Coping Functions of Prayer and Posttraumatic Growth

J. Irene Harris and Christopher R. Erbes
Minneapolis VA Medical Center, University of Minnesota, and University of Minnesota Medical School

Brian E. Engdahl
Minneapolis VA Medical Center and University of Minnesota Medical School

Richard G. Tedeschi
University of North Carolina at Charlotte

Raymond H. Olson
Minnesota Veterans Research Institute and University of Minnesota

Ann Marie M. Winskowski
Minneapolis VA Medical Center

Joelle McMahill
Minnesota Veterans Research Institute

Research on prayer and posttraumatic growth (PTG) indicates that those who pray report more PTG. Research is beginning to identify which types of prayer may be operating in this relationship. We sought to identify specific prayer functions related to PTG while considering differences due to the types of trauma experienced. Participants were trauma survivors from diverse, Midwestern Christian churches (N = 327). Participants completed questionnaires assessing trauma history, prayer coping functions, and PTG. Multiple linear regression analyses found that praying for calm and focus was independently related to higher levels of PTG. When considering all variables in the model, the relationship between prayer for calm and focus and PTG was not significant for those whose most significant trauma was interpersonal in nature, but significant for those with noninterpersonal trauma.

Correspondence should be sent to J. Irene Harris, VA Medical Center, One Veterans Drive, Minneapolis, MN 55417, USA. E-mail: jeanette.harris2@med.va.gov
Although research has long documented the negative effects of trauma, only recently has research documented positive changes, often described as posttraumatic growth (PTG; Calhoun & Tedeschi, 2000; Tedeschi & Calhoun, 1996). Most people have beliefs in a relatively fair and benevolent world, and when these beliefs are challenged by traumatic experiences, they struggle to make meaning of this incongruency (Janoff-Bulman & Frantz, 1997; Park, 2005). Many restructure their values and orientations, attempting to improve their quality of life (Calhoun & Tedeschi, 2000; Park, Cohen, & Murch, 1996; Tedeschi & Calhoun, 1996). Growth domains include an enhanced awareness of personal strength and recognition of new possibilities (Taku, Cann, Calhoun, & Tedeschi, 2008; Tedeschi & Calhoun, 1996). The growth domains of increased appreciation for life, closer relationships with others, and spiritual change represent somewhat different aspects of PTG and are often unexpected by survivors. They are often outgrowths of the struggle to comprehend the trauma and make meaning of it (Janoff-Bulman, 2006). Growth domains can also reflect coping challenges and existential reevaluation. Dealing with the aftermath of trauma is a substantial cognitive-emotional task that can reveal personal strength and new possibilities. For example, a survivor of sexual assault may not only recover from the assault but also begin to do volunteer or professional work to address sexual violence at a cultural level.

Recent studies found that religiosity/spirituality is an important predictor of PTG. Religious commitment and participation in religious activities correlate positively with PTG (Shaw, Joseph, & Linley, 2005). Among bereaved caregivers, spiritual involvement positively predicted PTG (Cadell, Regehr, & Hemsworth, 2003). Muslim torture survivors more involved in the practice of their faith (i.e., attending mosques more frequently) described higher levels of PTG (Kira et al., 2006). Jewish adolescents exposed to terror attacks who were strongly identified with their faith reported higher levels of PTG (Laufer & Soloman, 2006). Among college students, intrinsic religious commitment correlated positively with PTG (Park et al., 1996).

Other studies indicate a link between trauma-induced spiritual struggles and PTG (Pargament, Desai, & McConnell, 2006). Although many trauma survivors report an increase in religious or spiritual functioning following trauma, others describe a loss of faith (Falsetti, Resick, & Davis, 2003). It can be difficult to reconcile the experience of trauma with beliefs in a benevolent, omnipotent deity, and it is possible that efforts to make meaning of this are related to PTG (Pargament et al., 2006; Park, 2005). For example, higher levels of negative religious coping (such as fears that G-d is punishing or abandoning) predict higher levels of PTG (Pargament, Koenig, & Perez, 2000; Pargament, Smith, Koenig, & Perez, 1998). Furthermore, openness to religious change and willingness to struggle with existential questions correlate positively with PTG (Calhoun, Cann, Tedeschi, & McMillan, 2000). PTG may involve initial anger with a deity, followed by resolution (Siegel & Schrimshaw, 2000). Religious struggles may be with others (disagreements with religious authorities or cohorts), self (ambivalence about religious faith or religious beliefs), or with a deity (anger or fearfulness toward a deity perceived as uncaring or punitive; Pargament et al., 2006). Most people use prayer in their efforts to cope with and make meaning of traumatic experiences while resolving spiritual struggles (Ai, Tice, Peterson, & Huang, 2005; Schuster et al., 2001).

Although prayer plays a role in the relationships among religiosity and mental health outcomes (Ai et al., 2005; Ellison, Boardman, Williams, & Jackson, 2001; Harris et al., 2008; Harris, Schoneman, & Carrera, 2005; Lauderdale et al., 2006; Nooney & Woodrum, 2002), the findings are mixed. Some studies show that prayer is associated with poorer physical health,
increased avoidance, negative emotions, lower levels of life satisfaction, and reduced well-being (Ai et al., 2005; Ashby & Lenhart, 1994; Ellison et al., 2001; Koenig et al., 1997; McCullough, 1995; Paloma & Pendleton, 1991), whereas other studies show that prayer is related to higher levels of social support, reduced depression, improved stress tolerance, purpose in life, and religious satisfaction (Paloma & Pendleton, 1991; Richards, 1991; Schneider & Kastenbaum, 1993). These inconsistencies may have several explanations, such as (a) ambiguous direction of causality (e.g., more distressed individuals may pray more frequently, producing positive correlations between distress and prayer; Ellison et al., 2001), (b) relationships with unmeasured variables, or (c) unmeasured aspects of prayer itself. Understanding the impact of prayer on mental health requires careful attention to the measurement of prayer and the design of prayer studies (McCullough, 1995).

The relationship between prayer and PTG has received little study, despite qualitative assertions that prayer is related to PTG (Tedeschi & Calhoun, 2004), and at least one study noting that frequent prayer is related to more PTG in cardiac bypass patients (VandeCreek, Pargament, Belavich, Cowell, & Friedel, 1999). One reason this area has received little research attention has been the difficulty in effectively measuring the diverse cognitive behaviors that participants report as prayer.

Until recently, most studies measured prayer using one, two, or three questions, typically assessing the presence or absence of prayer, the frequency of prayer, and/or expectations that prayer will or will not be effective in managing distress; this resulted in mixed findings. Consequently, conceptualization and measurement of prayer behavior requires elaboration. Cognitive processes taking place during prayer are now assessed (i.e., Ellison et al., 2001). Ladd and Spilka (2002) added the interpersonal functions of prayer (i.e., connections with self, other people, or G-d); this approach has helped tie prayer to personality characteristics (Ladd et al., 2007). Ai et al. (2005) used a checklist to assess prayer content. Similarly, Janssen and Banziger (2003); Janssen, De Hart, and Den Draak (1990); and Janssen, Prins, Van der Lans, and Bairveldt (2000), have studied the formal structure and content of prayer. Even with these refinements in the definition and measurement of prayer behavior, its relationship to mental health outcomes is not yet clear.

Incorporating the theological functions of prayer (intercessory, contemplative, petitionary, adoration, thanksgiving, etc.) should also improve our conceptualization of prayer and its measurement (Elkins, Anchor, & Sandler, 1979; Ladd & Spilka 2002; Richards, 1991). Laird, Snyder, Rapoff, and Green (2004) piloted a measure classifying prayer as adoration, confession, thanksgiving, supplication, and/or reception and found that types of prayer were differentially associated with aspects of mental health. Individuals with arthritis who offered more adoration, thanksgiving, and supplication prayers reported higher levels of hope, whereas more reception prayer was related to more social interaction and less subjective impact of arthritis. Prayers of confession were related to more health concerns. Although the correlational and cross-sectional nature of this study preclude causal conclusions, these findings suggest that unidimensional assessment of prayer contributes to mixed findings by failing to assess prayer behavior in a refined manner.

Bade and Cook (1997) suggested evaluating prayer coping functions to better understand the relationships between mental health and prayer. Their empirically derived Prayer Functions Scale (PFS; Bade & Cook, 1997) identifies the frequency with which individuals use prayer for specific coping functions. Items were generated using a sample of predominantly Methodist,
Lutheran, Baptist, and Catholic participants. They answered open-ended questions about their use of personal prayer to cope with personal difficulties (Bade & Cook, 2008). The items were then grouped via cluster analysis (Bade & Cook, 2008) and factor analysis (Bade & Cook, 1997, 1998). The resulting measure has four subscales representing four prayer coping functions. The Provides Acceptance subscale indexes prayer used to accept difficult stressors. The Provides Calm and Focus subscale indexes prayer used to reduce uncomfortable arousal and increase focused approaches to coping. The Deferring/Avoiding subscale indexes efforts to have God change the stressor independently of the person praying. Finally, the Provides Assistance subscale indexes efforts to solve problems collaboratively with God. Preliminary studies using this measure suggest that higher scores on the Provides Acceptance, Provides Assistance, and Provides Calm and Focus scales were associated with more effective coping (Harris, Schoneman, & Carrera, 2002). Higher Provides Assistance scores predicted lower anxiety, whereas higher Deferring/Avoiding scores predicted higher anxiety levels (Harris et al., 2005). The measurement of prayer coping functions, like measurement of theological functions, suggests that some prayer functions are associated with better mental health functioning and others with poorer mental health functioning.

Assessing prayer coping functions is helpful in that it permits reference to the broader literature on coping with stressful events. The prayer coping findings just noted parallel findings in the secular coping literature (Bade & Cook, 1998). Overall, active coping strategies are more effective than avoidant coping strategies (Holahan, Moos, & Schaefer, 1996). The Provides Assistance, Provides Acceptance, and Provides Calm and Focus prayer functions all are active coping strategies and are associated with better mental health functioning than the Deferring/Avoiding prayer function, which is clearly an avoidant coping strategy (Harris et al., 2005).

To use prayer as a coping strategy one must have a relationship with the Deity and be able to use the relationship as an emotional resource. Unfortunately, some types of trauma are likely to affect one’s ability to use relational support. Survivors of trauma intentionally inflicted by other people (child abuse, sexual abuse, intimate partner violence, and physical or sexual assault) often have difficulty trusting and using social support. They also develop PTSD at higher rates than survivors of noninterpersonal traumas such as natural disasters, (Stein, Van Der Kolk, Austin, Fayyad, & Clary, 2006). Survivors of interpersonal trauma have difficulty managing relationships safely and are therefore more likely to experience subsequent trauma exposure, including revictimization (e.g., Ford, Stockton, Kaltman, & Green, 2006; Nishith, Mechanic, & Resick, 2000).

Impaired relationships may be due to changes in cognitions among survivors of interpersonal trauma; such survivors report higher levels of negative cognitions about themselves and the world around them and are more likely to blame themselves for the event than survivors of noninterpersonal traumas (Elwood & Williams, 2007; Nixon & Nishith, 2005). They are more likely to perceive social situations as threatening (Elwood, Williams, Olatunji, & Lohr, 2007), which may precipitate more avoidance (Ford et al., 2006). Should negative perceptions of self, self-blame, perceptions of threat, and avoidance in relationships extend to relationships with the Deity, prayer coping among survivors of interpersonal trauma may be impaired in the same ways that other relational coping resources are impaired for this group.

This study aimed to examine the relationship between the coping functions of prayer and reports of PTG in a sample of Midwestern individuals from diverse Christian churches. Based
on the aforementioned literature, we expected to find that scores on the active prayer coping functions (PFS Acceptance, PFS Assistance, and PFS Calm and Focus scales) would predict higher PTG (Hypothesis 1). Given the relational impact of interpersonal trauma on survivors, we speculated that survivors of interpersonal trauma may struggle with using prayer as a coping strategy for dealing with trauma and, as a result, may perceive less posttraumatic growth as the result of using prayer. Hypothesis 2, then, was that relationships between prayer coping functions and PTG would be weaker for survivors of interpersonal trauma than for survivors of noninterpersonal traumas.

**METHOD**

**Participants**

Adults were recruited from diverse Christian churches in the northern Midwest through verbal announcements and written postings requesting that individuals who had experienced trauma complete a survey about their use of religious coping. We recruited a sample of 327 trauma-survivor participants, including 228 female, 95 male, and 1 transgendered participant. Three participants did not provide information on their gender. Eighty-seven percent identified as Caucasian; 5% as African American; 5% as Native American; 2% as Hispanic; and 1% as African, Asian, or unidentified ethnicity. Denominational affiliations included Catholic (29%), generic “Protestant” (17%), Lutheran (13%), Presbyterian (4%), United Church of Christ (3%), Reformed Church of America (5%), Baptist (2%), Church of Christ Scientist (4%), Episcopal (7%), Independent Evangelical (less than 1%), Metropolitan Community Church (5%), United Methodist (4%), Church of the Nazarene (4%), Unity Church (less than 1%), and other affiliations (3%). Several participants reported multiple religious affiliations. Participants identified their most distressing traumatic experience, including interpersonal traumas such as sexual assault, childhood sexual abuse, assault and domestic violence (31%), and noninterpersonal traumas such as sudden death of a loved one, life threatening or disabling illness, and natural disasters (69%). Time since the identified “most distressing traumatic” event ranged from less than 1 year to 65 years, with a modal interval of 1 year. The average level of education was 1 year of graduate school (median was a bachelor’s degree), the average age was 55, and the median income was $35,000 to $45,000 annually.

**Procedures**

Two of the investigators met with area congregations to invite them to participate in this survey in exchange for a $10 incentive. Church members were asked to stay after services and complete consent and survey forms and were provided with lunch as they completed the survey. The survey forms requested age, gender, ethnicity, history of trauma, time since trauma, frequency of church attendance, frequency of prayer, frequency of scriptural study, and present and past religious affiliations. The Traumatic Life Events Questionnaire (TLEQ; Kubany et al., 2000) was included to elicit trauma exposure history. This is a 24-item assessment of types of trauma exposure; for each type of trauma identified, the instrument also assesses if the participant’s response was consistent with Diagnostic and Statistical Manual of Mental Disorders (4th ed.;
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American Psychiatric Association, 1994) criteria for trauma exposure, in that it included high levels of fear, helplessness, or horror (Kubany et al., 2000). Test–retest reliabilities for different trauma types measured by the TLEQ at 1-week intervals average from 68% to 91% (Kubany et al., 2000). Severity of trauma exposure as reported on the TLEQ has been shown to be correlated with PTSD symptoms across a number of measures (Kubany et al., 2000). Estimates in internal consistency for this instrument are not relevant, as those who report exposure to one type of trauma (e.g., motor vehicle accident) would not necessarily be expected to validate items about another type of trauma (such as child abuse). Participants were asked to select the most distressing traumatic event they reported on the TLEQ and to answer items on the measures of prayer functions and PTG with this event in mind.

The Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) is a 21-item Likert scale with five factor analytically derived subscales. The subscales are Relating to Others, New Possibilities, Personal Strength, Spiritual Change, and Appreciation of Life. Internal consistency reliability (alpha) for the subscales ranges from .67 to .85, whereas the alpha for the full scale is .90 (Tedeschi & Calhoun, 1996). In previous research, scores have not correlated with social desirability but were correlated with optimism and extraversion (Tedeschi & Calhoun, 1996). The total score (the overall level of positive change and growth attributed to a traumatic experience) was used as the index of PTG for this study because the intercorrelations among the subscales (ranging .59–.71) and the alpha for the full scale (.90) are both quite high.

The PFS (Bade & Cook, 1997), as described previously, is a Likert scale that measures the frequency with which individuals use prayer for specific coping functions. The four subscales are Provides Acceptance (17 items, $\alpha = .94$), Provides Calm and Focus (11 items, $\alpha = .89$), Deferring/Avoiding (4 items, $\alpha = .86$), and Provides Assistance (14 items, $\alpha = .92$; Bade & Cook, 1997). Sample items from the Provides Acceptance include, “Realize that what is happening in my life is good, even if it seems awful or painful at the time,” “Ask for patience,” “Give me the understanding to accept God’s will,” and “Pray that the difficulty will lead me to a closer relationship with God.” Sample items from the Provides Calm and Focus subscale include “Calms me down,” “Find peace within myself,” “Meditate,” “Allows me to reflect on the issues,” and “Keeps me focused.” Examples of the content of the Deferring/Avoiding include “Pray for God to change the situation,” “Pray for things to get better,” “Ask for quick solutions to my problems,” and “Pray for difficulties to be taken away.” The Provides Assistance subscale uses items such as “Pray that God may show me how to handle the difficulties,” “Ask God to help me face difficult situations,” “Talk things over with God,” and “Ask God to help me through the difficult times” (Bade & Cook, 1998).

**RESULTS**

For all analyses, missing data were addressed through listwise deletion. Means, standard deviations, alphas found in this sample, and t tests by trauma type (interpersonal vs. non-interpersonal traumas) for prayer functions and Posttraumatic Growth are listed in Table 1. Scores for PTG and prayer functions are similar to those previously reported (Harris et al., 2005; Tedeschi & Calhoun, 1996). Survivors of interpersonal traumas used less prayer for acceptance and assistance than survivors of other types of trauma. There were no differences in PTG scores based on type of trauma exposure.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Full Sample</th>
<th>Non-Interpersonal Trauma Survivors</th>
<th>Interpersonal Trauma Survivors</th>
<th>t</th>
<th>df</th>
<th>D</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFS Acceptance</td>
<td>305 62.70</td>
<td>89  58.62</td>
<td>204  63.74</td>
<td>-2.53*</td>
<td>291</td>
<td>-0.30</td>
<td>0.95</td>
</tr>
<tr>
<td>PFS Assistance</td>
<td>311 57.60</td>
<td>90  52.89</td>
<td>209  58.16</td>
<td>-3.37**</td>
<td>297</td>
<td>-0.39</td>
<td>0.86</td>
</tr>
<tr>
<td>PFS Calm &amp; Focus</td>
<td>314 40.90</td>
<td>91  39.99</td>
<td>211  41.34</td>
<td>-1.08</td>
<td>300</td>
<td>-0.12</td>
<td>0.83</td>
</tr>
<tr>
<td>PFS Defer &amp; Avoid</td>
<td>312 14.10</td>
<td>92  13.59</td>
<td>210  13.65</td>
<td>-0.13</td>
<td>300</td>
<td>-0.01</td>
<td>0.84</td>
</tr>
<tr>
<td>Total PTGI Score</td>
<td>310 66.50</td>
<td>93  68.49</td>
<td>209  66.08</td>
<td>0.86</td>
<td>300</td>
<td>0.09</td>
<td>0.94</td>
</tr>
</tbody>
</table>

*p ≤ .05, **p ≤ .01.
TABLE 2

Intercorrelations Between Major Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) TLEQ</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2) Total PTGI Score</td>
<td>.20**</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3) PFS Accept</td>
<td>.10</td>
<td>.43**</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4) PFS Assist</td>
<td>.03</td>
<td>.35**</td>
<td>.86**</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>5) PFS Calm</td>
<td>.07</td>
<td>.46**</td>
<td>.77**</td>
<td>.73**</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6) PFS Defer</td>
<td>.09</td>
<td>.24**</td>
<td>.47**</td>
<td>.49**</td>
<td>.46**</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>7) Prayer Frequency</td>
<td>.00</td>
<td>.04</td>
<td>.26**</td>
<td>.27**</td>
<td>.17**</td>
<td>.14*</td>
<td>—</td>
</tr>
</tbody>
</table>

Note. TLEQ = Sum of Potentially Traumatic Experiences; PFS = Prayer Functions Scale; PTGI = Posttraumatic Growth.
*p < .05. **p < .01.

Interscale correlations are presented in Table 2. All of the coping functions of prayer were positively correlated with posttraumatic growth, as well as with one another. Because of evidence of overlapping variance among the four coping functions of prayer, further regression analysis was necessary to determine if any particular prayer coping functions were more important than others in the relationship between prayer and posttraumatic growth.

The relationship between prayer functions and PTG was analyzed using linear regression with PTGI scores as the dependent variable as shown in Table 3. Alpha was set at .01 to control for experiment-wise Type I error. Trauma type and the four prayer functions were

TABLE 3

Trauma Type and Prayer Functions as Predictors of Posttraumatic Growth

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal Trauma</td>
<td>2.93</td>
<td>2.62</td>
<td>0.06</td>
</tr>
<tr>
<td>PFS Accept</td>
<td>0.36</td>
<td>0.16</td>
<td>0.25</td>
</tr>
<tr>
<td>PFS Assist</td>
<td>-0.24</td>
<td>0.19</td>
<td>-1.27</td>
</tr>
<tr>
<td>PFS Calm/Focus</td>
<td>0.83*</td>
<td>0.19</td>
<td>0.37</td>
</tr>
<tr>
<td>PFS Defer/Avoid</td>
<td>0.17</td>
<td>0.31</td>
<td>0.03</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal Trauma</td>
<td>7.19</td>
<td>11.30</td>
<td>0.15</td>
</tr>
<tr>
<td>PFS Accept</td>
<td>0.09</td>
<td>0.21</td>
<td>0.06</td>
</tr>
<tr>
<td>PFS Assist</td>
<td>-0.14</td>
<td>0.26</td>
<td>-0.08</td>
</tr>
<tr>
<td>PFS Calm/Focus</td>
<td>1.33*</td>
<td>0.27</td>
<td>0.60</td>
</tr>
<tr>
<td>PFS Defer/Avoid</td>
<td>-0.25</td>
<td>0.36</td>
<td>-0.05</td>
</tr>
<tr>
<td>Interpersonal Trauma X PFS Accept</td>
<td>0.57</td>
<td>0.32</td>
<td>0.74</td>
</tr>
<tr>
<td>Interpersonal Trauma X PFS Assist</td>
<td>-0.30</td>
<td>0.38</td>
<td>-0.35</td>
</tr>
<tr>
<td>Interpersonal Trauma X PFS Calm/Focus</td>
<td>-1.04*</td>
<td>0.38</td>
<td>-0.91</td>
</tr>
<tr>
<td>Interpersonal Trauma X PFS Defer/Avoid</td>
<td>1.43</td>
<td>0.67</td>
<td>0.43</td>
</tr>
</tbody>
</table>

Note. Step 1 Adj. $R^2 = .24$, $F = 11.32$, $p < .01$. Step 2 Adj. $R^2 = .26$, $F = 11.78$, $p < .01$, $R^2 Δ = .03$, $FΔ = 2.94$, $p = .02$.
**p < .01.
entered in Step 1. The interactions of each prayer function and trauma type were entered in Step 2. Prayer functions explained about 24% of the variance in PTG. The model including interactions of prayer functions and trauma type (interpersonal vs. noninterpersonal) explained about 26% of the variance in PTG. In the full model, both the Calm/Focus prayer function \( (B = 1.333, p < .001) \) and the interaction of trauma type and the Calm/Focus prayer function \( (B = -1.036, p = .006) \) emerged as significant predictors of PTG. Among survivors of interpersonal trauma, the partial correlation between the Calm/Focus prayer function and PTG was .11 with all other prayer coping functions controlled. Among survivors of noninterpersonal traumas the correlation between these two variables was .30 with all other prayer coping functions controlled. This statistically significant difference indicates that although prayer for calm and focus predicts posttraumatic growth among survivors of noninterpersonal traumas, prayer for calm and focus is not a statistically significant predictor of posttraumatic growth among survivors of interpersonal traumas.

**DISCUSSION**

Hypothesis 1 was partially supported; the Provides Calm and Focus prayer function was a positive predictor of PTG. Hypothesis 2 was also supported; the relationship between the Provides Calm and Focus prayer function and PTG was weaker among survivors of interpersonal traumas.

Based on the previous literature, it is not surprising that the Provides Calm and Focus function was a positive correlate of PTG; this prayer function has been associated with more positive mental health outcomes in the past (Harris et al., 2002; Harris et al., 2005). Furthermore, the Provides Calm and Focus prayer coping function appears to be closely related to secular constructs that have been associated with PTG in the past. Items on this subscale identify meditation and reflection as specific prayer coping mechanisms. Previous research on posttraumatic growth has consistently identified “rumination,” “cognitive processing,” and “meaning making” to enhanced posttraumatic growth (Bower, Kemeny, Taylor, & Fahey, 1998; Calhoun et al., 2000; Tedeschi, Calhoun, & Cooper, 2000; Ulrich & Lutgendorf, 2002). Participants who report using high levels of the Provides Calm and Focus prayer coping function are likely using prayer to pursue repetitive cognitive processes and adapt their meaning making processes to accommodate their experience of trauma. They may be better able to make a transition from intrusive and anxiety-ridden thinking, or “brooding” rumination to a more productive “reflective” form of rumination (Nolen-Hoeksema & Davis, 2004). This transition may be accomplished through the comfort and focus that prayer can provide, and has been seen to be a crucial aspect of the process of PTG (Calhoun & Tedeschi, 2006). Furthermore, this cognitive processing within a prayer relationship with a Deity may well be related to current theories of posttraumatic distress, which posit that healthy adaptation to traumatic events requires an ability to tolerate the distress or trauma-related memories so that the memories, and the affect associated with them, can be processed and assimilated into healthy memory structures (e.g., Foa & Rothbaum, 1998; Resick & Schnicke, 1992). The Provides Calm and Focus prayer coping function may thus serve, within the context of a relationship with a Deity, to facilitate cognitive processing and meaning-making, and ultimately posttraumatic growth.
Differences that emerged based on trauma type were consistent with the previous literature on interpersonal traumas. Survivors of interpersonal traumas used less prayer for acceptance and assistance. Given previous literature indicating that survivors of interpersonal traumas perceive more threat in relationships and are more likely to blame themselves for the traumatic event (Elwood & Williams, 2007; Elwood et al., 2007), they may be less likely to seek help in a relationship with a Deity. Perceptions of support from a Deity are extremely subjective, and individuals experiencing high levels of self-blame combined with high levels of threat from others may in fact fear retribution from a Deity, rather than conceiving this as a source of spiritual support. Even when they did access prayer coping resources, such as using prayer to achieve calm and focus, this strategy was less effective for survivors of interpersonal traumas than for survivors of other types of trauma. It may be that survivors of interpersonal traumas would have increased difficulty trusting and effectively using social support from a Deity, and potentially from others in their community of faith, rendering religious coping strategies less effective than they are for survivors of noninterpersonal traumas.

The design of this study was cross-sectional, and the analysis is correlational, so it is not possible to derive causal conclusions at this point; it is possible that prayer coping behavior influences posttraumatic growth or vice versa. Longitudinal studies would appropriately address this issue. The sample was uniformly Christian, highly educated, predominantly Caucasian, regular church attenders; generalization of these findings to other populations requires further studies. Although all of those sampled identified as Christian, diverse denominational affiliations were represented in this sample, as were diverse types of trauma exposure. Both the PFS and the PTGI have been used with a wide range of denominational or religious groups (Bade & Cook, 1997, 1998; Harris et al., 2002; Harris et al., 2005; Kira et al., 2006; Laufer & Soloman, 2006), so there is no reason to fear that these instruments are not valid with this population, or that the results are not valid for the general population of Christian trauma survivors. At the same time, there may be different patterns of relationships between prayer and posttraumatic growth across individual denominations. Our present sample is not large enough to answer this question in that level of detail; future studies will be necessary to detect such differences.

Results speak to the importance of considering multidimensional aspects of religion, and of considering both positive and negative relationships between religiosity and mental health. Results are consistent with much of the previous literature on religiosity and PTG, confirming that spiritual practice is related to PTG (Cadell et al., 2003; Kira et al., 2006; Shaw et al., 2005), and extending findings that rumination, cognitive processing, and self-disclosure are related to PTG (Tedeschi & Calhoun, 2004) to sacred contexts. The results have useful implications for counseling trauma survivors who pray. These findings suggest that contemplative approaches to prayer coping, such as meditation, reflection, and self-disclosure to the Deity, can facilitate posttraumatic growth. This may be particularly useful for survivors who may have limited access to social support, as self-disclosure in prayer may fill some of the functions of social support. Furthermore, for survivors of interpersonal trauma who have a relationship with a Deity, attention to restoring trust and support in that relationship may be as important as it is in other relationships in restoring coping resources. Longitudinal studies are needed to determine if a cause–effect relationship exists between these prayer functions and outcomes; should such relationships be found, Calm and Focus prayer coping would be confirmed as an appropriate focus of counseling attention for individuals seeking personal growth in the context of traumatic experiences.
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PRAYER AND POSTTRAUMATIC GROWTH


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