

Stressful Events and Religious/Spiritual Struggle: Moderating Effects of the General Orienting System

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Religious/spiritual struggle (R/S struggle) often occurs in the context of stressful life events and is consistently associated with higher levels of psychological distress. However, little is known about the factors that cushion or exacerbate the effects of stressful life events on R/S struggle. The orienting system is an individual's general way of viewing and dealing with the world and includes resources and burdens for handling stressful events. This study examines the moderating effect of emotional, social, spiritual, behavioral, and cognitive domains of the orienting system on the relationship between stressful life events and R/S struggle in a cross-sectional study of a nationally representative sample of U.S. adults. Multiple indicators of each domain were examined. The results indicated that emotional (anger, death anxiety), social (social isolation), behavioral (smoking status), and spiritual (insecure relationship with God) burdens moderated the relationship between stressful life events and R/S struggle. Cognitive (self-esteem, optimism), social (emotional support), and spiritual (religious hope) resources did not moderate this relationship. These results indicate that multiple components of the orienting system function as burdens that magnify the relationship between stressful life events and R/S struggle. Further, these findings point to potential clinical targets for reducing the intensity of R/S struggle in the context of stressful life events.

Keywords: religious/spiritual struggle, stressful events, resources, burdens

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Historically, research on religion and spirituality (R/S) has focused on positive characteristics and outcomes of R/S. More recently, a growing body of work has examined the potentially detrimental or challenging aspects of R/S, including R/S struggle. R/S struggle occurs when “some aspect of R/S belief, practice or experience becomes a focus of negative thoughts or emotions concern or conflict” (Exline, Pargament, Grubbs, & Yali, 2014) and is characterized by spiritual conflicts with others, a strained relationship with the divine, and intrapersonal spiritual strains, such as doubt about one's religious beliefs (Pargament, Murray-Swank, Magyar, & Ano, 2005; Pargament, Smith, Koenig, & Perez, 1998).

Although R/S struggle is not necessarily highly prevalent or experienced at intensive levels (Abu-Raiya, Pargament, Krause, & Ironson, 2015; Ellison, Fang, Flannelly, & Steckler, 2013), it is predictive of outcomes. R/S struggle is consistently associated with negative outcomes including higher levels of depression (Ai, Park, Huang, Rodgers, & Tice, 2007; Ellison et al., 2013) and anxiety (McConnell, Pargament, Ellison, & Flannelly, 2006; McGee, Myers, Carlson, Funai, & Barclay, 2013; Sherman, Plante, Simonton, Latif, & Anaissie, 2009), lower levels of life satisfaction and quality of life (Pargament, Koenig, Tarakeshwar, & Hahn, 2004; Pedersen, Pedersen, Pargament, & Zachariae, 2013; Tarakeshwar et al., 2006), greater distress (Brelsford, Mondell, Raldiris, & Ramirez, 2015; Wilt, Exline, Grubbs, Park, & Pargament, 2016), and difficulty adjusting to loss (Lichtenthal, Burke, & Neimeyer, 2011; Wortmann, Park, & Edmondson, 2012). These relationships also emerge in studies of pastoral professionals that have shown that spiritual dryness, an indicator of R/S struggle characterized by feeling “spiritually empty” and distant from God, is associated with higher levels of emotional exhaustion (Chandler, 2009) and anxiety and depression (Frick, Büssing, Baumann, Weig, & Jacobs, 2016).

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R/S struggle often appears to be triggered by stressful life events. For example, Vietnam veterans report higher levels of R/S struggle than matched population controls (Currier, Drescher, & Harris, 2014). Among veterans, those with high levels of exposure to combat report greater R/S struggle than veterans with lower levels of combat exposure (Park et al., 2016). In a national sample, the positive relationships between R/S struggle and anxiety and phobic anxiety were stronger among participants who had experienced a recent illness (McConnell et al., 2006). A potential explanation for these relationships is that stressful experiences challenge individuals' belief systems and views of the world, undermining the beliefs and behaviors people rely on in the course of daily life (Pargament et al., 2005).

However, it may be that some belief systems and views of the world are more vulnerable to stressful experiences than other components of the orienting system. Therefore, characteristics of an individual's orienting system itself may explain why some people have negative experiences, such as R/S struggle, after stressful events and others do not. The orienting system is an individual's "general way of viewing and dealing with the world" (Pargament, 2001, p. 99). It is multidimensional and includes core beliefs (e.g., life is fair), behavioral practices (e.g., diet), emotionality (e.g., anger), social connections (e.g., relationships with family/friends), and R/S factors (e.g., relationship with God). Resources within the orienting system such as strong social support and a secure relationship with God may be particularly helpful in the context of stressful life events by lending guidance and stability, thereby reducing the impact of those events on distress (Pargament, 2001). However, burdens within the orienting system such as negative emotions and unhealthy lifestyle behaviors are deficits that may increase distress after a disruptive life event.

Orienting System Burdens

Research has not examined the impact of burdens and resources of the orienting system as potential exacerbators or buffers of the relationship between stressful life events and R/S struggle. Emotional, cognitive, social, spiritual, and behavioral components of the orienting system have been associated with greater R/S struggle, suggesting they may function as burdens within the orienting system. For example, negative emotions such as anger, depression, and anxiety have been positively associated with R/S struggle (Exline et al., 2014; Pirutinsky, Rosmarin, Pargament, & Midlarsky, 2011; Trevino et al., 2010). Cognitive factors such as negative appraisals of a stressor have also been associated with greater R/S struggle (Ano & Pargament, 2013) and may be cognitive burdens within the orienting system.

Behavioral factors may also be burdens that impact the relationship between stressful life events and R/S struggle. Unhealthy lifestyle behaviors such as less vegetable consumption (Holt, Clark, Debnam, & Roth, 2014) and greater alcohol (Holt et al., 2014) and tobacco use (Horton & Loukas, 2013) have been associated with higher levels of R/S struggle. Higher levels of R/S struggle have also been associated with increases in addiction for multiple substances including caffeine, tobacco, food starving, prescription and recreational drugs, sex, and work (Faigin, Pargament, & Abu-Raiya, 2014). Finally, spiritual and religious components of the orienting system such as an insecure attachment to God (Ano & Pargament, 2013), belief in a nonbenevolent God, and

belief that suffering is part of God's plan are associated with higher levels of R/S struggle (Wilt et al., 2016). Many of these studies do not examine potential mediators and moderators of the relationships between orienting system burdens and R/S struggle. It is possible, therefore, that these relationships are explained by other factors. Yet, these findings suggest that components of the orienting system are burdensome and increase individuals' risk for R/S struggle.

Orienting System Resources

Emotional, cognitive, social, spiritual, and behavioral components of the orienting system may also be resources that buffer the relationship between stressful life events and R/S struggle. For people facing stressful life events, cognitive components of the orienting system such as a positive view of the world (Cotton et al., 2006; Warren, Van Eck, Townley, & Kloos, 2015) and the self (Bradley, Schwartz, & Kaslow, 2005; Cotton et al., 2006; Trevino et al., 2010) are negatively associated with R/S struggle. Social components of the orienting system such as higher levels of social support have been associated with less R/S struggle in medical patients (Dalmida, Koenig, Holstad, & Wirani, 2013; Trevino et al., 2010), community samples (Werdell, Dy-Liacco, Ciarrocchi, Wicks, & Breslford, 2014), and undergraduate college students experiencing R/S struggle (Desai & Pargament, 2015). Religious and spiritual components of the orienting system may also buffer the relationship between stressful life events and R/S struggle. Orienting systems with strong spiritual components are associated with a weaker relationship between R/S struggle and poor adjustment (Abu-Raiya, Pargament, & Krause, 2016) and R/S struggle resolution (Desai & Pargament, 2015).

As this overview reveals, an array of factors may play a role in the genesis of R/S struggle. One strategy for understanding the scope of influential factors is to examine which factors moderate the relationship between stressful life events and R/S struggle. Despite strong evidence that various components of the orienting system are related to the experience of R/S struggle, the moderating effect of these factors on the relationship between stressful life events and R/S struggle has not been examined. In the current study, we examine whether emotional, social, spiritual, behavioral, and cognitive components of the orienting system moderate the relationship between stressful life events and R/S struggle. This focus is justified by previous research suggesting that R/S struggle can be triggered by stressful life events. This study takes a comprehensive view of the factors that may buffer or exacerbate the relationship between stressful life events and R/S struggle. We hypothesize that resources within the orienting system (i.e., emotional support, religious hope, self-esteem, and optimism) will be associated with a weaker relationship between the number of stressful life events experienced and R/S struggle while burdens (i.e., anger, death anxiety, social isolation, insecure relationship with God, smoking status, and alcohol abuse) will be associated with a stronger relationship between stressful life events and R/S struggle.

Method

Participants and Procedures

The Landmark Spirituality and Health Survey (LSHS) is a cross-sectional study of a nationally representative sample of US

adults age 18 years and older. Approval for the study was obtained from the Institutional Review Board of the University of Michigan. Data were collected in all states with the exception of Alaska and Hawaii. The National Opinion Research Center (NORC), based in Chicago was responsible for data collection that was completed in 2014. The NORC 2010 National Sampling Frame was the basis for sampling procedures. The sampling frame was based on two sources. First, the majority of the database was identified through postal address lists compiled by the United States Postal Service (USPS). Second, field employees were sent to enumerate all houses in areas where USPS address lists were unavailable.

The sampling procedure involved three steps. First, National Sampling Areas (NFAs) were formed by dividing counties and metropolitan areas into geographic units of selected sizes. Forty-four NFAs were chosen with probabilities proportional to size. Second, the NFAs were divided into sections consisting of Census tracts and block groups. Sections were selected with probabilities proportional to size. Housing units were sampled in the third and final step. Each housing unit within each section had equal chance of being chosen. The dwellers of each housing unit sampled were contacted to participate in the study and be interviewed. The response rate for the study was 50%.

The current sample ($n = 2,115$) includes participants who experienced at least one life stressor in the past 18 months ($n = 2,547$) and had complete data on the measure of R/S struggle ($n = 2,197$). Atheists were excluded ($n = 62$) as they were not administered the R/S struggle measure. Before all analyses, the sample was weighted to adjust for demographic differences between the sample and the population of U.S. adults.

Measures

Sample characteristics. Sample characteristics were assessed by self-report and included age, gender, number of years of education, race/ethnicity, marital status, income, and religious affiliation. Response options for marital status included married, separated, divorced, widowed, never married, and living in a committed relationship (but not married). For analytic purposes, these responses were dichotomized into married and "other." Response options for religious affiliation included Catholic or Roman Catholic, Protestant, Jewish, Islam, Buddhist, Hindu, other, no religious preference, agnostic (not sure there is a God), atheist (there is no God), do not know, and refuse. Responses were dichotomized into Christian (Catholic or Protestant) and all other responses.

Stressful life events. Participants completed a checklist of 12 stressful life events (e.g., death of a close friend, separation or divorce) based on the work of Moos and colleagues (Moos, Cronkite, Billings, & Finney, 1984). Participants selected all events they experienced in the past 18 months. A simple count of the number of events experienced by each participant was calculated. The five most commonly endorsed events included moving to a new residence (32.2%), income decreased by 20% or more (33.0%), death of a close friend (38.9%), trouble with family members (47.3%), and serious illness or injury of family member (48.0%).

R/S struggle. R/S struggle was assessed with a 15-item version of the Religious and Spiritual Struggles Scale (RSS), shortened from the original 26-item version to reduce participant bur-

den (Exline et al., 2014). Participants were asked to identify the most stressful event they experienced in the past 18 months and then were instructed: "Please think about the specific event you just identified. To what extent have you responded to this event in each of the following ways: not at all (a), a little bit (b), somewhat (c), quite a lot (d), a great deal (e)?" This 15-item version scale represents five types of R/S struggle: Divine (e.g., "Felt as though God had abandoned me"), Demonic (e.g., "Worried that the problems I was facing were the work of the devil or evil spirits"), Interpersonal (e.g., "Was concerned that other people did not respect my religious/spiritual beliefs"), Moral (e.g., "Worried that my actions were morally or spiritually wrong"), and Ultimate-Meaning (e.g., "Felt as though my life had no deep meaning"). Responses to items across all types of R/S struggle were summed to create a total score with higher scores indicating greater R/S struggle ($\alpha = .87$). In support of our focus on the total RSS score, a higher order general RSS factor was found in the validation study (Exline et al., 2014).

Components of the Orienting System

Emotional factors. The emotional component of the orienting systems was assessed with measures of anger and death anxiety. Anger was measured with five items from the widely used scale developed by Cook and Medley (Cook & Medley, 1954). Each item is rated on a 5-point scale and items were summed to create a total score ($\alpha = .80$) with higher scores indicating greater anger. Four items from published scales were used to measure anxiety regarding one's own death (Neimeyer, 1994). Each item is rated on a 5-point scale and item responses were summed with higher scores indicating greater death anxiety ($\alpha = .84$).

Social factor. Social isolation was assessed with three items from published scales (e.g., "How often do you feel left out?"; de Jong-Gierveld, 1978; Peplau & Perlman, 1982; Russell, 1996). Participants rate each item on a 3-point scale with higher scores indicating greater social isolation. Item responses were summed to create total score ($\alpha = .77$). Emotional support received from outside the church was assessed using a modified version of a scale designed to assess social support received from fellow church members (Krause, 2008). Participants rated each of three items on a 4-point scale regarding support received "not counting your minister of fellow church members." Items were summed to create a total score with higher scores indicating more social support ($\alpha = .87$).

Spiritual factor. Three items from the Attachment to God Inventory were used to assess concern about one's relationship with God (Beck & McDonald, 2004). Each item is rated on a 5-point scale and items were summed to create total scores ($\alpha = .81$). Higher scores indicate a more insecure relationship with God. Religious hope was assessed with a three-item short form of the Scioli Trait Hope Scale that includes items to address the attachment and spiritual dimensions of hope (Scioli, Ricci, Nyugen, & Scioli, 2011). Participants rate each item on a 4-point scale. Items were summed with a higher score indicating more religious hope ($\alpha = .92$).

Behavioral factor. The behavioral component of the orienting system was assessed with smoking status and alcohol use. Regarding smoking status, participants were asked "Do you smoke cigarettes now?" Response choices were "yes" (1) and "no" (0).

Alcohol abuse was assessed with the CAGE questionnaire, a widely used screening tool for alcohol problems (Ewing, 1984). The CAGE is a four-item scale; response options were "yes" (1) and "no" (0). Items were summed with higher scores indicating a greater number of risk factors for problematic alcohol use ($\alpha = .71$).

Cognitive factors. Cognitive factors included self-esteem and optimism. Self-esteem was assessed with three items from the Rosenberg Self-Esteem Scale ($\alpha = .72$; Rosenberg, 1965). Participants rate each item on a 5-point scale. Item responses were summed with higher scores indicating higher self-esteem. Three items from the Life Orientation Test (Scheier & Carver, 1985) and a single item on confidence in the future (Krause, 2002) were used to assess optimism ($\alpha = .78$). Participants respond to each item on a 5-point scale. Item responses were summed with higher scores indicating greater optimism.

Analyses

Descriptive statistics were conducted on sample characteristics (age, gender, race, marital status, religious affiliation, income, and education) and the predictor variable (i.e., number of stressful life events), criterion variable (i.e., R/S struggle), and potential moderating variables (i.e., anger, death anxiety, social isolation, emotional support, insecure relationship with God, religious hope, smoking status, alcohol abuse, self-esteem, and optimism). Second, correlations among the predictor, criterion, and potential moderating variables were conducted.

Third, linear regression analyses were used to examine whether the relationship between the number of stressful life events and R/S struggle differed by level of the moderator variables. Model 1 of these analyses included the demographic variables age, gender, education, race, marital status, income, and religious affiliation. Model 2 added the number of stressful life events. In Model 3, each potential moderator was added individually. Model 4 included the product of the number of stressful life events and each potential moderator (e.g., number of stressful life events * self-esteem). Measures of the independent variable and potential moderators were centered for all regression analyses except for smoking status. Graphs of significant interaction effects were created by calculating the relationship between the number of stressful life events and R/S struggle when the moderator variables were equal to 1 *SD* above and below the mean.

Results

Participant Characteristics

Approximately half of the sample was female ($n = 1,235$, 58.4%), White ($n = 1,233$, 58.9%), and married ($n = 902$, 42.8%) with an average age of 45.86 years ($SD = 17.24$). The majority of the sample reported affiliation with a Christian religion ($n = 1,610$, 76.1%). The mean level of education was 13.44 years ($SD = 3.07$) and approximately half of the sample reported an annual total family income of \$39,999 or less ($n = 1,108$, 55.2%; see Table 1).

The sample was restricted to participants who experienced at least one stressful life event in the past 18 months. Of these, participants reported experiencing an average of 3.33 and median

of 3.00 stressful life events in the past 18 months. Consistent with prior studies, participants reported relatively low levels of R/S struggle. They also reported low levels of social isolation and problematic alcohol use. However, participants endorsed moderate levels of anger, death anxiety, self-esteem, and an insecure relationship with God and high levels of emotional support, religious hope, and optimism. One-quarter ($n = 530$, 25.1%) reported currently smoking (see Table 2).

Correlational Analyses

Experiencing a greater number of stressful life events in the past 18 months was positively associated with R/S struggle ($r = .33$, $p < .001$). A greater number of stressful life events was also associated with higher levels of anger, death anxiety, social isolation, an insecure relationship with God and greater problematic alcohol use ($r_s = .08-.27$, all $ps < .001$) and lower levels of

Table 1
Sample Characteristics

Sample characteristic	<i>n</i> (%) ^a
Gender	
Female	1,235 (58.4)
Male	880 (41.6)
Race	
White	1,233 (58.9)
African American	360 (17.2)
Hispanic	427 (20.3)
Asian	50 (2.4)
Marital status	
Married	903 (42.8)
Separated	92 (4.3)
Divorced	322 (15.2)
Widowed	138 (6.6)
Never married	540 (25.6)
Committed relationship	117 (5.5)
Religious affiliation	
Catholic	465 (22.0)
Protestant	588 (27.8)
Jewish	28 (1.3)
Muslim	9 (.4)
Buddhist	32 (1.5)
Hindu	2 (.1)
Other	612 (28.9)
None	273 (12.9)
Agnostic	106 (5.0)
Income	
Less than \$5,000	178 (8.9)
\$5,001–9,999	127 (6.3)
\$10,000–14,999	188 (9.4)
\$15,000–19,999	119 (5.9)
\$20,000–24,999	152 (7.6)
\$25,000–29,999	148 (7.4)
\$30,000–39,999	196 (9.7)
\$40,000–59,999	298 (14.9)
\$60,000–79,999	191 (9.5)
\$80,000–99,999	125 (6.2)
\$100,000–119,999	100 (5.0)
\$120,000 or more	184 (9.2)
	Mean (<i>SD</i>)
Age, years	45.86 (17.24)
Education, years	13.44 (3.07)

^a Differences in sample size are because of missing data.

Table 2
Descriptive Statistics

Study variable	Mean	SD	Range
Number of stressful life events	3.33	1.90	1–11
R/S struggle	22.22	8.52	15–74
Anger	16.09	4.27	5–25
Death anxiety	9.72	4.18	4–20
Social isolation	4.48	1.70	3–9
Insecure relationship with God	8.19	3.06	3–15
Alcohol abuse	.99	.95	0–4
Self-esteem	9.99	1.68	3–15
Optimism	16.05	2.66	4–20
Emotional support received outside church	9.27	2.27	3–12
Religious hope	8.60	2.49	3–12

	<i>N</i>	%
Smoking status		
Yes	530	25.1
No	1,578	74.9

Note. R/S = religious/spiritual.

optimism ($r = -.11, p < .001$). Being a current smoker was associated with a greater number of stressful life events ($r = .20, p < .001$). The only potential moderators not associated with stressful life events were self-esteem, emotional support, and religious hope.

R/S struggle was significantly correlated with all potential moderating variables except for religious hope. With respect to the burden variables, greater R/S struggle was associated with higher levels of anger, death anxiety, social isolation, insecure relationship with God and problematic alcohol use ($r_s = .07-.39$, all $p_s < .01$) with the strongest correlation with social isolation. In terms of the resource variables, R/S struggle was negatively correlated with emotional support ($r = -.12, p < .01$), self-esteem ($r = -.14, p < .001$), and optimism ($r = -.18, p < .001$). Being a current smoker was associated with greater R/S struggle ($r = .10, p < .001$). See Table 3 for correlational analyses. With a few exceptions, the potential moderating variables were significantly correlated with each other (see Table 3).

Moderator Analyses

In all analyses, a greater number of stressful life events was associated with higher levels of R/S struggle after controlling for

age, gender, education, race, marital status, income, and religious affiliation. For the orienting system burdens, anger and death anxiety were significantly and positively related to R/S struggle after controlling for sample characteristics and the number of stressful life events (see Table 4). Most germane to the purpose of this study, the interactions between stressful life events and anger and death anxiety were significantly related to R/S struggle. For anger, the positive relationship between the number of stressful life events and R/S struggle was stronger for participants with high levels of anger than for participants with low anger levels (see Figure 1). Similarly, the positive relationship between the number of stressful life events and R/S struggle was stronger in participants with high death anxiety than for participants with low death anxiety (see Figure 2).

Social isolation was significantly and positively correlated with R/S struggle after controlling for sample characteristics and the number of stressful life events (see Table 4). In addition, the interaction between the number of stressful life events and social isolation was significantly related to R/S struggle. The relationship between the number of stressful life events and R/S struggle was stronger among participants with high social isolation than among participants with low social isolation (see Figure 3). A more insecure relationship with God was associated with higher levels of R/S struggle after controlling for sample characteristics and the number of stressful life events (see Table 4). Further, the interaction between the number of stressful life events and relationship with God insecurity was significantly associated with R/S struggle. The positive relationship between the number of stressful life events and R/S struggle was stronger among participants with a more insecure relationship with God (see Figure 4).

Smoking status was not associated with R/S struggle after controlling for sample characteristics (see Table 4). However, the interaction of the number of stressful life events and smoking status was significantly associated with R/S struggle. The positive relationship between the number of stressful life events and R/S struggle was stronger among current smokers than nonsmokers (see Figure 5). Alcohol abuse and the interaction between stressful life events and alcohol abuse were not significantly associated with R/S struggle (see Table 4).

Regarding orienting system resources, self-esteem and optimism were significantly and negatively related to R/S struggle

Table 3
Correlations Among Study Measures

Study variable	1	2	3	4	5	6	7	8	9	10	11
1. Number of stressful life events	—										
2. R/S struggle	.33***	—									
3. Anger	.21***	.27***	—								
4. Death anxiety	.08***	.21***	.18***	—							
5. Social isolation	.27***	.39***	.23***	.18***	—						
6. Insecure relationship with God	.09***	.32***	.33***	.30***	.19***	—					
7. Alcohol abuse	.12***	.07***	.02	.04	.06**	.006	—				
8. Smoking status	.20***	.10***	.17***	.005	.12***	.07**	.11***	—			
9. Self-esteem	-.04	-.14***	-.07**	-.15***	-.22***	-.12***	.05*	-.02	—		
10. Optimism	-.11***	-.18***	-.02	-.14***	-.31***	-.04	-.03	-.05*	.51***	—	
11. Emotional support received outside church	-.02	-.12***	-.09**	-.05	-.19***	-.08**	-.05	.003	.23***	.24***	—
12. Religious hope	-.02	-.02	.002	-.14***	-.14***	.10***	-.12***	-.08***	.33***	.46***	.23***

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4

Orienting System Burdens as Moderators of the Relationship between Stressful Life Events and R/S Struggle

Variables	R/S struggle (B)					
Age	-.03	-.02	-.09***	-.02	-.04	-.04
Gender	-.02	.001	-.002	-.02	-.01	-.01
Education	.01	-.02	-.04	.02	-.03	-.03
Hispanic	-.04	-.08	-.05	-.05	-.07	-.07
White	-.09	-.13	-.10	-.05	-.13	-.13
Black	-.04	-.04	-.02	-.02	-.04	-.04
Asian	-.04	-.05	-.04	-.03	-.05	-.05
Marital status	-.06*	-.07**	-.004	-.08***	-.06**	-.06*
Income	-.09***	-.09***	-.07*	-.09***	-.11***	-.11***
Religious affiliation	.04*	.04*	.04*	-.01	.04	.05*
Number of SLE	.24***	.26***	.19***	.25***	.26***	.26***
Anger	.17***					
SLE × Anger	.04*					
Death anxiety		.16***				
SLE × Death anxiety		.04*				
Social isolation			.31***			
SLE × Social isolation			.05*			
Insecure relationship with God				.28***		
SLE × Insecure relationship with God				.08***		
Smoking status					-.02	
SLE × Smoking status					.06*	
Alcohol use						.03
SLE × Alcohol use						.03

Note. Gender: Female = 0, male = 1; Hispanic: No = 0, yes = 1; White: No = 0, yes = 1; Black: No = 0, yes = 1; Asian: No = 0, yes = 1; Marital status: Other = 0, married = 1; Religious affiliation: Other = 0, Christian = 1; SLE = stressful life events; R/S = religious/spiritual.

* $p < .05$. ** $p < .01$. *** $p < .001$.

after controlling for sample characteristics and stressful life events. However, the interactions between stressful life events and self-esteem and optimism did not significantly predict R/S struggle (see Table 5). Emotional support was significantly and negatively associated with R/S struggle after controlling for sample characteristics and the number of stressful life events but the interaction between the number of stressful life events and emotional support was not significant (see Table 5). Religious hope was significantly and negatively associated with R/S struggle after controlling for sample characteristics and the number of stressful life events but the interaction between the

number of stressful life events and religious hope was not significant (see Table 5).

Discussion

The purpose of this study was to examine the moderating effect of emotional, social, spiritual, behavioral, and cognitive burdens and resources of the orienting system on the relationship between stressful life events and R/S struggle. These findings identify burdens within the orienting system that appear to increase the intensity of a R/S struggle after stressful life events. Specifically,

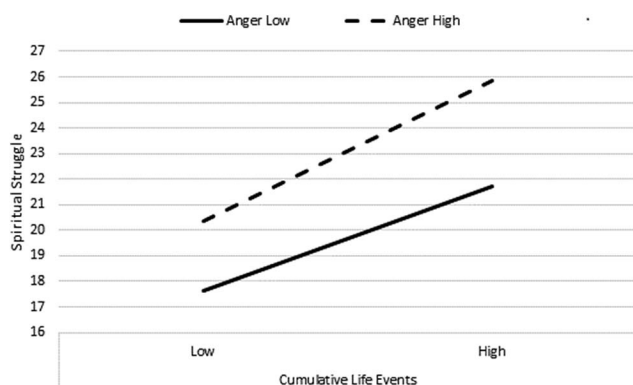


Figure 1. Interaction of cumulative life events and anger on spiritual struggle.

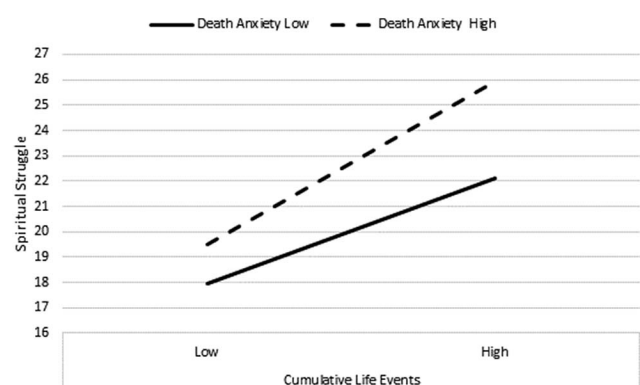


Figure 2. Interaction of cumulative life events and death anxiety on spiritual struggle.

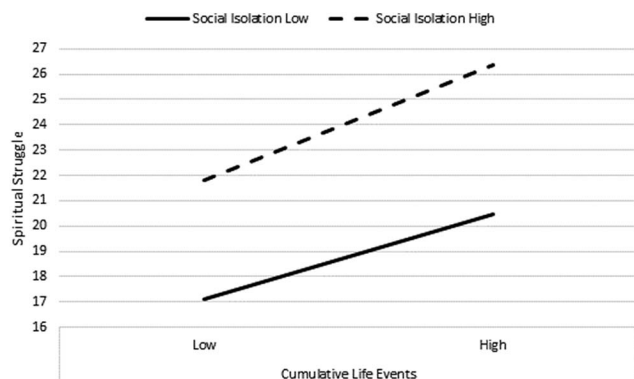


Figure 3. Interaction of cumulative life events and social isolation on spiritual struggle.

high levels of negative emotions (anger, death anxiety) and social isolation, a more insecure relationship with God, and smoking status were associated with a stronger relationship between the number of stressful life events and R/S struggle. However, resources within the orienting system did not moderate the relationship between stressful life events and R/S struggle. Cognitive (self-esteem and optimism), emotional (emotional support), and spiritual (religious hope) resources did not cushion the impact of stressful life events on R/S struggle.

A greater number of stressful life events in the past 18 months was associated with higher levels of R/S struggle after controlling for demographic characteristics. This finding suggests that the cumulative stress of multiple negative events may increase the likelihood of R/S struggle and is consistent with other research indicating that exposure to a greater number of stressors is associated with higher levels of emotional distress including posttraumatic stress symptoms (Delany-Brumsey, Joseph, Myers, Ullman, & Wyatt, 2013; Garfin, Silver, Ugalde, Linn, & Inostroza, 2014), depression (Delany-Brumsey et al., 2013; Keinan, Shrira, & Shmotkin, 2012; Richmond, Elliott, Pierce, Aspelmeier, & Alexander, 2009), anxiety (Delany-Brumsey et al., 2013; Richmond et al., 2009), general psychological distress (Evans, Becker, Zahn, Bilotta, & Keesee, 2012; Williams et al., 2007), job stress (Evans et al., 2012), and lower levels of physical health (Evans et al.,

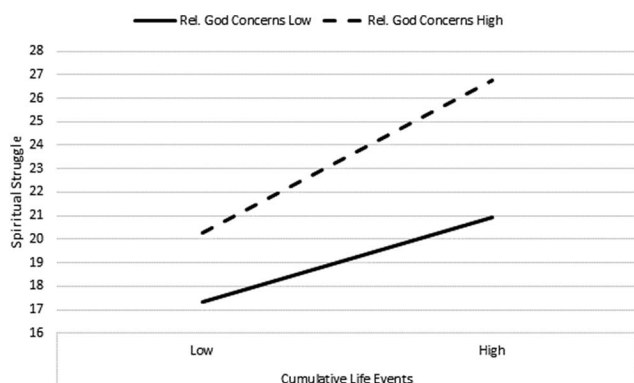


Figure 4. Interaction of cumulative life events and insecure relationship with God on spiritual struggle.

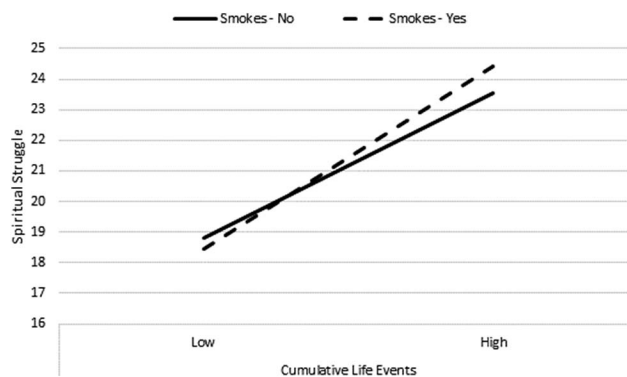


Figure 5. Interaction of cumulative life events and smoking status on spiritual struggle.

2012). However, it is important to note that research on the relationship between distress and R/S struggle suggests that these constructs are moderately correlated and vary independently (Stauner et al., 2016). A potential explanation for our findings is that the increased stress associated with multiple negative events over a short time period overwhelms the resources of the orienting system (Pargament, 2001). In this context, R/S beliefs, practices, and values become shaken, resulting in greater R/S struggle.

This study identified multiple burdens within the orienting system that exacerbate the relationship between cumulative stressful life events on R/S struggle. First, among people experiencing a higher level of negative emotions, a stronger relationship emerged between the number of stressful life events and R/S struggle. Strong negative emotions may interfere with individuals' ability to

Table 5

Orienting System Resources as Moderators of the Relationship Between Stressful Life Events and R/S Struggle

Variables	R/S struggle (B)			
Age	-.05*	-.05*	-.11***	-.04
Gender	-.004	-.005	-.03	-.01
Education	-.01	-.02	-.05	-.03
Hispanic	-.07	-.06	-.22*	-.07
White	-.14	-.17*	-.26*	-.14
Black	-.03	-.03	-.21*	-.04
Asian	-.05	-.06	-.07	-.05
Marital status	-.06*	-.06*	-.05	-.06**
Income	-.09***	-.10***	-.13***	-.11***
Religious affiliation	.04*	.05*	.01	.05*
Number of stressful life events	.27***	.25***	.28***	.27***
Self-esteem	-.12***			
SLE × Self-esteem	.008			
Optimism		-.18***		
SLE × Optimism		.03		
Emotional support			-.14***	
SLE × Emotional support			.02	
Religious hope				-.05*
SLE × Religious hope				-.01

Note. Gender: Female = 0, male = 1; Hispanic: No = 0, yes = 1; White: No = 0, yes = 1; Black: No = 0, yes = 1; Asian: No = 0, yes = 1; Marital status: Other = 0, married = 1; Religious affiliation: Other = 0, Christian = 1; smokes now: No = 0, yes = 1; SLE = stressful life events.

* $p < .05$. ** $p < .01$. *** $p < .001$.

cope with stressful events or deplete their resources to cope with stressful life events thereby increasing the strength of R/S struggle. For example, anger has been positively associated with maladaptive coping strategies including avoidant coping (Diong et al., 2005) and substance use (Eftekhari, Turner, & Larimer, 2004) and lower use of active coping (Diong & Bishop, 1999). Death anxiety has been discussed as a stressor in itself, requiring coping resources such as social support (Catania, Turner, Choi, & Coates, 1992), positive thinking, and denial (Adelbratt & Strang, 2000). Providing individuals with effective strategies for managing negative emotions may reduce the likelihood or strength of R/S struggle in the context of stressful events.

Social isolation is an additional burden within the orienting system that moderated the relationship between stressful life events and R/S struggle. The relationship between the number of stressful life events and R/S struggle is stronger in individuals who report higher social isolation. Studies have consistently documented the benefits of social support (Cohen & Wills, 1985; Grav, Hellzén, Romild, & Stordal, 2012; Shand, Cowlshaw, Brooker, Burney, & Ricciardelli, 2015; Uchino, 2006) and the dangers of social isolation (Cacioppo & Hawkley, 2003; Cornwell & Waite, 2009) for physical and mental health. Individuals who are socially isolated when stressful events occur may have only their own internal resources to cope with these events. In the context of multiple stressful events, these internal resources may become overwhelmed, leading to stronger R/S struggle.

R/S burdens within the orienting system may also influence the relationship between stressful life events and R/S struggle. In this study, an insecure attachment to God was a burden within the orienting system that was associated with a stronger relationship between stressful life events and R/S struggle. An individual's relationship with God can provide comfort and reassurance in times of stress (Kirkpatrick, 1998). If that relationship is characterized by concern about abandonment by God, as in an insecure relationship, God may not be perceived as a reliable source of support in times of stress. In fact, as demonstrated in this study, an insecure relationship may actually exacerbate the impact of stressful life events on an individual's R/S beliefs. In this case, an insecure attachment to God is not just the absence of a secure attachment but represents a vulnerability factor in itself (Homan, 2014).

Mixed findings emerged with the behavioral factors of smoking status and problematic alcohol use. Smoking status moderated the relationship between stressful life events and R/S struggle. The relationship between stressful life events and R/S struggle was stronger in current smokers than nonsmokers. Research suggests that many people smoke in response to stress (Magid et al., 2009; Sun, Buys, Stewart, & Shum, 2011). However, smoking may sidetrack the individual from dealing with the underlying problem caused by stressful life events, thereby magnifying the impact of these events on individuals' R/S beliefs. Individuals who do not smoke may utilize more effective coping strategies, explaining the weaker relationship between the number of stressful life events and R/S struggle in nonsmokers relative to smokers. Problematic alcohol use was not associated with R/S struggle and did not moderate the relationship between stressful life events and R/S struggle. Research on the relationship between R/S struggle and alcohol use is mixed (Faigin et al., 2014; Holt et al., 2014). Further, the low rates of problematic alcohol use in the current

sample may have limited our ability to detect a relationship. Additional research is needed to clarify the relationship between R/S struggle and alcohol use and abuse.

In contrast to the moderating effect of orienting system burdens, resources of the orienting system did not cushion the relationship between stressful life events and R/S struggle. More specifically, cognitive aspects of the orienting system, positive views of the self (i.e., self-esteem) and the world (i.e., optimism), emotional support, and religious hope did not moderate the relationship between the number of stressful life events and R/S struggle. Multiple factors may explain this finding. First, self-esteem and optimism were negatively related to R/S struggle after controlling for sample characteristics. However, a greater number of stressful life events in the past 18 months was associated with lower levels of optimism and was not related to self-esteem. Stressful life events may challenge individuals' positive view of the world and the self, reducing the protective potential of these cognitive factors on R/S beliefs after stressful events. Longitudinal studies are needed to determine whether levels of optimism and self-esteem before stressful life events reduce the likelihood or strength of R/S struggle. Second, cognitive factors of the orienting system may not be relevant to the experience of R/S struggle in the context of stressful events. While possible, this explanation is inconsistent with previous research suggesting that optimism and self-esteem are related to adaptive coping strategies (Friedman et al., 1992; Lo, 2002) and psychological well-being (Brissette, Scheier, & Carver, 2002; Kolokotroni, Anagnostopoulos, & Tsikkinis, 2014) with some research suggesting that optimism and self-esteem moderate the relationship between perceived stress and health and well-being (Chang, 1998; Rector & Roger, 1997).

In addition to self-esteem and optimism, emotional support and religious hope were not significant moderators of the relationship between stressful life events and R/S struggle. Taken as a whole, these findings might suggest that burdens of the orienting system are more relevant than resources to the experience of R/S struggles. However, this conclusion would seem premature for a few reasons. First, only a limited number of resource variables was examined in this study. Other variables, such as acceptance, gratitude, or forgiveness, might emerge as buffers of the effects of stressful life events on R/S struggles. Second, resource variables may be relevant to the successful resolution of R/S struggles once they have been encountered. In this vein, a recent analysis of the LSHS study data identified a few religious resources (e.g., religious commitment, religious support, and life sanctification) within the orienting system that buffered the relationship between R/S struggle and well-being and distress (Abu-Raiya et al., 2016). Additional research on the role of resources of the orienting system for the experience of R/S struggle in the context of stressful life events is needed.

Clinical Implications

R/S struggle has been consistently associated with higher levels of psychological distress in the context of stressful events (McGee et al., 2013; Pedersen et al., 2013; Sherman et al., 2009). This study identifies burdens within the orienting system that may increase the severity of R/S struggle after stressful life events. Individuals with burdens in their orienting systems may benefit from additional support and mental health care after stressful

events to reduce the likelihood and intensity of R/S struggle and facilitate their successful resolution. In the current study, emotional, social, spiritual, and behavioral components of the orienting system moderated the relationship between the number of stressful life events and R/S struggle. These findings provide guidance on which orienting system burdens to target while individuals are undergoing stressful life events and suggest that mental health providers can assess and address multiple components of the orienting system to reduce the strength of R/S struggle and perhaps their longer term impact. For example, teaching individuals to better manage negative emotions and/or reduce social isolation may reduce the impact of stressful life events on their R/S beliefs and worldview.

Limitations and Future Research Directions

Strengths of this study include the large nationally representative sample, a comprehensive assessment of R/S struggle that included various types of struggle, and evaluation of various components of the orienting system. This study also focuses on the general population; much of the research to date has examined specific populations defined by a stressful life event such as HIV/AIDS or posttraumatic stress disorder (PTSD). However, the findings must be interpreted in the context of study limitations. First, this study is cross-sectional; conclusions about the causal relationships among variables cannot be made. Of note, the instructions for the assessment of R/S struggle directed participants to indicate the degree to which each item described their response to their most stressful life event over the past 18 months, prompting participants to describe R/S struggle that occurred after the stressful event. In addition, theoretically, we are making the assumption that the moderating variables were present as part of the orienting system at the time of the stressful events, allowing them to function as burdens and resources when the stressful event occurred. Longitudinal studies in which characteristics of the orienting system are assessed before the occurrence of a stressful life event are needed to definitively identify components of the orienting system that buffer or exacerbate the impact of stressful life events on R/S struggle.

Second, R/S struggle was assessed as a unidimensional construct. We did not examine the various types of R/S struggle separately. Future studies should consider whether particular moderators are more relevant for specific types of R/S struggle. Third, this study did not consider qualitative differences among the stressful events or the relative impact of each stressful event on individual participants. Stressful events likely vary in their severity and the degree to which they are experienced as stressful. Future research should consider these differences and examine the relationships between perceived severity of stressful events and R/S struggle and the moderating effect of the orienting system on this relationship. Finally, this study examined a limited number of components of the orienting system and the moderating effects of these variables were small. Additional research is needed to identify other resources and burdens of the orienting system that may moderate the relationship between stressful life events and R/S struggle.

This study indicates that experiencing a larger number of stressful life events is associated with a higher level of R/S struggle. Further, the experience of R/S struggle after stressful events is

impacted by the burdens in the individual's general way of viewing the world. Individuals with higher emotional, social, spiritual, and behavioral burdens experience greater R/S struggle in the context of stressful life events. Identifying individuals who may experience R/S struggle and working to strengthen their orienting systems may reduce their experience of R/S disruption after stressful events and perhaps facilitate their long-term health and well-being.

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