097/00019442-199721520-00006>
- Marsh, H. W., Wen, Z., & Hau, K. T. (2004). Structural equation models of latent interactions: Evaluation of alternative estimation strategies and indicator construction. *Psychological Methods*, 9, 275–300. <http://dx.doi.org/10.1037/1082-989X.9.3.275>
- Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, and practice*. New York, NY: Guilford Press.
- Pargament, K. I. (2007). *Spiritually integrated psychotherapy: Understanding and addressing the sacred*. New York, NY: Guilford Press.
- Pargament, K. I., Falb, M., Ano, G., & Wachholtz, A. (2013). Religion and coping. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of psychology of religion and spirituality* (pp. 560–579). New York, NY: Guilford Press.
- Pargament, K. I., Koenig, H. G., Tarakeshwar, N., & Hahn, J. (2001). Religious struggle as a predictor of mortality among medically ill elderly patients: A 2-year longitudinal study. *Archives of Internal Medicine*, 161, 1881–1885. <http://dx.doi.org/10.1001/archinte.161.15.1881>
- Pargament, K. I., Magyar, G. M., Benore, E., & Mahoney, A. (2005). 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. <http://dx.doi.org/10.1111/j.1468-5906.2005.00265.x>
- Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion*, 37, 710–724. <http://dx.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* (2nd ed., pp. 257–279). New York, NY: Guilford Press.
- R Core Team. (2015). R: A language and environment for statistical computing. R Foundation for Statistical Computing (Version 3.2.2). Vienna. Retrieved from <http://www.R-project.org/>
- Reise, S. P., Moore, T. M., & Haviland, M. G. (2010). Bifactor models and rotations: Exploring the extent to which multidimensional data yield univocal scale scores. *Journal of Personality Assessment*, 92, 544–559. <http://dx.doi.org/10.1080/00223891.2010.496477>
- Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. Version 0.5–20. *Journal of Statistical Software*, 48, 1–36. Retrieved from <http://www.jstatsoft.org/v48/i02/>
- 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 [open access]. *Religions*, 7, 68. <http://dx.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.
- Trevino, K. M., Balboni, M., Zollfrank, A., Balboni, T., & Prigerson, H. G. (2014). Negative religious coping as a correlate of suicidal ideation in patients with advanced cancer. *Psycho-Oncology*, 23, 936–945. <http://dx.doi.org/10.1002/pon.3505>
- Trevino, K., Pargament, K. I., Krause, N., Ironson, G., & Hill, P. C. (2017). Stressful life events and religious/spiritual struggle: Moderating effects of the general orienting system. *Psychology of Religion and Spirituality*. Advance online publication. <http://dx.doi.org/10.1037/rel0000149>
- Turner, R. J., & Lloyd, D. A. (1995). Lifetime traumas and mental health: The significance of cumulative adversity. *Journal of Health and Social Behavior*, 36, 360–376. <http://dx.doi.org/10.2307/2137325>
- Wilt, J. A., Grubbs, J. B., Pargament, K. I., & Exline, J. J. (2017). Religious and spiritual struggles, past and present: Relations to the Big Five and well-being. *International Journal for the Psychology of Religion*, 27, 51–64. <http://dx.doi.org/10.1080/10508619.2016.1183251>
- Wortmann, J. H., Park, C. L., & Edmondson, D. (2011). Trauma and PTSD symptoms: Does spiritual struggle mediate the link? *Psychological Trauma: Theory, Research, Practice, and Policy*, 3, 442–452. <http://dx.doi.org/10.1037/a0021413>
- Yang-Wallentin, F., Jöreskog, K. G., & Luo, H. (2010). Confirmatory factor analysis of ordinal variables with misspecified models. *Structural Equation Modeling*, 17, 392–423. <http://dx.doi.org/10.1080/10705511.2010.489003>

Received October 10, 2016

Revision received September 30, 2017

Accepted February 27, 2018 ■