1-1-2013

Effect of religiosity and combat exposure to predict combat service member posttraumatic growth

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George Fox University

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Effect of Religiosity and Combat Exposure to Predict Combat Service Member Posttraumatic Growth

by

Kurt C. Webb

Presented to the Faculty of the Graduate Department of Clinical Psychology George Fox University in partial fulfillment of the requirements for the degree of Doctor of Psychology in Clinical Psychology

Newberg, Oregon
April 29, 2013
Effect of Religiosity and Combat Exposure on Combat Service Member

Posttraumatic Growth

by

Kurt C. Webb

has been approved

at the

Graduate School of Clinical Psychology

George Fox University

of a Dissertation for the Psy.D. degree.

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Effect of Religiosity and Combat Exposure to Predict Combat Service Member Posttraumatic Growth

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Abstract

The purpose of this study is to investigate 2 research questions: Do pre-deployment religiosity among combat military service members and level of combat exposure predict posttraumatic growth? And, do the level of combat exposure and changes in religiosity predict posttraumatic growth in combat military service members?

The sample was obtained from an archival data set (Orton, 2012) was a group of male National Guard infantry deployed to the war in Iraq (N = 75). Participants were given pre- and post-deployment measures 1 month before and 6 months after returning from the Iraq war. Four regression equations were used to predict posttraumatic growth. The predictor variables were religious behavior (DUREL scale), religious coping (Brief RCOPE scale), spiritual wellbeing (Brief Spiritual Wellbeing scale), and combat exposure (CES). The 2 criterion variables were measured by the Posttraumatic Growth Inventory (PTGI) and the PTGI Plus (3 additional spiritual change items). All 4 multiple regression analyses found no significant results: The first
set of religiosity predictor variables were not related to posttraumatic growth (PTG), as measured by the PTGI, $F(7, 65) = 1.89, p = .09$, and no relationship was found when the same predictor variables were entered with PTGI Plus, $F(7, 65) = 1.95, p = .08$. The second set of predictor variables were the religious change scores, which were not related to PTG as measured by the PTGI, $F(7, 62) = .67, p = .70$, nor were religious change scores related to PTG, as measured by the PTGI Plus, $F(7, 62) = .71, p = .66$.

No support was found for the research hypothesis that pre-deployment and post-deployment changes in religiosity would predict post-traumatic growth. Possible explanations for these unexpected results included low combat exposure scores, insufficient elapsed time to process war experiences, and a high rate of participants who identified as non-religious. Another possibility is that individuals high in religiosity may hold somewhat different assumptive worldviews that prepare them to resolve trauma more effectively. Finally, religious coping style may interact with trauma, yielding contradictory results, which were not explored in the present sample.
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Chapter 1

Introduction

Over the last two decades, the armed forces and the Veteran’s Administration (VA) have increased their efforts to mitigate psychological problems among veterans. The RAND Corporation has estimated that since October 2001, 1.64 million soldiers have been deployed to Iraq and Afghanistan. Approximately 300,000 of these veterans (about 18%) are believed to have higher rates of psychological problems over physical injuries (Tanielian & Jaycox, 2008). Past research has well established that traumatic events may lead to psychological consequences, such as anxiety, depression, and posttraumatic stress disorder (PTSD; Clancy et al., 2006; Neria, Bromet, & Marshall, 2002).

Current trauma research has focused on understanding the role of resiliency characteristics among soldiers, with the hope of improving the efficacy of treatment interventions. A component of resiliency under exploration is individual coping, which is mediated by dispositional, cognitive, behavioral, and social domains. However, one area that has been under-investigated is the role of religious factors that may affect soldiers’ coping and wellbeing while processing post combat-related outcomes (e.g., combat exposure, trauma).

To date, there appears to be one study (Badgett, 2009) that investigated the moderating effects of spirituality on combat exposure and posttraumatic growth among Vietnam veterans. This present study was designed to measure how combat exposure and religiosity impact posttraumatic growth among soldiers deployed during the Iraq war under Operation Iraqi
Freedom. Specifically, do pre-deployment religiosity among combat service members and level of combat exposure predict posttraumatic growth as measured by the Posttraumatic Growth Inventory (PTGI)? And do the level of combat exposure and changes in religiosity predict posttraumatic growth in combat service members?

**Combat Exposure and Trauma**

War-related trauma has been studied more than any other type of trauma among civilians (e.g., childhood sexual abuse, motor vehicle accidents, natural disasters). One commonly held assumption was that combat-related trauma was more traumatic than other types of trauma. This assumption could be partly influenced by popular media and movies that depict war trauma as senseless and meaningless loss, whereas civilian types of trauma are generally believed to be unavoidable (e.g., natural disasters) or accepted as a necessary risk to daily living (e.g., motor vehicle accidents). Nevertheless, the research literature on understanding the differences and similarities on trauma types has yielded mixed results. For example, some studies indicate that the “types of trauma” could possibly explain why therapeutic treatment was less efficacious for veterans than civilians with equivalent PTSD symptomology, suggesting that combat trauma might affect different psychological processes (Burstein et al. 1988; Foa, Keane, Friedman, & Cohen, 2009).

However, some research studies have found no significant difference between combat or civilian-related trauma (e.g., motor vehicle accidents, work-related traumatic accidents), as related to the severity of trauma symptoms or the development of a psychiatric disorder (Amir, Kaplan, & Kotler, 1996; Brown, Fulton, Wilkeson, & Petty, 2000; Gaylord, Holcomb, & Zolezzi, 2009).
Both severity and type of combat exposure appear to be related to the development of psychological wounds. For example, veterans who witnessed an injury of a fellow soldier had greater distress and were three times more likely to have increased PTSD symptoms than veterans who did not (Adler, Vaitkus, & Martin, 1996; Baker et al., 2009). Other studies have found that active service members who served in Operation Iraqi Freedom had both greater combat exposure and more post-deployment PTSD symptoms compared to active service members from past military operations (Renshaw, Rodrigues, & Jones, 2009; Tanielian & Jaycox, 2008). This illustrates that the type of combat exposure of veterans from the War on Terror may be considerably different from past war campaigns.

**Posttraumatic Growth**

While combat experiences can produce negative responses, some researchers have used positive psychology to understand what psychological, behavioral, and social processes can explain the phenomenon of positive coping and personal transformation despite enduring a traumatic event (Aspinwall & Tedeschi, 2010). These positive, personal changes have been defined as posttraumatic growth (Calhoun & Tedeschi, 2004; Tedeschi & Calhoun, 1996), which has also been studied as “stress-related growth” or “benefit finding” (Aspinwall & Tedeschi, 2010; Helgeson, Reynolds, & Tomich, 2006).

One core theoretical assumption of posttraumatic growth is the notion that the individual had an unquestioned “assumptive world,” so that pre-trauma schemas leave him or her unprepared to assimilate the traumatic event (Parkes, 1971; Tedeschi, Calhoun, & Cann, 2007). These assumptive schemas generally involve a sense of personal control, trust, and an
expectation that good things happen to good people. Tedeschi et al. (2007) suggested that in posttraumatic growth pre-trauma schema are transformed through cognitive and affective processing that leads to reevaluation of pre-trauma events and schema change.

Over the last two decades, posttraumatic growth has been found among individuals with a history of childhood sexual abuse (Fritch, Mishkind, Reger, & Gahm, 2010; Lev-Wiesel, Amir, & Besser, 2005), sexual assault (Ahrens, Abeling, Ahmad, & Hinman, 2010; Frazier & Berman, 2008), female assault victims (Grubaugh & Resick, 2007), victims of violence (Kunst, 2010), cancer survivors (Schroevers, Helgeson, Sanderman, & Ranchor, 2010), HIV/AIDS (Sawyer, Ayers, & Field, 2010), life-threatening illness (Heffron, Grealy, & Mutrie, 2009), prisoner of war (Feder et al., 2008), terrorism (Val & Linley, 2006), motor vehicle accidents (Shakespeare-Finch & Armstrong, 2010), severe burn survivors (Rosenbach & Renneberg, 2008), and natural disaster (Kilmer & Gil-Rivas, 2010). Several studies have investigated posttraumatic growth among veterans, but a paucity of research has studied posttraumatic growth among service members who served in Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF; Benetato, 2011; Pietrzak et al., 2010), and little attention has been paid to the role of religiosity in posttraumatic growth among service veterans (Badgett, 2009).

The research literature on posttraumatic growth yields mixed results. Some research supports a linear, positive relationship between severity of trauma symptoms and posttraumatic growth (Morris, Shakespeare-Finch, Rieck, & Newbery, 2005). However, more studies have established a paradoxical pattern, in that positive growth simultaneously occurred while the individual was still experiencing distress about the past traumatic event (Feder et al., 2008; Tedeschi et al., 2007). Other studies have found similar findings, yet more in the direction of a
curvilinear relationship between posttraumatic stress and posttraumatic growth, so that a moderate level of stress could lead to higher posttraumatic growth (Kunst, 2010; Levine, Laufer, Hamama-Raz, Stein, & Solomon, 2008; McCaslin et al., 2009; McLean et al., 2011; Solomon & Dekel, 2007; Yerkes & Dodson, 1908).

However, stressful events do not consistently lead to posttraumatic growth. For example, Maguen, Vogt, King, King, & Litz (2006) found no significant relationship between exposure to warfare (e.g., aftermath experiences of handling human remains, dealing with prisoners) and posttraumatic growth.

Religiosity and Military Personnel

Religion has a dominant role in American culture and is a resolute part of the human experience. A Gallup Poll found that 56% of Americans endorsed religion as very important in their life and another 25% stated it was fairly important (Gallup Polls, 2009). This indicates that approximately four-fifths of Americans value religion in their lives. While investigating military religious demographics, there were no current statistics on religion because the military largely stopped tracking religious information in 2005 (Mansfield, 2005). As a result, there is little current research on military religious affiliation, and the research that does exist yields contradictory results. For example, one study found that 87% of military active duty members at an outpatient medical center endorsed a religious affiliation, whereas a large-scale study using census data from 2001, which compared military personnel to the U.S. population, illustrated that military members endorsed lower rates of identifying with a religious affiliation—21% of military personnel, compared to 14% of civilians 18 and over identified, as atheist or not religious (McLaughlin, McLaughlin, & Van Slyke, 2010; Segal & Segal, 2004). Nevertheless,
these studies confirm at the very least that the majority of military personnel likely endorse a religious affiliation.

**Religious Beliefs and Behavior**

Religious beliefs undergird conscientious religious practices (e.g., prayer, attending religious services), which by definition are extrinsic behaviors of religiosity. A literature review conducted by Moreira-Almeida, Neto, and Koenig (2006) examined 79 articles and found religious practice and behavior was related to psychological well-being that included one or more of these variables—“life satisfaction, happiness, positive affect, and higher morale” (p. 245). Thus, religious practices may serve as markers for predicting well-being, yet the research findings are mixed on the relationship between religious beliefs and trauma.

After the terrorist attacks on September 11, 2001, 90% (N = 560) of participants surveyed three to five days after the attacks had turned to religion to cope with the uncertainty that another attack was possible (Schuster et al., 2007). Although Schuster et al. did not examine religious change over time, the response to seek religious support may illustrate the reorganization of shattered assumptions (e.g., I am not in control; life is unpredictable and unsafe; Janoff-Bulman, 1992). For example, one study suggested that religious assumptions were not altered after a traumatic event, but that religious beliefs provided a framework to understand and cope with the traumatic experience (Overcash & Calhoun, 1996). In contrast, another study found veterans who killed others or did not prevent the death of others experienced weakened religious beliefs (Fontana & Rosenheck, 2004). As a result, this relationship between religious beliefs and trauma is not clearly established. So increasing the severity of the trauma is not always related to shattered assumptions leading to weakened religious beliefs. One possible explanation for these
mixed results is that some may be more resilient and able to accommodate the traumatic effects without weakening their religious faith.

**Religious Coping**

Pargament et al. (1988) conducted one of the first studies to investigate intrinsic and extrinsic religious coping, which delineated three religious coping styles: (a) in the self-directing style, the individual takes responsibility to actively resolves problems, while God is viewed as allowing personal freedom and not directly involved; (b) in the deferential style, the individual appears to defer responsibility of problem-solving to God; and (c) in the collaborative style, the individual and God share the responsibility of active problem-solving. In the same study, the self-directing style was negatively related to religiosity, whereas the deferential and collaborative approaches were positively related to increased religiosity. In this seminal study, collaborative religious coping was the most frequently used method among a college sample (Paragament, Smith, Koenig, & Perez, 1998), suggesting that education or intellectual ability may influence religious coping.

Religious beliefs and coping can also be a barrier to psychological health, such as maladaptive thinking that leads to increased distress rather than better psychological functioning. Pargament, Koenig, and Perez (2000) indicated that negative religious coping included reappraisals of a punishing God, demonic activity, questioning God’s power to affect situational change, dissatisfaction with God, rigid religious behavior, and self-directed coping without God’s help (Pargament et al., 2000). Essentially, individuals engaged in negative religious coping will not use collaborative or deferential coping strategies, but rely primarily on a self-directed coping method.
The research literature on negative religious coping indicates that when traumatized populations used negative religious coping mechanisms, they were found to have lower rates of seeking religious social support (Kennedy, 1989, cited in Drescher & Foy, 1995), to have lower rates of forgiveness toward others and oneself (Witvliet, Phipps, Feldman, & Beckham, 2004), to have greater feelings of guilt after killing others or not preventing the death of a fellow veteran (Fontana & Rosenheck, 2004), and were more likely to be less religious (Falsetti, Resick, & Davis, 2003).

Positive religious coping generally includes a positive response to and sense of connectedness and security to a higher power (Pargament, Feuille, & Burdzy, 2011). Pargament et al. (2000) posited that positive religious coping included a process of meaning-making and achievement of a life transition, and having a sense of control, comfort, and closeness to God and others. Numerous studies found positive religious coping was related to higher levels of psychological well-being (Pargament, Koenig, Tarakeshwar, & Hahn, 2004; Rouss, 2007; Sermanian, 2007) posttraumatic growth (Askay & Magyar-Russell, 2009; Thombre, Sherman, & Simonton, 2010) and lower depression (Ahrens et al., 2010).

Because studies on the relationship between religiosity, combat exposure level and posttraumatic growth are limited, the objective of this study is to better understand the relationship between combat exposure and increased posttraumatic growth as mediated by religious beliefs, behaviors, and practices. Specifically, are there aspects of religiosity being underestimated in the transformative processes of posttraumatic growth? Since the majority of military members identify as having some form of religious worldview, and because religion or spirituality can represent important values for making-meaning and having a sense of purpose, it
is possible an individual’s religious views and ways of responding to their environment could contribute to a self-evaluation process that develops into negative reactions (e.g., PTSD) or positive growth (e.g., value relationships more).
Chapter 2

Methods

Participants

The sample of participants was comprised of three Army National Guard Infantry platoons deployed to the Iraq War from 2007 to 2008. A total of 221 participants were initially assessed one-month before pre-deployment to Iraq. However, on the post-deployment assessment, the study (Orton, 2012) indicated that only 75 returned completed data sets because the Army administrators misplaced the deidentified master list required to match the datasets.

The demographics (see Appendix A) of this sample were obtained in the pre-deployment phase on the same day that the first battery of measures was administered. All the participants were male, with a mean age of 27 years; 43% were single, 32% were married, 8% were divorced, and 17% did not report marital status. The education level for this sample included 77% with high school/GED, 3% bachelors, 4% postgraduate, and 16% who did not report. Participants reported the following religious affiliations: 31% endorsed “none,” 21% Christian Orthodox, 20% Protestant, 15% Catholic, 1% Jewish, and 12% other. The ethnicities were comprised of the following: 75% as European American, 7% as Native American, 4% as Hispanic/Latino, 3% as Asian American, 1% as African American, 1% as Pacific Islander, and 10% as other.

Measures

In this study, a total of five measures were utilized from the archival data set. The eight predictor variables to investigate the areas of religious behaviors, religious coping, spirituality, and combat exposure were measured by the Duke University Religious Index (DUREL; see
Appendix B), Brief Religious Coping scale (Brief RCOPE; see Appendix C), Brief Spiritual Well Being Scale (Brief SWBS; see Appendix D), and the Combat Exposure Scale (CES; see Appendix E). The criterion variable for posttraumatic growth was measured by the Posttraumatic Growth Inventory (PTGI; see Appendix F), and three additional questions were added to the PTGI and designated as PTGI Plus as a separate criterion variable.

The Duke University Religious Index (DUREL) is a five-item measure that assesses: (a) organized religious activity (e.g., frequency of attending religious services), (b) non-organized religious activity (e.g., frequency of praying, meditating, or studying religious text), and (c) intrinsic religiosity (i.e., three items assessing internalization of one’s religious practices and beliefs; Koenig & Bussing, 2010; Koenig, Parkerson, & Meador, 1997). The first two items measure religious activities on a six-point Likert continuum for frequency; the combined score on these two items was used to measure extrinsic religiosity (DUREL Act.). The final three items measure intrinsic religiosity by utilizing a five-point Likert scale from Definitely true to Definitely not true, and the combined score for these three items was used to measure intrinsic religiosity (DUREL Int.) The Cronbach alpha for internal consistency is 0.91 for all five items, and the intrinsic religiosity subscale alpha has been found to range from 0.75 to 0.88 (Cotton et al., 2006; Koenig et al., 1997; Storch et al., 2004). For this current study, the Cronbach alpha for all five items was 0.91.

The Brief Religious Coping scale (Brief RCOPE) was designed to integrate religious dimensions that measure levels of stress, coping, and health (Pargament et al., 1998). The Brief RCOPE is a 14-item measure adapted from the larger RCOPE that originally had 105 items (Pargament et al., 2000). Items 1-7 measure positive religious coping, and items 8-14 measure
negative religious coping. Pargament et al. (2011) aggregated statistical results from 30 studies that used the Brief RCOPE, indicating that the median coefficient alphas range from 0.81 to 0.92 for negative and positive religious coping respectively. Both positive and negative religious coping will be used to evaluate direction of religious coping to predict posttraumatic growth. The Cronbach alpha for this current study ranged from 0.84 and 0.96 for negative and positive religious coping respectively.

The Brief Spiritual Well Being Scale (Brief SWBS) has 6-items derived from the 20-item Spiritual Well-Being instrument (Bufford, 2011; Paloutzian & Ellison, 1982). The Brief SWBS yields three scores: A total spiritual well-being score that combines both the vertical and horizontal dimensions, the vertical dimension refers to one’s sense of well-being in relationship to God, and the horizontal dimension refers to one’s perception of life’s purpose and satisfaction, controlling for specific religious references (Paloutzian & Ellison, 1982). A preliminary study of the BSWBS for an Air National Guard sample had a Cronbach alpha of 0.91 (Bufford, 2011). The Cronbach alpha for this current sample was 0.61.

The Combat Exposure Scale (CES) measures participants’ subjective accounts of the frequency and intensity of combat encounters (Keane et al., 1989; Lund, Foy, Sipprelle, & Strachan, 1984). The CES has seven-questions with five-point ordinal values that measure frequency of certain types of combat exposure. For example, “How often did you see someone hit by incoming or outgoing rounds?” followed by 1 (never), 2 (1-2x), 3 (3-12x), 4 (13-50x), and 5 (51 or more). The severity of combat exposure is derived by adding up the seven Likert items, which can range from the lowest score of 7 to the highest score of 35. The overall combat exposure is divided into five categories: 0-8 (light) 9-16 (light-moderate) 17-24 (moderate) 25-
Effects of Religiosity

32 (moderate-heavy) and 33-41 (heavy). Coefficient alpha is .85. In the present sample the Cronbach alpha was .76.

The Posttraumatic Growth Inventory (PTGI) served as the dependent measure. It has 21 items that load on five factors that include (a) appreciation of life, (b) relating to others, (c) new possibilities, (d) personal strength, and (e) spiritual change (Calhoun, Cann, Tedeschi, & McMillan, 2000; Tedeschi & Calhoun, 1996). Item responses are rated on five-point ordinal scales, ranging from No Change to Very Great Change in positive growth following the traumatic event. Factor analysis across several studies confirmed that these five factors were measuring separate constructs (Lee, Luxton, Reger, & Gahm, 2010; Taku, Cann, Calhoun, & Tedeschi, 2008; Tedeschi & Calhoun, 1996). Internal consistency had a coefficient alpha of 0.90 (Tedeschi & Calhoun, 1996). In the current study, the Cronbach alpha was 0.96.

One study found that including three religiously oriented questions (I have a deeper commitment to my religious beliefs; I find more spiritual meaningfulness in life; I accepted myself as a spiritual being) with the 21-item PTGI made the spiritual change domain more robust (Morris et al., 2005). Morris et al. found the 24-item PTGI had a Cronbach alpha of 0.93, and the spiritual change factor was 0.93. In this study, the three added items to the PTGI is referred to as the PTGI-Plus. The Cronbach alpha for all 24-items was 0.96, and the spiritual change factor with the additional items was 0.94.

Procedure

Archival data was obtained by permission to conduct this study (Orton, 2012). The original data collection included three platoons that were tested one month before deployment to Iraq. All participants signed an informed consent form, and approval before testing was obtained.
from platoon commanders before administration of assessment measures from a trained administrator. After the platoons returned from Iraq, a six-month period passed before administering a second battery of assessments by a trained administrator.

A total of five assessment measures were used in this study. The seven variable scores from three of the instruments were obtained from the assessment battery conducted in both the pre- and post-deployment phase: the Duke Religion Index (DUREL Act, DUREL Int.), the Brief Religious Coping scale (Brief Negative and Positive RCOPE), and the Brief Spiritual Well Being Scale (Vertical and Horizontal Brief SWB). The variable scores of the last two measures were obtained from only the post-deployment phase: the Combat Exposure Scale (CES) and the Posttraumatic Stress Growth Inventory (PTGI). Three additional questions were added to the PTGI and designated as PTGI Plus to be entered each as a separate criterion variable.
Chapter 3

Results

The purpose of this study was to investigate two research questions: Do pre-deployment religiosity among combat military service members and level of combat exposure predict posttraumatic growth? And, do the level of combat exposure and changes in religiosity predict posttraumatic growth in combat military service members? An assessment battery was given one month before and six months after serving a tour in the war zone in Iraq. Descriptive statistics for the study variables and change scores are reported in Table 1.

Data Analysis

Descriptive statistics, internal consistency, correlations among the study measures were computed. Four simultaneous multiple regression analyses were performed. The first set of eight predictor variables included seven religiosity scores from the pre-deployment measures that were derived from the DUREL (religious activities and intrinsic religiosity), the Brief RCOPE (negative RCOPE and positive RCOPE), and the Brief SWB scales (total, vertical, and horizontal), and total combat exposure score as measured by the CES. However, multicollinearity excluded using the Brief SWB total score in the regression models, resulting in seven independent variables. This first predictor variable set was entered into two regression models, and continuous scores from the PTGI and the PTGI Plus were entered as separate criterion variables in the respective regression equation.
Table 1

*Descriptive Statistics for the Study Variables*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Pre-Dep. M (SD)</th>
<th>Post-Dep. M (SD)</th>
<th>Range</th>
<th>Potential</th>
<th>Actual</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief Positive RCOPE</td>
<td>75</td>
<td>13.5 (6.6)</td>
<td>11.5 (6.1)</td>
<td>7-28</td>
<td>7-28</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>Brief Negative RCOPE</td>
<td>75</td>
<td>9.2 (3.5)</td>
<td>8.8 (3.6)</td>
<td>7-28</td>
<td>7-22</td>
<td>1.83</td>
<td></td>
</tr>
<tr>
<td>DUREL Activities</td>
<td>75</td>
<td>9.1 (2.5)</td>
<td>9.4 (2.5)</td>
<td>2-12</td>
<td>3-12</td>
<td>-1.11</td>
<td></td>
</tr>
<tr>
<td>DUREL Intrinsic</td>
<td>75</td>
<td>9.1 (3.9)</td>
<td>10.3 (4.4)</td>
<td>3-15</td>
<td>3-15</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>Brief SWB Horizontal</td>
<td>75</td>
<td>11.4 (2.5)</td>
<td>13.5 (3.4)</td>
<td>3-18</td>
<td>3-17</td>
<td>-1.50</td>
<td></td>
</tr>
<tr>
<td>Brief SWB Vertical</td>
<td>75</td>
<td>10 (3.6)</td>
<td>10.7 (4.6)</td>
<td>3-18</td>
<td>3-18</td>
<td>-.56</td>
<td></td>
</tr>
<tr>
<td>Combat Exposure Scale</td>
<td>75</td>
<td>--</td>
<td>13 (4.8)</td>
<td>7-35</td>
<td>7-35</td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td>Posttraumatic Growth Inventory</td>
<td>73</td>
<td>--</td>
<td>34.2 (25.9)</td>
<td>0-105</td>
<td>0-91</td>
<td>.28</td>
<td></td>
</tr>
<tr>
<td>Posttraumatic Growth Inventory Plus</td>
<td>73</td>
<td>--</td>
<td>36.7 (28.2)</td>
<td>0-120</td>
<td>0-99</td>
<td>.28</td>
<td></td>
</tr>
</tbody>
</table>

Note. The Posttraumatic Growth Inventory Plus included an additional three questions to the original 21 questions of the PTGI. Pre-deployment and post-deployment means and standard deviations respectively represent scores obtained one month before and six month after returning from the Iraq War. N equals the total number of participants.
The second set of predictor variable scores was derived by subtracting the post religiosity scores from the pre-deployment measures to create seven religious change scores. The total combat score from the CES and the religious change scores were entered into two regression equations that used the same criterion variables from the first set of regressions: PTGI and PTGI Plus.

As can be seen in Table 1, only the DUREL Intrinsic variable approached a normal distribution with a skewness of .11, and a mean of 9.1 (3.9) that is slightly over the midpoint of the scale (9). Normality is met when the skewness is between $\pm 0.5$ from zero, while moderate skew ranges between $\pm 0.5$ to $\pm 1.0$, and high skew is greater than $\pm 1.0$ (Bulmer, 2001). A score of 9 on the DUREL Intrinsic scale indicates that participants on average were “unsure” about the role of their religious views (e.g., In my life, I experience the presence of the Divine; my religious beliefs are what really lie behind my whole approach to life); 17.3% of the sample scored a 15 suggesting intrinsic religiosity was definitely not true in their life.

The Brief Positive RCOPE variable was moderately negatively skewed (.70), due to 29.3% of the sample obtaining the minimum score of 7 suggesting no positive religious coping. Similarly, the Brief Negative RCOPE was highly negatively skewed (1.83) due to 54.7% of the sample endorsing not at all on having a negative religious coping strategy. The DUREL Act and Brief SWB Horizontal variables had high positive skewness (-1.11 and -1.50 respectively). Finally, the participants combat exposure mean score was 13 (4.8) with high positive skew, due to 62.7% of the participants scoring 13 and below.

Correlations were performed to examine relationships among the criterion and predictor variables (see Table 2). Correlations in Table 2 reveal that no significant relationships were
Table 2

Correlations Among Study Variables (N = 75)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<td>PTG</td>
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<tr>
<td>PTG Plus</td>
<td>.99*</td>
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<tr>
<td>P. RCOPE</td>
<td>.13</td>
<td>.17</td>
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</tr>
<tr>
<td>N. RCOPE</td>
<td>.22</td>
<td>.22</td>
<td>.20</td>
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</tr>
<tr>
<td>DUREL A</td>
<td>-.16</td>
<td>-.20</td>
<td>-.74**</td>
<td>-.04</td>
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<td></td>
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<tr>
<td>DUREL I</td>
<td>-.05</td>
<td>-.08</td>
<td>-.76**</td>
<td>-.10</td>
<td>.71**</td>
<td>--</td>
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<tr>
<td>SWB H</td>
<td>.16</td>
<td>.15</td>
<td>-.11</td>
<td>-.27*</td>
<td>.19</td>
<td>.15</td>
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<tr>
<td>SWB V</td>
<td>-.05</td>
<td>-.07</td>
<td>-.43**</td>
<td>-.24*</td>
<td>.35**</td>
<td>.48**</td>
<td>.41**</td>
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<td></td>
</tr>
<tr>
<td>CES</td>
<td>.07</td>
<td>.07</td>
<td>-.12</td>
<td>.07</td>
<td>.03</td>
<td>.03</td>
<td>-.08</td>
<td>.09</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. The variables are posttraumatic growth (PTG) and posttraumatic growth plus (PTG Plus); brief positive religious coping (P. RCOPE) and brief negative religious coping (N. RCOPE); Duke University Religion Index—religious activities (DUREL A) and Duke University Religion Index—intrinsic religiosity (DUREL I); brief spiritual well-being—horizontal relationship (SWB H) and brief spiritual well-being—vertical relationship (SWB V); and the combat exposure scale (CES).  

* = p < .05, ** = p < .01.

found between predictor variables of combat exposure, religious coping, spiritual wellbeing, religious behavior, and criterion variables of posttraumatic growth and PTGI Plus,

The first regression analysis used the DUREL (activities and intrinsic) Brief RCOPE (negative and positive), and Brief SWB (vertical and horizontal) to predict PTGI as the criterion variable; no significant relationship emerged, $F_{(7, 65)} = 1.89, p = .09$. Likewise, there was no
significant result on the second regression analysis when using the same predictor variables and entering PTGI Plus as a criterion variable, $F_{(7, 65)} = 1.95, p = .08$.

The second research question explored whether the level of combat exposure and changes in religiosity predict posttraumatic growth in combat service members. As was performed in the previous two regression analyses stated above, the religious change scores were entered as predictor variables and total scores on PTGI and PTGI Plus were entered as separate criterion variables, for the third and fourth regression equations. No significant results emerged for the predictor variables of the third regression, $F_{(7, 65)} = 0.67, p = .70$, or the fourth regression, $F_{(7, 65)} = 0.71, p = .66$. 
Chapter 4
Discussion

The purpose of this study was to investigate the relationship between religiosity, combat exposure, and posttraumatic growth in a sample of combat National Guard personnel who were deployed during the Iraq War. Specifically, the research questions were whether soldier’s pre-deployment religious beliefs, behaviors, and spiritual well-being and subsequent combat exposure predict posttraumatic growth, and whether soldiers’ combat exposure and change in religiosity (e.g., positive or negative religious coping) from pre-to post-deployment assessment predict posttraumatic growth.

As of this writing, only one study has investigated the relationship between spirituality, combat exposure, and posttraumatic growth (Badgett, 2009). Badgett found in a sample of Vietnam War veterans that combat exposure and spirituality predicted higher posttraumatic growth.

The findings in this study indicate that for this group of combat soldiers, religiosity and severity of combat exposure did not predict posttraumatic growth. In addition, changes in combat soldier religiosity from pre- to post-deployment assessment, and severity level of combat exposure, were not related to posttraumatic growth. As a result, these findings do not provide support for Badgett’s (2009) findings and suggest that combat exposure and religiosity do not always lead to posttraumatic growth. In addition, any changes in religiosity that combat soldiers might experience from pre- to post-deployment, such as positive or negative religious coping,
may not always develop into posttraumatic growth. Although Badgett’s findings differ from this current study, it is possible that the positive growth Badgett found was driven by context (i.e., Vietnam War vs. Iraq War) and length of time between processing combat experiences and time of assessment (i.e., almost 40 years vs. 6 months). In addition, changes in combat circumstances (especially the possibility of multiple serial deployments) or social and cultural changes during the intervening years may affect the relationship between religiosity, combat exposure, and post-traumatic growth.

Also, the research literature varies on an optimal time frame between the period of combat exposure and the period of processing time necessary to lead to positive growth. Only one study found that a stressful event, the terrorist attack on 9/11, was positively related to posttraumatic growth with only “6.5” months at post assessment (Butler et al., 2005). Other studies found a positive relationship between combat exposure and posttraumatic growth within time frames that ranged from approximately two years (Feder et al., 2008; Pietrzak et al., 2010) to almost 40 years (Badgett, 2009) post combat experiences. In studies where no significant relationship was found, post assessment time frames ranged from two years of an Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) sample (Maguen et al., 2006) to two decades of a Vietnam War sample (Schnurr, Rosenberg, & Friedman, 1993). Therefore, it is possible that longer intervals between combat exposure and assessing posttraumatic growth might be optimal when soldiers are assessed at peacetime, discharged from military service, or do not expect immediate redeployment to a combat warzone. It is also possible that the soldiers in this sample were going to be redeployed to the Iraq War, which could possibly hinder cognitive processing and meaning-making processes found in posttraumatic growth.
Finally, as mentioned above, the sample size was originally 221, but the Army lost the master list that resulted in obtaining only 75 participants. Because the small sample comes from this larger amount, the results may be more representative of this demographic in the National Guard. However, caution should be taken when considering generalizing these results. This study used archival data from a convenience sample of three platoons of combat Army National Guard infantry personnel who were stationed in Oregon, deployed to the Iraq War, and largely Caucasian (75%) and male (100%). Therefore, it would be inappropriate to generalize these results to other military personnel, who may see less or more severe combat experiences, engage in other wars that differed in combat conditions and post-combat care, or were varied in geographic, social, political, or religious influences.

Limitations

Although combat exposure does not always lead to positive growth (Maguen et al., 2006), it is possible that the soldiers in this sample underreported their positive growth on the PTGI. Smith and Cook (2004) posited that participants might underreport positive growth because they may be cautious to attribute growth experience to a traumatic event. It is also possible that this study’s sample of National Guard personnel had combat experiences that were mediated by resources (e.g., resiliency training) not available to veterans of past wars (e.g., Vietnam War).

The low amount of combat exposure in this sample of National Guard combat soldiers, which had a distribution with high positive skew, likely did not provide the necessary conditions of stress to activate cognitive reevaluation or religious changes that could lead to positive growth. Prior studies indicate that a positive or curvilinear relationship often occurs in response
to a stressor (e.g., healthcare stress, posttraumatic stress), with the greatest gains found in the moderate range (Kunst, 2010; Levine et al., 2008; McCaslin et al., 2009; McLean et al., 2011). In studies that found a curvilinear relationship, low and high levels of stress were related to lower posttraumatic growth, while moderate levels of stress yielded higher posttraumatic growth (Badgett, 2009; Pietrzak et al., 2010). Therefore, it is possible that this study’s low level of combat exposure was insufficient to initiate positive growth processes. Thus, the present data are consistent with the scores on the low end of the curve for participants in the Pietrzak et al. In addition, it is also possible that at least a moderate level of combat stress is necessary for soldiers to reevaluate their values and face existential questions that may initiate positive growth while processing stressful experiences (e.g., what is my purpose when human life is fragile and can end at any moment?).

Another possible confound to this current study is the high rate of non religious participants which could lower positive engagement (i.e., reluctance to answer religiosity questions) on religious assessment measures and perhaps not be representative of National Guard personnel overall. In this sample of National Guard infantry, 31% endorsed not having a religious orientation, whereas one study found only 21% of the military personnel affiliated as Atheist or endorsed not being religious (Segal & Segal, 2004). In addition, it is possible that National Guard personnel who choose to spend their weekends drilling tend to be less religious, and individuals that are more religious may not want to compromise their religious values, such as not missing church services on weekends.

Also, the motivation and choice to serve as a combat soldier could possible influence negative and positive responses to combat experiences. For example, soldiers drafted in the
Vietnam War likely did not have or had limited opportunity to avoid combat experiences, whereas the all volunteer armed service appear to have greater freedom of choice in their military service. It is likely the response to trauma and positive growth could be related to the soldiers’ personal choice to enlist.

A final possible limitation is the study’s low statistical power ($N = 75$). A larger sample size might have increased the power to improve sensitivity in finding significant relationships between combat exposure, religiosity, and posttraumatic growth.

**Future Research**

Although research on posttraumatic growth has increased lately, additional research is warranted to investigate this understudied area. Religiosity is a specific area that has gained attention in the research literature, yet the interaction of religious variables between combat exposure and posttraumatic growth needs to be investigated further. Studying religious factors among combat service members could provide more understanding on the relationship between religiosity, resiliency, and meaning making. For example, positive religious coping styles can lead to positive adjustment (Ross, Handal, Clark, & Vander Wal, 2009). Thus, it is reasonable to continue to investigate how religiosity affects positive growth processes after experiencing combat and/or traumatic experiences.

In addition, further research on how religiosity may help combat soldiers to make positive changes may improve current resiliency programs (e.g., Warrior Resiliency Program). For example, the Army’s Comprehensive Soldier and Family Fitness program (CSF) was developed to improve resiliency by utilizing an assessment measure called the Global Assessment Tool (GAT) to evaluate and improve five domains of functioning—physical, social,
family, emotional, and spiritual (Peterson, Park, & Castro, 2011). On the spiritual fitness domain, the human spirit model was adopted and incorporates seven components (e.g., sense of agency, self-motivation), one of which is the spiritual core that was defined as the “individual’s most central values and beliefs concerning purpose and meaning in life, truths about the world, and vision for releasing one’s full potential and purpose” (Pargament & Sweeney, 2011). To date, there is no evidence that CSF training on spiritual fitness is beneficial to soldiers who have completed this training. However, the CSF appears to be a step in the right direction to address this component of spirituality as a possible resource to increased resiliency.

Finally, future research could explore the relationship between veteran and active duty soldiers’ posttraumatic growth, and evaluate whether an active combat role and anticipated redeployment leads to less positive growth processes. Female combat members were underrepresented in this sample, and future studies would be more representative by including female combat soldiers. Also, it would be wise for future studies to explore combat exposure, religiosity, and posttraumatic growth using a nationally representative sample of combat veterans from different wars.
References


Effects of Religiosity

Fontana, A., & Rosenheck, R. (2004). Trauma, change in strength of religious faith, and mental health service use among veterans treated for PTSD. *Journal of Nervous and Mental Disease, 192*(9), 579-584. doi:10.1097/01.nmd.0000138224.17375.55


Yerkes, R. M., & Dodson, J. D. (1908). The relation of strength of stimulus to rapidity of habit formation. *Journal of Comparative Neurology & Psychology, 18*459-482. doi:10.1002/cne.920180503
Appendix A

Demographics Questionnaire
Demographics Questionnaire

Assigned Number: ________

Age: ________

Sex: ________

Rank: ________

M.O.S.: ________

Number of Deployments to a Combat Zone (including this last one): ________

Ethnicity:

- African-American
- Asian-American
- European-American
- Native American
- Hispanic/Latino
- Pacific Islander
- Other ________________

Religious Affiliation:

- Protestant
- Catholic
- Christian Orthodox
- Jewish
- Other ________________
- None

Marital Status:

- Married
- Divorced
- Remarried
- Widowed
- Single

Education:

- High School/GED
- Bachelors
- Post-Graduate
Appendix B

Duke University Religion Index
DUREL: Duke University Religion Index
(also available in Spanish, Portuguese, Chinese, Romanian, Japanese, and Persian/Arabic)

Directions: Please answer the following questions about your religious beliefs and/or involvement. Please indicate your answer with a checkmark.

(1) How often do you attend church or other religious meetings?
   1. More than once/wk
   2. Once a week
   3. A few times a month
   4. A few times a year
   5. Once a year or less
   6. Never

(2) How often do you spend time in private religious activities, such as prayer, meditation or Bible study?
   1. More than once a day
   2. Daily
   3. Two or more times/week
   4. Once a week
   5. A few times a month
   6. Rarely or never

The following section contains 3 statements about religious belief or experience. Please mark the extent to which each statement is true or not true for you.

(3) In my life, I experience the presence of the Divine (i.e., God).
   1. Definitely true of me
   2. Tends to be true
   3. Unsure
   4. Tends not to be true
   5. Definitely not true

(4) My religious beliefs are what really lie behind my whole approach to life.
   1. Definitely true of me
   2. Tends to be true
   3. Unsure
   4. Tends not to be true
   5. Definitely not true

(5) I try hard to carry my religion over into all other dealings in life.
   1. Definitely true of me
   2. Tends to be true
   3. Unsure
   4. Tends not to be true
   5. Definitely not true

Appendix C

Brief Religious Coping Scale
Brief RCOPE

The following items deal with ways you coped with the negative event in your life. There are many ways to try to deal with problems. These items ask what you did to cope with this negative event. Obviously different people deal with things in different ways, but we are interested in how you tried to deal with it. Each item says something about a particular way of coping. We want to know to what extent you did what the item says. How much or how frequently. Don’t answer on the basis of what worked or not – just whether or not you did it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can. Circle the answer that best applies to you.

1 – not at all
2 – somewhat
3 – quite a bit
4 – a great deal

1. Looked for a stronger connection with God.  
2. Sought God’s love and care.  
3. Sought help from God in letting go of my anger.  
4. Tried to put my plans into action together with God.  
5. Tried to see how God might be trying to strengthen me in this situation.  
6. Asked forgiveness for my sins.  
7. Focused on religion to stop worrying about my problems.  
8. Wondered whether God had abandoned me.  
9. Felt punished by God for my lack of devotion.  
10. Wondered what I did for God to punish me.  
11. Questioned God’s love for me.  
12. Wondered whether my church had abandoned me.  
13. Decided the devil made this happen.  
14. Questioned the power of God.
Appendix D

Brief Spiritual Well-Being Scale
Brief Spiritual Well-Being Scale

For each of the following statements circle the choice that best indicates the extent of your agreement or disagreement as it describes your personal experience:

| SA = Strongly Agree | A = Agree | MD = Moderately Disagree |
| MA = Moderately Agree | D = Disagree | SD = Strongly Disagree |

1. I feel very fulfilled and satisfied with life .......................................................... SA MA A D MD SD
2. I don't enjoy much about life .................................................................................. SA MA A D MD SD
3. I don't have a personally satisfying relationship with God................................ SA MA A D MD SD
4. I feel most fulfilled when I'm in close communion with God................................ SA MA A D MD SD
5. I feel unsettled about my future .............................................................................. SA MA A D MD SD
6. I believe that God is concerned about my problems .............................................. SA MA A D MD SD
Appendix E

Combat Exposure Scale
**CES**

*Please circle the number above the answer that best describes your experience*

1) Did you ever go on combat patrols or have other dangerous duty?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1-3x</td>
<td>4-12x</td>
<td>13-50x</td>
<td>51+times</td>
<td></td>
</tr>
</tbody>
</table>

2) Were you ever under enemy fire?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
<td>&lt;1 month</td>
<td>1-3 months</td>
<td>4-6 months</td>
<td>7 mos or more</td>
</tr>
</tbody>
</table>

3) Were you ever surrounded by the enemy?

<table>
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<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1-2x</td>
<td>3-12x</td>
<td>13-25x</td>
<td>26+times</td>
<td></td>
</tr>
</tbody>
</table>

4) What percentage of the soldiers in your unit were killed (KIA), wounded or missing in action (MIA)?

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<thead>
<tr>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>1-25%</td>
<td>26-50%</td>
<td>51-75%</td>
<td>76% or more</td>
<td></td>
</tr>
</tbody>
</table>

5) How often did you fire rounds at the enemy?

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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1-2x</td>
<td>3-12x</td>
<td>13-50x</td>
<td>51 or more</td>
<td></td>
</tr>
</tbody>
</table>

6) How often did you see someone hit by incoming or outgoing rounds?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1-2x</td>
<td>3-12x</td>
<td>13-50x</td>
<td>51 or more</td>
<td></td>
</tr>
</tbody>
</table>

7) How often were you in danger of being injured or killed (i.e., being pinned down, overrun, ambushed, near miss, etc.)?

<table>
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<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1-2x</td>
<td>3-12x</td>
<td>13-50x</td>
<td>51 or more</td>
<td></td>
</tr>
</tbody>
</table>

Appendix F

Posttraumatic Growth Inventory
Effects of Religiosity

Posttraumatic Growth Inventory

Indicate for each of the statements below the degree to which this change occurred in your life as a result of your combat experiences during this deployment. Please use the following scale.

0 = I did not experience this change as a result of my crisis.
1 = I experienced this change to a very small degree as a result of my crisis.
2 = I experienced this change to a small degree as a result of my crisis.
3 = I experienced this change to a moderate degree as a result of my crisis.
4 = I experienced this change to a great degree as a result of my crisis.
5 = I experienced this change to a very great degree as a result of my crisis.

<table>
<thead>
<tr>
<th>Statement</th>
<th>No change</th>
<th>Very Great</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I changed my priorities about what is important in life.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>2. I have a greater appreciation for the value of my own life.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>3. I developed new interests.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>4. I have a greater feeling of self-reliance.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>5. I have a better understanding of spiritual matters.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>6. I more clearly see that I can count on people in times of trouble.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>7. I established a new path for my life.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>8. I have a greater sense of closeness with others.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>9. I am more willing to express my emotions.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>10. I know better that I can handle difficulties.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>11. I am able to do better things with my life.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>12. I am better able to accept the way things work out.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>13. I can better appreciate each day.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>14. New opportunities are available which wouldn't have been otherwise.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>15. I have more compassion for others.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>16. I put more effort into my relationships.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>17. I am more likely to try to change things which need changing.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>18. I have a stronger religious faith.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>19. I discovered that I'm stronger than I thought I was.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>20. I learned a great deal about how wonderful people are.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>21. I better accept needing others.</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>22. I have a deeper commitment to my religious beliefs. *</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>23. I find more spiritual meaningfulness in life. *</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
<tr>
<td>24. I accepted myself as a spiritual being. *</td>
<td>0 1 2 3 4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix G

Curriculum Vitae
KURT C. WEBB

Mailing Address: 926 Aspen Street, Fairbanks, AK 99709
Cell phone: 925-200-4365; Work: 907-451-8208; Fax: 907-451-8207
Email: kwebb@hopecounseling.org

EDUCATION

Doctoral Candidate in Clinical Psychology (Psy.D.) Anticipated completion 2013
Graduate Department of Clinical Psychology
George Fox University: Newberg, OR (APA-accredited)

Dissertation
Topic: Effect of Religiosity and Combat Exposure on
Combat Service Member Posttraumatic Growth
Chair: William Buhrow, Psy.D.

Master of Arts in Clinical Psychology 2010
George Fox University: Newberg, OR

Bachelor of Science in Counseling Psychology 2006
William Jessup University: Rocklin, CA

Associates of Arts in Psychology 2003
Foothill College: Los Altos Hills, CA

RELEVANT EMPLOYMENT

Social Worker 2007
Department of Health and Human Services: Sacramento, CA
Supervisor: Alberta Trigg, M.S.W.
• Managed a caseload of 100 plus clients
• Conducted in-home interviews with adult and geriatric population
• Evaluated client’s psychosocial needs and medical conditions
• Trained to identify geriatric clients at-risk for suicide

Mental Health Worker 2006
Department of Health and Human Services: Sacramento, CA
Supervisor: Catherine Salyers, R.N.
• Monitored patients with severe psychopathology
• Team consultation to manage patient behavior
• Trained to manage patients with escalating aggression and to
defuse potential physical altercations
United States Coast Guard 1987–2008
Stationed at the following locations: Puerto Rico (2 years),
Miami, FL (3 years), Sacramento, CA (15 years)
Position: Aviation Survival Technician/rescue swimmer
• 21-year career, retired
• Helicopter rescue swimmer and on-scene leader for medical triage
• Instructor to aircrew members to meet swimming standards, emergency
egress, and survival training on land and sea
• Maintained all life support systems on aircraft (e.g., life rafts)

Internship Experience
Hope Counseling Center
Outpatient Community Mental Health: Fairbanks, AK July 2012—Present
Supervisor: John DeRuyter, Psy.D.
• Assessments for ADHD, FASD, and child custody evaluations
• Brief and long-term therapy for a wide age range of client with a particular emphasis on
  family systems

Supervised Practicum Experience
Willamette Family Medical Center
Supervisor: Joel Gregor, Psy.D.
• Brief therapy model of eight session
• CBT and solution-focused therapy with a diverse population
• Primarily child assessments for learning disorders and ADHD

Portland VA
(Total hours 558)
Supervisors: Angela Plowhead, Psy.D., Elizabeth Rankin, Ph.D.,
Robert Socherman, Ph.D.
• In-home structured interviews, cognitive assessments,
capacity evaluations of geriatric veterans
• Extensive report writing and proficient use of the VA’s
computerized patient record system (CPRS)
• Bi-weekly team meetings and collaboration on treatment
  planning with primary care team, which included nurses,
social workers, dieticians, and pharmacists

George Fox University Behavioral Health Clinic
Outpatient community mental health: Newberg, OR May. 2009–Jun. 2010
(Total hours 586)
Supervisor: Joel Gregor, Psy.D.
• Brief therapy model of eight session, primarily CBT
Effects of Religiosity

- Provided weekly individual and family psychotherapy for an under-insured population from age six to adult
- Structured intake interviews, diagnosis, treatment planning
- Supervised videotape review and case presentations
- Co-facilitated eight-week parenting skills group
- Administered child assessments for learning disorders and ADHD diagnosis

**Pre-Practicum (Graduate Department of Clinical Psychology)**
Undergraduate students from George Fox University
Supervisor: Clark D. Campbell, Ph.D., ABPP
- Conducted intake interviews, mental-status exams, and individual therapy
- Participated in weekly supervision, videotape review, case presentations, and consultation
- Developed treatment plans, progress notes, and termination summaries

**Supplemental Practicum Experience**

**Long-Term Therapy with One Client (1st course of therapy)**
George Fox University Behavioral Health Clinic
Supervisor: Joel Gregor, Psy.D.
- Client diagnosed with major depression and PTSD
- 8-session model using solution-focused therapy to reduce depression and suicidal ideation
- Followed by 12-sessions of cognitive processing therapy to target PTSD symptoms

**Time-Limited Dynamic Therapy**
George Fox University Behavioral Health Clinic
Supervisor: Winston Seegobin, Psy.D.
- Began therapy with same client with past diagnoses of major depression and PTSD
- 20-session model based on Levenson’s Time-Limited Dynamic Therapy
- Weekly supervision, case conceptualization, video review

**Psychodynamic Therapy**
George Fox University Behavioral Health Clinic
Supervisors: Joel, Gregor, Psy.D., Charity Benham, Psy.D.
- Dr. Gregor provides weekly supervision
- Dr. Benham, a psychodynamic therapist, provide
supplemental supervision through May 2012
  • Monthly supervision and case conceptualization

Consultation Experience

Psychodynamic Group Meetings
Facilitator: Kurt Free, Ph.D., Beaverton, OR
• Monthly meetings to review case presentations
• Provide a written transcript audio recordings of current long-term client
• Psychodynamic case formulation, interpretation, and interventions

Clinical Team
George Fox University: Newberg, OR
Evaluators: Winston Seegobin, Psy.D., Marie-Christine Goodworth, Ph.D., Robert Buckler M.D., Mark McMinn Ph.D./ABPP, Rodger K. Bufford, Ph.D.
• Present two client presentations from various theoretical orientations, from cognitive to psychodynamic formulation
• Provide a written report that includes history, diagnoses, case conceptualization
• Provide research articles on evidenced-based treatments
• Discuss areas of improvement and clinical competencies

Research Experience

Ongoing Research: Identifying barriers to patient attendance within an integrated behavioral medicine model
Coauthors: Jeffrey Sordahl, Jr., MA, Mike Vogel, MA
Current Status: Manuscript Preparation
• A survey of patients with no-shows regarding identified barriers to attendance of behavior health appointments

Program Evaluation Consultant: Oregon Health Sciences University
Richmond Clinic: Portland, OR
• Conduct program evaluation to assess barriers to treatment in partially-integrated behavioral health setting.

Peer-Reviewed Journal Publication
Effects of Religiosity


Research Vertical Team 2009–2012
George Fox University: Newberg, OR
Team Leader and Academic Advisor: Bill Buhrow, Psy.D.
• Primary focus of this team is on research design and developing dissertation topics
• Team work related to collaboration on poster presentations

Undergraduate Senior Project 2006
William Jessup University: Rocklin, CA
Professor: Julius Gurney III, Ph.D.
• Research topic: Does premarital counseling lower divorce outcomes?
• Gathered and analyzed research data
• Presented findings to faculty and peers

Teaching Experience

Cognitive Processing Therapy for PTSD Sept. 2010
George Fox Behavioral Health Clinic: Newberg, OR
• Presented and taught colleagues at practicum site how to use the CPT model
• Created a 30-page personalized spiral bound checklist for using CPT
Teacher’s Assistant in Advanced Counseling  
George Fox University: Newberg, OR  
Professor: Kristina Kays, Psy.D.  
- Facilitated weekly group meetings with undergraduate students  
- Taught basic therapy skills, such as active listening and affect attunement  
- Reviewed student videos on their counseling skills, and provided feedback for areas of improvement

Supervision Class  
George Fox University: Newberg, OR  
Professor: Roger K. Bufford, Ph.D.  
- Weekly meetings with 2nd year graduate student  
- Provided support and didactic training on diagnoses, case conceptualization, and treatment

Professional Development

Rorschach Immersion Course  
Massachusetts School of Professional Psychology: Boston, MA  
Faculty: Terrie Burda, Psy.D.  
- 35-hour introduction to the Rorschach assessment using Exner’s scoring method

Traumatic Nightmares: A Missing “Peace” of PTSD  
Portland State University: Portland, OR  
Presenter: Lori R. Daniels, Ph.D., L.C.S.W.  
- 8-hour workshop that included differential diagnosis, vignettes, and interventions to address nightmares related to PTSD symptomology

Diversity Involvement & Training

Multicultural Committee  
George Fox University: Newberg, OR  
- Participation in activity planning to enhance diversity awareness in the university community  
- Collaboration on poster presentations

The Ethic of Assessing Multicultural Competence  
National Multicultural Conference and Summit: Seattle, WA  
Presenters: Linda Forrest, Ph.D., Melanie Domenech Rodriguez, Ph.D.
Jennifer Erickson Cornish, Ph.D., Cynthia Sturm, Ph.D.

**When Diverse Identities Collide: Contributions from Science & Practice with Sexual Minorities**
National Multicultural Conference and Summit: Seattle, WA
Chair: Arlene Noriega, Ph.D.

**Is Multicultural Psychology Ascientific?**
National Multicultural Conference and Summit: Seattle, WA
Speaker: Ana Mari Cauce, Ph.D.

**Assessment Consideration in Working with Multicultural children/Adolescents**
George Fox University: Newberg, OR
Presenter: Eleanor Gil-Kashiwabara, Ph.D.

**Psychotherapy with Gay, Lesbian, and Bisexual Clients**
George Fox University: Newberg, OR
Presenter: Carol A. Carver, Ph.D.

**Multi-Cultural Counseling**
George Fox University: Newberg, OR
Presenter: Carlos Taloyo, Ph.D.

**Re-Considering Multiculturalism and Context**
George Fox University: Newberg, OR
Presenter: J. Derek McNeil, Ph.D.

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**ASSESSMENT EXPERIENCE**

**Personality**
- Minnesota Multiphasic Personality Inventory, 2nd Edition (MMPI-2)
- Minnesota Multiphasic Personality Inventory, Adolescent (MMPI-A)
- Sixteen Personality Factor, 5th Edition (16PF)
- Millon Clinical Multiaxial Inventory, 3rd Edition (MCMI-III)
- Personality Assessment Inventory (PAI)

**Cognitive**
- Mini-Mental Status Examination (MMSE)
- Wechsler Adult Intelligence Scale, 4th Edition (WAIS-IV)
- Wechsler Intelligence Scale for Children, 4th Edition (WISC-IV)
- Wechsler Preschool and Primary Scale of Intelligence (WPPSI-III)
- Wide Range Intelligence Test (WRIT)

**Memory**
• Wechsler Memory Scale, Fourth Edition (WMS-IV)
• Wide Range Assessment of Memory & Learning, 2nd (WRAML-2)

**Achievement**
• Wide Range Achievement Test, 4th Edition (WRAT-4)
• Wechsler Individual Achievement Test, 3rd Edition (WIAT-III)
• Woodcock-Johnson III

**Neuropsychological**
• Repeatable Battery for Assessment of Neuropsychological Status
• California Verbal Learning Test- 2 (CVLT2)
• Controlled Oral Word Assocation (COWA)
• Delis-Kaplan Executive Function System (D-KEFS)
  • 20 Question Test
  • Sorting Test
  • Trail Making Test
• Wisconsin Card Sorting Test (WCST)
• Grooved Pegboard Test
• Wide Range Assessment of Visual Motor Abilities (WRAVMA)
• Tactual Performance Test (TPT)
• Grip Strength Test
• Booklet Category Test
• Boston Naming Test

**Behavior & Attention**
• Conner’s Continuous Performance Test II (CPT II V.5)
• Conner’s 3rd Edition
• Behavior Assessment System for Children, Second Edition (BASC-2)
• Brown ADD Scales for Children & Adolescents
• Vanderbilt ADHD Diagnostic Parent/Teacher Rating Scale

**Other**
• Posttraumatic Checklist (PCL-M, PCL-S)
• Outcome Rating Scale (ORS)
• Personal Health Questionnaire (PHQ-9)
• Hospital Anxiety and Depression Scale (HADS)
• Independent Living Scales (ILS)
• Geriatric Depression Scale (GDS)
• Beck’s Depression Inventory, 2nd Edition (BDI-II)

**Research**
• Posttraumatic Growth Inventory (PTGI)
• Beck’s Depression Inventory (BDI-II)
• Brief Religious Coping Inventory
• Brief Spiritual Well-Being Scale

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**Membership**
Effects of Religiosity

American Psychological Association, Graduate Affiliate (APAGS) 2008–Present

Association for Psychological Science (APS) 2010–Present

HONORS & AWARDS

George Fox University: Newberg, OR
• Awarded for membership and contributions to diversity awareness

William Jessup University: Rocklin, CA
• Awarded for outstanding academic achievement

The Iva F. Wills Scholarship 2004–2005
William Jessup University: Rocklin, CA
• Awarded for outstanding academic achievement

VOLUNTEER & COMMUNITY INVOLVEMENT

George Fox University: Newberg, OR
• Provided social and academic support to one incoming 1st year graduate student

Camp Supervisor Summer 2005
Cape Hope Ministries: Colfax, CA
Director: Carol Dove
• Managed camp counselors for troubled youth, ages 8 to 12-years-old

New Student Orientation Assistant 2005–2006
William Jessup University: Rocklin, CA
Supervisor: Tom Stevens, M.A.
• Assisted incoming freshman through orientation process
• Organized and coordinated outreach activities (e.g., Red Cross food program, homeless outreach services in San Francisco)

REFERENCES
Please contact me by phone or email, and I will gladly provide references.