

## Social Support as a Mediator in the Relationship Between Religious Comforts and Strains and Trauma Symptoms

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Recent research shows that religious and spiritual variables are related to adjustment among those who have experienced trauma (Harris et al., 2008). It is also known that social support influences posttraumatic adjustment (Frazier et al., 2011). Critics have argued that religious and spiritual variables primarily serve as a proxy for social support because individuals in spiritual communities access higher levels of social support than those with no such community (Bradley, Schwartz, & Kaslow, 2005). We sought to explore the interrelationships among these 3 domains by studying church members with histories of trauma exposure. We found that social support and religious comforts and strains are distinguishable. Social support, religious comfort, and religious fear and guilt make independent contributions to posttraumatic adjustment, whereas social support partially mediates the relationship between alienation from one's higher power, religious rifts, and trauma symptoms.

*Keywords:* spirituality, social support, trauma, religion

For many people, spirituality plays an important role in coping with trauma (Schuster et al., 2001), but the role is not a simple one. It has generally been accepted that spiritual/religious beliefs and involvement may help survivors make meaning of traumatic experiences (Hall & Johnson, 2001; Wilson & Moran, 1998). However, data-based studies show that some survivors find their religious beliefs helpful in coping with trauma, whereas others find these beliefs hurtful and seek to reduce religious involvement or abandon their faith after experiencing trauma (Elliott, 1994; Falsetti, Resick, & Davis, 2003; Fontana & Rosenheck, 2004; Strawbridge, Shema, Cohen, Rogers, & Kaplan, 1998). Research indicates that those who lose religious faith in the context of a traumatic experience use more mental health services through the course of their lives (Fontana & Rosenheck, 2004).

Exline's model of spiritual health variables may explain these divergent findings, as it incorporates both religious comforts and religious strains (Exline, 2002a; Exline, Yali, & Sanderson, 2000). Religious comforts include support (from people in the faith community and from a higher power), increased sense of meaning or purpose, and support for a virtuous lifestyle (Exline, 2002b; Exline & Rose, 2005). Religious strain includes conflict with the faith community, doubts or perceived inadequacies of faith, guilt, and fears of condemnation or hell (Exline & Rose, 2005; Exline, Yali, & Lobel, 1999). Research supports this model; anger toward a higher power predicts more emotional distress (Exline et al., 1999; Exline & Rose, 2005). Alienation from a higher power, religious rifts, and religious fear and guilt predict more depression and suicidal ideation (Exline et al., 2000; Exline & Rose, 2005). People with high levels of religious strain are likely to seek help with religious concerns in therapy (Exline et al., 2000). Among trauma survivors, religious strain is a positive predictor of trauma symptoms, even when accounting for differences in levels of trauma exposure (Harris et al., 2008). On the other hand, there is evidence that religious comfort may buffer the negative effects of stressors (Cook, Aten, Moore, Hoot, & Davis, 2013) and contribute to posttraumatic growth (Ogden et al., 2011).

Social support has historically been defined as personal interactions involving emotional support, instrumental assistance, information, and assistance with self-appraisal (House, 1981). Social support is typically measured as either structural (the number of supportive relationships and frequency of supportive interactions) or functional (the types of needs met in the supportive interaction, such as needs for emotional support, instrumental assistance,

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knowledge, and self-esteem; Grav, Hellzen, Romild, & Stordal, 2012; Schwarzer & Knoll, 2007). Strong relationships between positive social support, negative social interactions, and trauma outcomes are well-known, having been confirmed in meta-analytic and prospective studies (Bradley, Schwartz, & Kaslow, 2005; Brewin, Andrews, & Valentine, 2000; Frazier et al., 2011; Gabert-Quillen et al., 2012; Marke & Bennett, 2013; Ozer, Best, Lipsey, & Weiss, 2003; VanVoorhees et al., 2012; Wilcox, 2010). Preliminary evidence suggests that negative social interactions may be more predictive of difficulty adjusting after trauma than social support (Kaniasty, 2012; Lincoln et al., 2010).

There are a few studies that demonstrate that better trauma outcomes are associated with higher levels of structural social support, (Ozer & Weiss, 2004; Wilcox, 2010). However, most studies in this area look specifically at functional social support (Adams & Boscarino, 2006; Charuvastra & Cloitre, 2008; Engelhard, Huijding, van den Hout, & de Jong, 2007; Frazier et al., 2011). Prospective studies have found that functional social support mediates the effects of predisposing factors (such as trait-negative affect and prior distress) in the development of PTSD (Engelhard et al., 2007; Frazier et al., 2011; Marke & Bennett, 2013). Furthermore, there is evidence that functional social support for positive self-appraisal (i.e., support for interpreting traumatic events in a manner that supports self-esteem) is especially critical in posttraumatic adjustment (Gabert-Quillen et al., 2012). Higher scores on a measure of functional social support are associated with lower levels of trauma symptoms when degree of trauma exposure is controlled (Cadell, Regehr, & Hemsworth, 2003; Erbes, Harris, Winskowski, Olson, & Engdahl, 2006; Harris et al., 2008; Keane, Marshall, & Taft, 2006; Koenig, McCullough, & Larson, 2001). Based on these studies, it appears that functional social support is more likely to serve as a mediator when considering spiritual aspects of adjustment to trauma.

Because members of faith communities have access to more social support (Bradley, 1995; Dunkel-Schetter, Folkman, & Lazarus, 1987; Ellison & George, 1994), critics have argued that spiritual and religious variables serve primarily as a proxy for social support, postulating that spiritual and religious variables contribute little if anything to adjustment (Joiner, Perez, & Walker, 2002). This has been an easy argument to make given that much research on religion and adjustment to trauma fails to consider social support as a potential confound or mediator (George, Ellison, & Larson, 2002; Thuné-Boyle, Stygall, Keshtgar, & Newman, 2006).

However, there is a growing body of research that addresses this concern. There is evidence that those who receive more social support use more positive religious coping (Krause, Ellison, Shaw, Marcum, & Boardman, 2001), and those who receive less social support use more negative religious coping (Bradley et al., 2005). Furthermore, a study of religious attitudes and mental health among college students indicated no statistically significant relationships between religious attitudes and social support from family, friends, and significant others (O'Connor, Cobb, & O'Connor, 2003). Several studies have found that religiousness contributes to physical and mental health independently when social support is controlled (Hill, Angel, Ellison, & Angel, 2005; McConnell, Pargament, Ellison, & Flannelly, 2006). There is very limited research available about the comparative roles of spiritual or religious variables and social support in recovery from trauma.

This study sought to clarify the combined roles of social support and religious comforts and strains in predicting trauma symptoms. We hypothesized that religious comfort would predict lower levels of trauma symptoms and religious strains would predict higher levels of trauma symptoms (H1), and social support would partially mediate the relationships between religious comforts/strains and trauma symptoms (H2).

## Method

### Participants

The study included 327 participants, including 228 women, 95 men, one transgendered participant, and three participants who did not provide information on their gender. See Tables 1 and 2 for descriptions of sample demographics and trauma histories. All participants self-reported experiencing at least one traumatic event and were recruited at church services. The sample was primarily Caucasian ( $n = 286$ ), but also included African American ( $n = 15$ ), Native American ( $n = 16$ ), Hispanic ( $n = 6$ ), African ( $n = 1$ ), and Asian ( $n = 1$ ) participants. Religious groups represented were Catholic ( $n = 96$ ), unspecified Protestant ( $n = 55$ ), Lutheran ( $n = 44$ ), Presbyterian ( $n = 14$ ), United Church of Christ ( $n = 12$ ), Reformed Church of America ( $n = 16$ ), Baptist ( $n = 17$ ), Church of Christ Scientist ( $n = 11$ ), Episcopal ( $n = 22$ ), Independent Evangelical ( $n = 3$ ), Metropolitan Community Church ( $n = 16$ ), United Methodist ( $n = 13$ ), Church of the Nazarene ( $n = 14$ ), Unity Church ( $n = 1$ ) and other affiliations ( $n = 9$ ). Many participants reported multiple denominational affiliations. The average age was 55 years old, the average level of education was 17 years, and the median income was in the \$35,000–\$45,000 per year range. The majority of participants described a history of multiple types of trauma; the most common presenting traumas included sudden death of a loved one, life-threatening or disabling accident, assault, or illness, childhood sexual abuse, sexual harassment, natural disasters, and motor vehicle or other accidents. Participants had to report at least one traumatic experience on the Traumatic Life Events Questionnaire (TLEQ; Kubany et al., 2000) to be retained in the sample for analysis.

Table 1  
Participant Demographic Variables

Demographic	Mean/ <i>SD</i>	Range	<i>n</i> (%)
Age	55.44/15.91	18–99	
Education	17.92/2.98	8–24	
Income, median	\$35,000–45,000		
Years since trauma	18.43/16.45	1–65	
Percent probable PTSD			62 (19)
Male			95 (29)
Female			228 (70)
Married			150 (46)
Caucasian			286 (87)
African American			15 (5)
Native American			16 (5)
Hispanic			6 (1.8)
African			1 (0.3)
Asian			1 (0.3)

Table 2  
*Participant Trauma Histories*

Trauma type	Number reported
Natural disaster	133
Motor vehicle accident	129
Other type of accident	91
War/combat	29
Sudden death of loved one	274
Life threatening injury/illness	203
Robbery	66
Assaulted by stranger	52
Threatened with death	124
Child abuse—physical	71
Witness domestic violence	100
Spousal/partner abuse	99
Child abuse—sexual	197
Sexual assault (adult)	60
Sexual harassment	144
Stalking	77
Miscarriage	85
Abortion	53
Other event	124

## Procedure

The principal investigator visited 16 churches to invite those who (a) were at least 18 years of age, (b) could read and write in English, and (c) identified as trauma survivors to complete surveys on their spirituality in exchange for lunch and \$10. Denominations sampled included Roman Catholic, Evangelical Lutheran Church of America, Lutheran Church Missouri Synod, Metropolitan Community Church, United Methodist, American Baptist, Reformed Church of America, Church of Christ Scientist, Presbyterian, United Church of Christ, Episcopal, and Church of the Nazarene. Announcements read to potential participants identified trauma as “experience with very stressful situations such as being physically or sexually assaulted or abused, being in a war or natural disaster, being in an accident, being diagnosed with a serious illness, or having someone close to you unexpectedly die or develop a serious illness.”

Interested participants stayed after worship to complete consent and survey forms. The survey forms included a demographic questionnaire requesting information on age, gender, ethnicity, history of trauma, time since trauma, frequency of church attendance, and present and past religious affiliations.

## Measures

The TLEQ (Kubany et al., 2000) is a validated assessment for a history of trauma, using a checklist including natural disasters; motor-vehicle or other accidents; war or combat; sudden death of a loved one; life-threatening or disabling accident, assault, illness, or robbery; assault by a stranger; witness to assault; threats of violence; physical child abuse; witnessing domestic violence; spousal or partner assault; childhood sexual abuse; adult sexual assault; sexual harassment; stalking; miscarriage; abortion; and other traumatic events. The total number of traumatic experiences reported by each participant was calculated and used as an index of lifetime trauma exposure.

The PTSD Checklist—Civilian Version (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993) is a validated assessment of

symptoms that define PTSD. Scores range from 17–85, with higher scores indicating more posttraumatic stress symptoms. Coefficient alphas reflecting internal consistency range from .89–.97 (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996; Weathers et al., 1993). The alpha derived in this sample was .99.

The Religious Comfort and Strain Scale (RCSS; Exline et al., 2000) is a validated assessment of religious comforts and strains. It includes one subscale for religious comfort (score range 0–49), and three subscales of religious strains, including alienation from God (score range 0–35), religious fear and guilt (score range 0–28), and religious rifts (score range 0–28). Internal consistencies for the subscales range from .67–.87 (Exline et al., 2000). Alphas in this sample ranged from .58–.82. Items on the religious comfort subscale tap spirituality/community of faith as sources of support, for example, “feeling loved by God” or “feeling like part of a religious or spiritual community.” Items on the alienation from God subscale tap estrangement in relationship with the higher power, such as “difficulty believing God exists.” Items on the religious fear and guilt subscale measure fears about divine punishment or guilt, such as “belief that you have committed a sin too big to be forgiven.” Items on the religious rifts subscale measure conflict with religious leadership, family, and community of faith, such as “disagreement with something that your religion or church teaches.”

The Medical Outcomes Study (MOS) Social Support Survey (Sherbourne & Stewart, 1991) is a validated assessment of functional social support, (i.e., satisfaction with instrumental and emotional support from others). Internal consistency reliability (alpha) is .97 (Sherbourne & Stewart, 1991). The alpha derived in this sample was .99. Scores can range from 19–95 (Sherbourne & Stewart, 1991). Items on the instrument tap satisfaction with emotional, instrumental, informational, and appraisal aspects of social support, for example, “someone you can count on to listen to when you need to talk,” “someone to give you good advice about a crisis,” and “someone to help with daily chores if you were sick.” Although the instrument has subscales that can be used to measure emotional, tangible, affectionate, and positive social interactions, only the global index of social support was used for this study.

## Statistical Analysis

Following Preacher and Hayes (2004), data were subjected to mediation analyses using ordinary least-squares regression for direct paths between variables and bootstrapping estimates for directly testing the mediating (indirect) effects. This approach has been advocated over the causal-steps approach (Baron & Kenny, 1986), because it directly tests for the presence of mediation and does not require normally distributed indirect path coefficients (Preacher & Hayes, 2004). Analyses were conducted in SPSS Version 17 using the “indirect” macro (Preacher & Hayes, 2004). The indirect macro regressed the dependent variable (in this case, PCL scores) on (a) the set of demographic covariates (age, income, and level of education), (b) one of the four RCSS subscales (the independent variable), and (c) the mediating variable (social support). It also regressed the mediator (social support) on the set of demographic covariates and the independent variable (the RCSS subscale). It then calculated a point estimate of the indirect effect (the product of the unstandardized coefficients for regressing the

mediator on the independent variable and the dependent variable on the mediator) and provided a bootstrapped confidence interval (CI) around this estimate. This procedure was used four times, once for each of the RCSS subscales. Missing data for all analyses were addressed using listwise deletion.

## Results

Means and standard deviations (*SD*) are shown in Table 3. PCL scores above the cutoff for a probable diagnosis of PTSD were obtained from 19% of the participants. Intercorrelations are shown in Table 4. Posttraumatic symptoms were negatively correlated with religious comfort, and positively correlated with alienation from God, fear and guilt, and religious rifts. Social support negatively correlated with alienation from God, fear and guilt, and religious rifts.

When examining the effect of religious comfort on PCL scores, as mediated by social support, we found a statistically significant direct effect of religious comfort (as shown by a significant unstandardized regression coefficient when accounting for the set of covariates ( $b = -.346, p < .001$ ) on PCL scores. The proposed mediator (social support) had an independent and significant effect on PCL scores as shown by a significant unstandardized regression coefficient when accounting for the set of covariates and the religious comfort scale ( $b = -.147, p < .001$ ). However, contrary to the hypothesis, the indirect effect of religious comfort on PCL scores through social support (i.e., the mediating effect of social support) was not statistically significant. The point estimate for the indirect effect was  $-.057$ , and the 95% CI, established through the bootstrapping procedure with 2,000 resamples, went from  $-.157$  to  $.007$ . This CI contains 0, indicating that this test for mediation is not significant at an alpha level of  $.05$ . This indicates that the relationship between religious comfort and trauma symptoms is not even partially explained by social support.

Turning to the effect of alienation from God on PCL scores, we found a statistically significant direct effect of alienation from God ( $b = .381, p < .001$ ) on PCL scores. The proposed mediator (social support) had an independent and significant effect on PCL scores ( $b = -.149, p < .001$ ). Further, the indirect effect of alienation from God on PCL scores through Social Support (i.e., the mediating effect of social support) was statistically significant. The bootstrapped estimate (using 2,000 resamples) for this indirect effect was  $.063$ , with a 95% CI of  $.017$  to  $.135$ . This CI did not contain 0, demonstrating significance at an alpha level of  $.05$ . This suggests that access to social support weakens (partially mediates)

the relationship between alienation from God and posttraumatic stress symptoms.

The third test evidenced a statistically significant direct effect of religious fear and guilt ( $b = .405, p < .001$ ) on PCL scores. The proposed mediator (social support) had an independent and significant effect on PCL scores ( $b = -.139, p < .001$ ). The indirect effect of religious fear and guilt on PCL scores through social support (i.e., the mediating effect of social support) was not statistically significant. The bootstrapped estimate (using 2,000 resamples) for this indirect effect was  $.047$ , with a 95% CI of  $-.003$  to  $.129$ . This CI contained 0, indicating that the relationship between religious fear and guilt and posttraumatic stress symptoms is not mediated by social support.

Finally, there was a statistically significant direct effect of religious rifts ( $b = .291, p = .003$ ) on PCL scores. The proposed mediator (social support) had an independent and significant effect on PCL scores ( $b = -.149, p < .001$ ). Further, the indirect effect of religious rifts on PCL scores through social support (i.e., the mediating effect of social support) was statistically significant. The bootstrapped estimate (using 2,000 resamples) for this indirect effect was  $.071$ , with a 95% CI of  $.017$  to  $.160$ . This CI did not contain 0, demonstrating significance at an alpha level of  $.05$ . Consistent with findings on the alienation from God subscale, social support weakens (partially mediates) the relationship between religious rifts and posttraumatic stress symptoms.

## Discussion

H1 was fully supported. Findings regarding individual aspects of spiritual functioning included (a) religious comfort prediction of lower levels of PTSD symptoms; and (b) alienation from God, religious fear and guilt, and religious rifts predictions of higher levels of trauma symptoms.

H2 received mixed support. Social support mediated the relationships of alienation from God, and religious rifts with PCL scores, but did not mediate the relationship of religious comfort or religious fear and guilt with PCL scores. The analysis indicates that both religious comforts and strains account for unique variance in trauma symptoms independent of shared variance with social support.

The finding that religious comfort predicted lower levels of symptoms is consistent with previous literature. (Exline et al., 2000; Harris et al., 2006). The fact that the relationship between religious comfort and PCL scores was not mediated by social support indicates that religious comfort is an independent predictor of lower levels of trauma symptoms; this appears to be a new finding in the literature. These findings increase confidence that the relationship between religious comfort and better recovery from trauma is *specifically* related to religious Comfort, rather than merely the enhanced access to social support enjoyed by members of a faith community.

Items on the scale assessing religious comfort tap (a) sources of comfort experienced as coming from a deity, and (b) sources of comfort experienced as coming from others in the community of faith. The latter might be expected to overlap with social support, particularly since our measure of social support was not restricted to secular social support. Despite the fact that the measure of social support tapped both religious and nonreligious social support in the same scale scores, the correlation between religious

Table 3  
Means and Standard Deviations of Study Variables

Variable	Mean	SD
TLEQ total traumas	7.31	1.18
PCL score	36.43	8.11
Social support	74.1	17.38
Religious comfort	41.22	7.98
Alienation from G-d	6.47	6.77
Religious fear/guilt	6.43	6
Religious rifts	12.77	7.55

Note. TLEQ = Traumatic Life Events Questionnaire; PCL = PTSD Check List.

Table 4  
Intercorrelations for Study Variables

Variable	TLEQ	PCL	Social support	Religious comfort	Alienation from G-d	Religious fear/guilt	Religious rifts	Age	Income	Education
TLEQ	—									
PCL	.39**	—								
Social support	.14*	-.34**	—							
Religious comfort	-0.03	-.23**	-0.04	—						
Alienation from G-d	.25**	.27**	-.15*	-.59**	—					
Religious fear/guilt	.15**	.32**	-.15*	-.14*	.33**	—				
Religious rifts	0.08	.17*	-.16*	-.25**	.38**	.21**	—			
Age	-.21**	-.25**	-0.11	0.04	-0.01	-.23**	-0.03	—		
Income	-.14*	-.13*	< .01	-0.05	-0.02	< .01	-.13*	-0.03	—	
Education	-0.06	-.14*	0.06	-.13*	0.06	-.21**	.14*	.19*	-0.04	—

Note. TLEQ = Traumatic Life Events Questionnaire; PCL = PTSD Check List.

\*  $p < .05$ . \*\*  $p < .01$ .

comfort and social support in this sample was nonsignificant. This suggests that, at least for this sample, religious comfort became a source of help independent of social support in its relationship to posttraumatic stress symptoms.

Items on the scale measuring religious fear and guilt ask about expectations of punishment or condemnation from one's higher power. It would appear, based on these findings, that these aspects of one's relationships with a higher power are independent from social support. It is possible that sources of religious fear and guilt may be tied to behaviors and experiences about which participants may hold shame, and may not be expressing to others, limiting the effects of social support. Religious fear and guilt may be related to the tendency of many trauma survivors to blame themselves for traumatic experiences (Foa, Ehlers, Clark, Tolin, & Orsillo, 1999). Self-blame at a spiritual level likely carries with it costs such as fear of spiritual (in some faiths, eternal) condemnation and punishment. For such complications in the course of adjustment to trauma it is likely that resolution of spiritual issues would be important, and warrants further study.

The relationships between alienation from God, and religious rifts and higher PCL scores appear to be partially mediated by social support, thus contributing a measure of unique variance to posttraumatic adjustment. Alienation from God may reflect a disrupted relationship with a higher power that may or may not have predated traumatic experiences, subsequently affecting adjustment after trauma. There is preliminary evidence that trauma survivors who have negative expectations for social relationships may have similar negative cognitions in relationship with a deity (Harris et al., 2010), which would explain social support as a mediator in the relationship between alienation from God and posttraumatic stress symptoms. Further research in this area is indicated. Items on the scale measuring religious rifts tap disagreements or conflict with religious leadership/organizations and family on matters of faith. Religious rifts were associated with higher levels of trauma symptoms, but was mediated by social support. This mediation may be related to reduced access to social support in a community of faith and access to positive aspects of spirituality in posttraumatic adjustment (Harris et al., 2010).

Note that these findings are cross-sectional, so there is evidence of a relationship between religious comforts and strains and trauma outcomes, but the causal direction of that relationship is not yet

clear. The participants in this study were mostly Caucasian, Christian women who regularly attended church. Replication with a more diverse sample, especially groups outside of Christianity, would be a useful to expand knowledge about the clinical utility of these findings, as would longitudinal study to address cause-and-effect relationships.

Sample characteristics may be relevant to results. As noted above the sample were Christians who were attending church worship services, and self-identified as trauma survivors. Such a sample may have higher levels of religious commitment, and may feel a need to describe their faith as helpful in their mental health. That said, negative relationships between religious strain and mental health outcomes were still evident in this sample. It is possible that effect sizes in these relationships may be different among those who attended church versus those who are not active in a faith community. Furthermore, participants self-identified as trauma survivors, verified only by their self-report data on the TLEQ (Kubany et al., 2000). It is possible that if screened by clinicians for trauma exposure, some individuals in this sample may not have met criteria as trauma survivors. Further research with clinical populations may be useful to clarify the extent to which these findings may have been affected by sample characteristics.

Future directions for this research may include further assessment of the generalizability of these findings, for example, via replications in clinical samples, community samples not drawn from religious settings, and samples representing a single type of trauma exposure as opposed to this heterogeneous sample of trauma survivors. Future longitudinal and/or interventional studies would be useful to examine the causal direction of the relationships between religious comforts and strains and posttraumatic symptoms.

The clinical implications of these findings at the very least suggest that trauma survivors who are religious may benefit from clinician's sensitivity to both the benefits and hindrances to recovery related to their religious lives. Survivors who describe high levels of guilt, think of themselves as "unforgivable," and describe feeling alienated from their higher power or community of faith may benefit from opportunities to resolve these concerns in psychotherapy, as well as referrals to clergy, chaplains, spiritual directors, or other religious counselors. Furthermore, even in the absence of a community of faith, there is evidence that a comfort-

ing relationship with a higher power is associated with fewer symptoms, and religious concerns related to fear and guilt are associated with more symptoms. It may be appropriate for therapists to explore clients' higher power concepts for both potential support and potential hindrances in trauma therapy. Although many involved in religious communities may be very comfortable exploring mental health assets associated with faith, these results indicate that it is equally important to assess spiritual distress in work with trauma survivors.

Manualized interventions designed to address spiritual concerns relevant to traumatic experiences are available for people managing cancer (Cole, 2005), survivors of childhood sexual abuse (Murray-Swank & Pargament, 2005, 2008), and military veterans (Harris et al., 2011); these findings lend further support to the appropriateness of using such interventions when clients describe religious concerns in adjusting to trauma. Referrals to clergy, chaplains, or spiritual direction may also be useful to facilitate resolution of spiritual distress that may be exacerbating symptoms of posttraumatic stress.

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