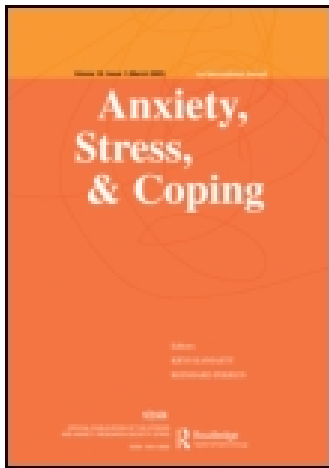


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Christina M. Hassija^{a b}, Jane A. Luterek^{a c}, Kristin Naragon-Gainey^{a d}, Sally A. Moore^{a c e} & Tracy Simpson^{a c}

^a Mental Health Service, Seattle Division, Veterans Affairs Puget Sound Health Care System, 1660 South Columbian Way, Seattle, WA, 98126, USA

^b Department of Psychology, University of Wyoming, 1000 E. University Avenue, 3415, Laramie, WY, 82071, USA

^c Department of Psychiatry and Behavioral Sciences, University of Washington, Seattle, WA, USA

^d Department of Psychology, University of Iowa, Iowa City, IA, USA

^e Evidence Based Treatment Centers of Seattle, Seattle, WA, USA

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Impact of emotional approach coping and hope on PTSD and depression symptoms in a trauma exposed sample of Veterans receiving outpatient VA mental health care services

Christina M. Hassija^{a,b*}, Jane A. Luterek^{a,c}, Kristin Naragon-Gainey^{a,d}, Sally A. Moore^{a,c,e} and Tracy Simpson^{a,c}

^a*Mental Health Service, Seattle Division, Veterans Affairs Puget Sound Health Care System, 1660 South Columbian Way, Seattle, WA 98126, USA;* ^b*Department of Psychology, University of Wyoming, 1000 E. University Avenue, 3415, Laramie, WY 82071, USA;* ^c*Department of Psychiatry and Behavioral Sciences, University of Washington, Seattle, WA, USA;* ^d*Department of Psychology, University of Iowa, Iowa City, IA, USA;* ^e*Evidence Based Treatment Centers of Seattle, Seattle, WA, USA*

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The present investigation evaluates the relationship between coping style, dispositional hope, and posttraumatic stress disorder (PTSD) and depression symptom severity in a trauma-exposed Veteran sample. Specifically, we evaluated the adaptive value of emotional avoidant and approach coping strategies and perceptions of hope in a sample of 209 trauma-exposed Veterans receiving outpatient mental health care at a VA facility. Participants completed a life events questionnaire and inventories assessing coping, dispositional hope, and PTSD and depression symptom severity. Hierarchical regression analyses were conducted controlling for relevant demographic variables. Greater levels of emotional avoidance and lower levels of emotional expression were significantly associated with increased PTSD and depression symptom severity. Dispositional hope was positively associated with depression symptoms only and perceptions of hope moderated the association between emotional avoidance coping and depression symptoms. Findings highlight the value of emotional coping strategies and perceptions of hope in posttraumatic adjustment. Specifically, employing coping techniques that encourage emotional expression may promote improved adjustment among trauma-exposed individuals, while reduced perceptions of hope and the use of avoidant coping strategies may place individuals at greater risk for depression following exposure to traumatic events.

Keywords: coping; hope; PTSD; Veterans

Introduction

Military service members and Veterans have routinely been found to have extensive trauma experiences prior to their military service (Bolton, Litz, Britt, Adler, & Roemer, 2001; Clancy et al., 2006), as well as significant trauma exposure during their military tenures (Thomas et al., 2010). Compared with those who have not experienced trauma, trauma-exposed individuals are at elevated risk for developing mental health conditions, most commonly, posttraumatic stress disorder (PTSD),

*Corresponding author. Email: Chassija@uwyo.edu

depression and substance use disorders (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Pietrzak, Goldstein, Southwick, & Grant, 2011). A number of peritrauma and posttrauma factors have been linked to poorer adjustment following exposure to a traumatic event such as trauma severity, low social support, and other life stress (Brewin, Andrews, & Valentine, 2000). Coping styles employed subsequent to traumatic stressors may also play a role in either increasing risk of poor adjustment (e.g., heavy drinking or drug use to cope; Lazarus, & Folkman, 1984) or promoting resilience and decreasing an individuals' risk of developing or maintaining PTSD and depression.

There has been some consensus within the literature that emotion-focused strategies are maladaptive by virtue of their generally positive association with poorer mental health outcomes, such as greater PTSD and depression symptom severity, following trauma exposure (e.g., Baschnagel, Gudmundsdottir, Hawk, & Beck, 2009; Blake, Cook, & Keane, 1992; Bryant & Harvey, 1995; Fairbank, Hansen, & Fitterling, 1991; Gil, 2005; Glass, Flory, Hankin, Kloos, & Turecki, 2009; Krause, Kaltman, Goodman, & Dutton, 2008; Nezu & Carnevale, 1987; Solomon, Mikulincer, Avitzur, 1988; Taft, Resick, Panuzio, Vogt, & Mechanic, 2007; Tiet et al., 2006; Tsay, Halstead, & McCrone, 2001). However, this association may be in part due to inadequate conceptualizations of emotion-focused coping, which have historically aggregated diverse strategies that encourage disparate ways of managing stressors, with some strategies promoting approach (e.g., seeking emotional support) and others avoidance (e.g., denial). Combining techniques that are not conceptually related may lead to erroneous and overgeneralized conclusions regarding the adaptive potential of emotional approaches.

Newer conceptualizations of emotion-focused coping have attempted to explicitly incorporate potentially adaptive forms of emotion-based coping that involve acknowledgment, understanding, and expression of emotion (Austenfeld, & Stanton, 2004). Emotional approach coping (EAC; Stanton, Kirk, Cameron, & Danoff-Burg, 2000) is postulated to be comprised of two main coping processes, emotional expression and emotional processing (Stanton, Kirk, et al., 2000). The former refers to coping in a manner that involves expressing emotions and feelings freely, while the later entails identifying and understanding the quality and value of feelings and emotions (Stanton, Kirk, et al., 2000). EAC was originally postulated by Stanton and colleagues and draws upon emotional processing models (Foa, & Kozak, 1986), as well as theoretical data supporting the benefit of processing and expressing emotions (Austenfeld, Paolo, & Stanton, 2006; Stanton, Danoff-Burg, Cameron, & Ellis, 1994; Stanton, Kirk, et al., 2000).

Stanton, Kirk, et al. (2000) developed a measure of EAC comprised of two empirically derived subscales; emotional expression (EAC-EE), which was designed to assess the level of engagement in and comfort with the expression of emotions, and emotional processing (EAC-EP), which was designed to measure the validation of and active attempts to acknowledge and understand one's emotions. Using this measure, greater endorsement of EAC has been found to be associated with better physical health and psychological functioning among medical patients and undergraduates dealing with a stressful situation (Baker, & Berenbaum, 2007; Berghuis & Stanton, 2002; Smith, Lumley, & Longo, 2002; Stanton, Danoff-Burg, et al., 2000).

It follows that EAC may be an important aspect of constructive coping that could represent an individual difference factor associated with resilience following

trauma exposure, thereby decreasing the risk of development or maintenance of PTSD or depressive symptomatology. This hypothesis is consistent with recent evidence found in samples of anxious individuals. Marques et al. (2009) found patients with an anxiety disorder (generalized anxiety disorder, social anxiety disorder, and panic disorder) reported significantly lower emotional expression and emotional processing than nonanxious controls. Low levels of EAC have also been shown to predict greater depressive symptoms among college students who had recently experienced un-cued panic attacks (Tull, Gratz, & Lacrose, 2006). While the pitfalls of not engaging in EAC strategies are apparent from the aforementioned studies, the corollary may be that the consistent use of EAC strategies fosters habituation and effective processing (Foa & Kozak, 1986).

Dispositional hope

One potential factor that may influence the manner in which individuals cope when presented with challenging circumstances is dispositional hope. Snyder et al. (1991) have conceptualized dispositional hope as a cognitive set based on reciprocally derived perceptions of successful agency (i.e., goal-directed determination) and pathways (i.e., planning of ways of achieving desired goals) in relation to meeting goals. Hence, dispositional hope refers to an individual's thoughts regarding the number of potential means and their self-efficacy or perceived capacity for accomplishing one's objectives. Generally, dispositional hope has been found to be negatively associated with psychological distress (e.g., Chang, & DeSimone, 2001; Glass et al., 2009; Horton & Wallander, 2001; Peleg, Barak, Harel, Rochberg, & Hoofien, 2009; Snyder et al., 1991).

Dispositional hope has also been found to moderate the association between coping style and subsequent adjustment in response to stressful life events (Glass et al., 2009; Stanton, Danoff-Burg, et al., 2000), such that particular coping strategies may be more useful for individuals with high versus low levels of dispositional hope. Stanton, Danoff-Burg, et al. (2000) found that among women in breast cancer treatment, emotionally expressive coping predicted decreased distress over time and fewer appointments for cancer-related morbidities only for those high in dispositional hope. Among Hurricane Katrina survivors, dispositional hope moderated the relationship between avoidant coping and general psychological distress, such that individuals who reported lower levels of dispositional hope and utilized avoidant coping strategies evidenced increased psychological distress in comparison to those with either high levels of dispositional hope or those who used less avoidant coping strategies (Glass et al., 2009). Thus, the use of avoidant coping strategies and low levels of dispositional hope may amplify psychological distress following trauma (Glass et al., 2009), in comparison with either of these factors alone. Given previous findings with breast cancer survivors, those with high levels of dispositional hope may obtain benefit from the use of EAC strategies in response to stressors.

Study rationale

The present study is based on secondary analysis of data that were collected to evaluate the relationship between various psychological factors and medical care

utilization and cost among male and female Veterans enrolled in Veteran Affairs (VA) mental health care (Simpson et al., in press). The aim of the present study was to examine the relationship between EAC, dispositional hope, and PTSD and depression symptom severity in a trauma-exposed sample. In addition, given prior evidence supporting the negative impact of emotionally avoidant coping on psychological distress and the distinct conceptualization of this coping approach from EAC, we evaluated the relationship between emotional avoidant coping (as conceptualized by Schnider, Elhai, & Gray, 2007), dispositional hope, and PTSD and depression symptom severity. Specifically, we evaluated the adaptive value of avoidant emotion-focused and EAC strategies, and the potential moderating role of dispositional hope, in a trauma-exposed Veteran sample enrolled in outpatient VA mental health care. We hypothesized that EAC would be negatively associated with PTSD and depressive symptomatology, while avoidant emotional coping would be positively associated with these variables of posttraumatic sequelae. Further, we hypothesized, based on previous findings with individuals who experienced stressful/traumatic life events (Glass et al., 2009; Stanton, Danoff-Burg, et al., 2000), that dispositional hope would moderate the relationship between EAC and avoidant emotional coping strategies and the outcome measures of PTSD and depressive symptomatology, such that EAC coping would be negatively associated with depression or PTSD outcomes for those high in dispositional hope, while emotional avoidant coping would be positively associated with depression or PTSD only among those with lower levels of hope.

Method

Participants

The study sample ($N = 209$) consisted of 104 female and 105 male Veterans recruited from the VA Puget Sound Health Care System (VAPSHCS) outpatient general mental health clinic (50%) and specialized mental health clinic for PTSD (50%). Participants engaged in addiction treatment or the outpatient clinic serving Veterans with severe chronic mental illness (e.g., schizophrenia, schizoaffective disorder) were not recruited for this study. An initial sample of 977 Veterans (500 males; 477 females) was identified from the VA Consumer Health Information Performance Sets VISN 20 regional data warehouse based on initial screening criteria. Male Veterans were randomly selected from the pool of those eligible and all eligible female Veterans were selected. Participant inclusion criteria were: (1) VAPSHCS enrollment for at least 12 months; (2) at least two mental health visits in the past year; and (3) actively followed in the general mental health or PTSD clinic at the time of the assessment. Prior to study participation, the primary mental health provider for each Veteran was contacted to determine whether the Veteran was sufficiently clinically stable to participate in the study. Clinicians were asked to use the following criteria to determine stability: patient is capable of providing informed consent, not currently receiving psychiatric inpatient care, not actively suicidal or homicidal and does not currently have a flag indicating dangerousness in their VA medical record.

Of the initially identified samples ($n = 977$), 35% ($n = 338$) were never contacted as recruitment efforts ended when the target sample size was achieved. Of the remaining 639, 23% ($n = 147$) were considered ineligible by their primary mental

health provider, 42% ($n = 269$) declined participation in the study, and less than 2% ($n = 11$) did not attend the scheduled assessment. Of the 492 who were eligible and contacted, 214 (43%) completed the interview. Using the available demographics from the data warehouse (i.e., age, gender, race, and marital status), there were no significant differences between the study sample and those in the initial sample or who declined participation. We excluded three transgender individuals from analyses due to the small number and two participants who did not report experiencing at least one traumatic life event.

Procedure

Participants were contacted and scheduled for a single in-person assessment held at the VA facility. During the study session, participants completed self-report questionnaires and an interview that is not part of the current study. The procedures were approved by the Institutional Review Board of the University of Washington. All participants provided written informed consent and received \$20 for completing the study.

Measures

Trauma exposure

The Traumatic Life Events Questionnaire (TLEQ; Kubany et al., 2000) is a self-report measure that assesses a broad range of potentially traumatic life events and has good psychometric properties. Participants were asked to indicate whether they experienced potentially traumatic events during the following timeframes: (1) before they enlisted, (2) during active duty, or (3) after military service (as a Veteran). While the TLEQ does request respondents to indicate whether they experienced PTSD criterion A2 at the time of each traumatic event endorsed, we did not use this to determine trauma endorsement given its limited ability to predict PTSD symptoms (e.g., Kubany, Ralston, & Hill, 2010).

PTSD symptoms

The PTSD checklist – civilian version (PCL-C; Weathers et al., 1993) is a well validated 17-item self-report measure assessing severity of PTSD symptomatology consistent with DSM-IV criteria. Items are measured on a five-point Likert scale (1 = not at all to 5 = extremely). Scores range from 17 to 85 with higher values indicating greater psychopathology; 44 is a suggested cut-off for a PTSD diagnosis (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996). The PCL has demonstrated good psychometric properties and correlates with other established measures of PTSD including clinical interviews (Blanchard et al., 1996; Monson et al., 2008).

Depression symptoms

The Patient Health Questionnaire-9 (PHQ-9; Kroenke & Spitzer, 2002) is a validated nine-item self-report measure assessing severity of depressive symptomatology consistent with DSM-IV criteria, with scores ranging from 0 to 27; higher scores

indicate greater depression. Scores of 5, 10, 15, and 20 are cut-points for mild, moderate, moderately severe, and severe depression, respectively (Kroenke & Spitzer, 2002). The PHQ-9 has demonstrated good sensitivity and specificity for detection of major depression (Kroenke, Spitzer, Williams, & Löwe, 2010).

Emotional expression and emotional processing coping

The EAC (Stanton, Kirk, et al., 2000) is an eight-item self-report measure with a four-item emotional expression subscale (EAC-EE) and a four-item emotional processing subscale (EAC-EP). Participants are asked to rate each item on a four-point Likert-type scale, with lower scores representing poorer emotional coping (scores range from 0 to 16 within each subscale). The EAC-EE is designed to measure the outward expressions of emotions, with items including “I take time to express my emotions,” “I let my feelings come out freely.” The EAC-EP is designed to assess active attempts to acknowledge and understand one’s emotions, with items such as “I delve into my feelings to get a thorough understanding of them” and “I realize that my feelings are valid and important.” There is evidence for the convergent, discriminant, and predictive validity of the EAC, and the EAC-EE and EAC-EP have been found to have high internal consistency and test–retest reliability (Stanton, Danoff-Burg, et al., 2000; Stanton, Kirk, et al., 2000).

Emotional avoidance coping

The 28-item Brief Cope (Carver, 1997) was administered in its entirety and the ten-item avoidant emotional coping subscale was used. Participants were asked to rate the extent to which they implemented each coping strategy to cope with their most stressful situation in the past two weeks. This subscale assesses the following avoidant emotional coping strategies: self-distraction, denial, behavioral disengagement, self-blame, and substance use on a four-point Likert scale. The avoidant emotional subscale from the Brief Cope has demonstrated adequate internal consistency (Schnider, Elhai, & Gray, 2007).

Dispositional hope

The Hope Scale (Snyder et al., 1991) assesses a sense of successful goal-directed determination (i.e., agency) and the ability to generate plans to achieve goals (i.e., pathways). The scale consists of eight items and four fillers measured on a four-point Likert-type scale. The Hope Scale has demonstrated high reliability, and has good convergent, discriminant, and predictive validity (Snyder et al., 1991), and evidenced high internal consistency within the current sample.

Administrative database information

The VA VISN 20 data warehouse was used to identify the initial sample of 977 based on the inclusion criterion and to extract pertinent patient descriptive data.

Data analysis

Bivariate correlations were calculated to determine the relationships between coping style (emotional processing, emotional expression, and emotional avoidance), hope, PTSD symptoms, and depressive symptoms. Then, hierarchical regression analyses were conducted to determine the unique contribution of each coping style, hope, and their interaction to these symptoms after controlling for relevant covariates. Demographic variables that have been known to differentially influence coping processes based on relevant theoretical literature and empirical findings (i.e., age, gender, ethnicity; Folkman, Lazarus, Pimley, & Novacek, 1987; Olf, Langeland, Draijer, & Gersons, 2007; Tweed, White, & Lehman, 2004) were selected as covariates. Separate analyses were conducted for each distress outcome measure. Control variables were entered in block 1, main effects were entered in block 2, and the interaction terms were entered in block 3. All predictors were centered prior to entry in the regression analyses.

Results

Participants in the present study had a mean age of 52.4 ($SD = 11.2$) and 74.6% were Caucasian, 12.4% African American, 2.4% Asian American, 2.4% Hispanic, 1.9% Native American, and 5.3% reported other ethnic or racial identity. Marital status was as follows: 43.1% married, 37.3% divorced or separated, 17.2% never married, and 2.4% widowed. Over half the sample reported annual household incomes over \$25,000 (65.7%) and over half completed at least some college (52.2%). The number of self-reported potentially traumatic events ranged from 1 to 21, with a mean of 10.76 ($SD = 4.26$). Participants endorsed a wide range of childhood and adult traumatic events with the most commonly endorsed experiences being death of a loved one (89.5%), natural disaster (78.9%), threatened with death/serious harm (65.1%), and life threat to loved one (62.2%). Forty-four percent of the sample reported being involved in combat or warfare and 39.7% reported unwanted sexual contact as an adult.

Table 1 presents the sample means, standard deviations, and coefficients alpha for each scale. The mean scores on the PCL-C and PHQ-9 indicate clinically significant levels of PTSD and depression (51.5 and 13.1, respectively), consistent with the cut-offs for a PTSD diagnosis and for moderate depression (see Blanchard et al., 1996; Kroneke & Spitzer, 2002). Slightly more than half of the sample (55.5%) screened positive for PTSD and 67.1% evidenced at least moderate depression (score

Table 1. Descriptive statistics.

	Mean	SD	α	# of items
PTSD (PCL)	51.49	15.81	.94	17
Depression (PHQ-9)	13.08	6.73	.88	9
Emotional expression	9.53	3.23	.87	4
Emotional processing	10.62	3.01	.81	4
Emotional avoidance	20.53	4.78	.65	10
Hope	31.97	8.38	.87	8

Note: $N = 209$.

of 10 or more). The coefficients alpha indicated good internal consistency for most of the scales used in the present study ($\alpha = .81$ to $.94$); however, the alpha for the Avoidant Emotional Coping scale was somewhat low ($\alpha = .65$).

The bivariate correlations among the psychological symptoms, coping styles, and hope are shown in Table 2. All scales were significantly associated in the expected direction ($p < .01$). Depression and PTSD symptoms were strongly correlated ($r = .70$), as were the two types of EAC ($r = .68$), although the correlations were not so high as to suggest indistinguishable constructs. Of the coping scales, emotional avoidance was most strongly associated with PTSD and with Depression ($r_s = .48$ and $.49$, respectively). Hope was relatively distinct from the coping scales, with the strongest correlation with Emotional Processing ($r = .47$) and a closer association with depression severity ($r = -.42$) than with PTSD severity ($r = -.27$).

The results of the hierarchical regressions predicting PTSD and depressive symptoms are shown in Table 3. None of the control variables (i.e., age, gender, race) contributed significantly to either regression model.¹ Using current PTSD symptoms as the criterion, greater levels of emotional avoidance and lower levels of emotional expression were significant predictors ($\beta_s = .419$ and $-.235$, respectively; $p < .01$). Similarly, depression symptoms were also predicted by emotional avoidance and emotional expression ($\beta_s = .476$ and $-.246$, respectively, $p < .01$). However, lower Hope ($\beta = -.236$; $p < .01$) was predictive of depression symptoms only. In addition, the interaction between hope and emotional avoidance was a marginally significant predictor of depression symptoms ($\beta = -.106$; $p = .054$). Figure 1 depicts this interaction graphically: at high levels of hope, emotional avoidance does not affect depression levels, whereas at low levels of hope, greater emotional avoidance predicts more severe depressive symptoms.

Discussion

In the current study, emotion-based coping strategies were associated with PTSD and depression symptom severity in a trauma-exposed Veteran sample. Consistent with our hypotheses, emotionally avoidant coping was associated with increased PTSD and depression severity, while emotional expression, an EAC strategy, was associated with lower PTSD and depression symptoms. Emotional processing, a second EAC strategy, was unrelated to either measure of distress. Dispositional hope was associated with increased depression symptom severity, but not PTSD symptoms, and moderated the relationship between emotionally avoidant coping and depression,

Table 2. Bivariate correlations.

	1	2	3	4	5	6
1. PTSD	–					
2. Depression	.70	–				
3. Emotional expression	–.32	–.38	–			
4. Emotional processing	–.27	–.37	.68	–		
5. Emotional avoidance	.48	.49	–.19	–.27	–	
6. Hope	–.27	–.42	.29	.47	–.27	–

Note: $N = 209$. All correlations are significant at $p < .01$.

Table 3. Hierarchical regression predicting PTSD and depression from coping style, hope, and coping style \times hope (final β 's shown).

Predictor	Symptom type			
	PTSD		Depression	
	ΔR^2	<i>B</i>	ΔR^2	<i>B</i>
Block 1	.026		.025	
Age		-.046		-.092
Gender		-.051		-.020
Race		.111		.098
Block 2	.285**		.458**	
Emotional expression		-.235**		-.246**
Emotional processing		.051		.038
Emotional avoidance		.419**		.476**
Hope		-.112		-.236**
Block 3	.007		.015	
Emotional expression \times hope		.052		.021
Emotional processing \times hope		-.124		-.131
Emotional avoidance \times hope		-.025		-.106*
Total R^2	.318**		.498**	

Note: $N = 209$. * $p = .05$, ** $p < .01$.

such that low levels of dispositional hope and emotionally avoidant coping were associated with higher levels of depression. Dispositional hope did not moderate the association between either EAC strategy and PTSD or depression.

The finding that emotional expression was associated with reduced PTSD and depression symptoms is consistent with results from previous investigations among anxiety samples (Marques et al., 2009; Tull et al., 2006). Emotional expression may be associated with reduced pathology for a number of reasons. First, consistent with emotional processing models, emotional expression may promote optimal

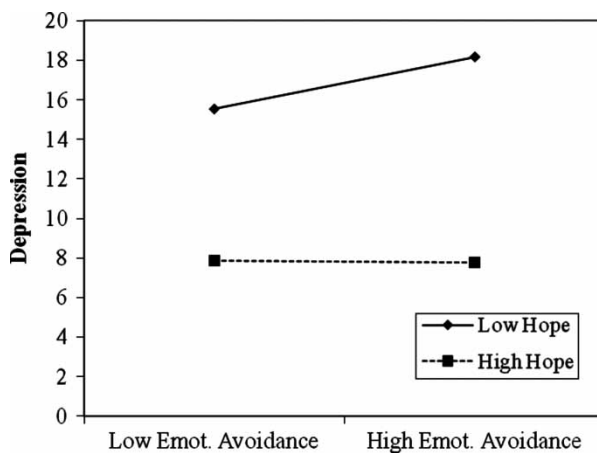


Figure 1. Two-way interaction between emotional avoidance and hope in predicting depression symptoms ($p = .054$). Emot. = emotional.

posttraumatic adjustment via emotional processing and facilitate fear reduction, as described by Foa and Kozak (1986), though the lack of a significant relationship between emotional processing and PTSD or depression tempers this idea. Similarly, emotional expression in response to traumatic and stressful life events has historically been associated with reduced physical and psychological distress (Smyth, 1998; Smyth & Pennebaker, 1999). Also, the propensity to express emotions openly may promote trauma survivors' disclosure to their support networks, thereby improving access to tangible aid and emotional support (Ullman, 2000). Additionally, the expression of emotion may foster emotion regulation, which is often compromised among individuals with complex trauma histories. Open expression of emotions and feelings may discourage experiential avoidance, an emotion regulation process whereby the person is unwilling to remain in contact with internal experiences (thoughts, feelings, and memories) and takes action to change them or the context in which they occur (Hayes, Wilson, Gilford, Follette, & Strosahl, 1996). Experiential avoidance has been associated with increased PTSD symptoms, psychological distress, depression, and lower quality of life among trauma exposed samples (e.g., Marx & Sloan, 2002; Plumb, Orsillo, & Luterek, 2004; Tull, Gratz, Salters, & Roemer, 2004). Consistent with these findings, avoidant coping was negatively correlated with both emotional expression and processing in the current study.

Interestingly, emotional processing was not uniquely related to distress in our sample. This was surprising, as being able to identify and understand the quality and value of one's feelings and emotions would be expected to facilitate emotional regulation and engagement. However, there has been some research suggesting that benefits of emotional processing may vary depending on the time since the traumatic or stressful event(s) and how long this type of coping is used (Austenfeld & Stanton, 2004; Marques et al., 2009; Stanton, Danoff-Burg, et al., 2000). In fact, some research suggests that prolonged use of emotional processing may foster rumination and increased psychological distress (Stanton, Danoff-Burg, et al., 2000). Future research regarding the relationship between emotional processing and avoidance or rumination in PTSD and depression is warranted, and it would be especially useful to account for time since the index event.

In addition, our results demonstrated negative relationships between avoidant emotional coping and PTSD- and depression-related symptomology. The detrimental effects of avoidant emotional coping in psychological distress are bolstered by the larger coping literature (e.g., Krause et al., 2008; Tiet et al., 2006). Our conceptualization of avoidant emotional coping consisted of strategies that encourage cognitive and behavioral avoidance (i.e., self-distraction, denial, behavioral disengagement, self-blame, and substance use). Utilizing coping strategies that encourage emotional avoidance may serve to exacerbate distress and inhibit emotional processing (Foa & Kozak, 1986; Hayes et al., 1996).

Lastly, we found that greater dispositional hope was associated with reduced depression, but not PTSD, symptoms. Based on Snyder's et al. (1991) description of hope as an individual's perception of pathways and agency, it is possible that trauma survivors who report lower levels of hope may have reduced self-efficacy and believe that there are limited possibilities for recovery from their traumatic experience. Maintaining negative beliefs about the self and world may evoke and amplify feelings of hopelessness and discourage potentially helpful behavioral efforts (e.g., disclosure,

support-seeking), resulting in depressed mood. Further, dispositional hope moderated the relationship between avoidant emotional coping and depression symptoms, such that greater use of avoidant coping strategies and reduced hope were associated with greater psychological distress in our sample. This finding is consistent with findings reported by Glass et al. (2009) who found that hope moderated the relationship between psychological distress and avoidant coping among survivors of Hurricane Katrina. Given that both of these factors appear to be individually associated with increased distress, it is likely that individuals who have reduced hope and engage in avoidant strategies may be more vulnerable to prolonged distress following trauma exposure.

The current findings have a number of important clinical implications. Consistent with a number of effective trauma-focused interventions, such as Prolonged Exposure (Foa, Hembree, & Rothbaum, 2007), therapeutic approaches that encourage contact with emotions and feelings may be beneficial in ameliorating distress associated with trauma exposure. In addition, encouraging trauma survivors to freely express their emotions and disclose to members of their support network may increase their access to practical and emotional support, thereby improving adjustment following trauma exposure. Additionally, techniques aimed at encouraging emotional processing may also promote adaptive cognitive reappraisal of the stressor (Stanton, Kirk, et al., 2000), which can be an important part of the recovery process for trauma survivors grappling with notions of causality, responsibility, or blame. It may also be beneficial to incorporate dialogue aimed at instilling hope through identifying pathways and enhancing perceptions of agency in the trauma recovery process into existing interventions. For example, therapeutic strategies that foster meaning making and the identification of the potential positive effects of the trauma may be particularly useful.

The present study has several limitations. First, this study was cross-sectional in nature, making it impossible to speak to the direction of relationships between variables examined. Hence, future longitudinal investigations are necessary to elucidate the nature of relationships established in this study. Similarly, we did not evaluate other potentially related vulnerability factors and thus, cannot speak to the degree to which emotional processing and dispositional hope relate to posttraumatic distress relative to other risk/resiliency factors (i.e., social support, other life stress). Future investigations in this area are warranted. Also, the present study relied on the use of retrospective self-report measures, which are subject to recall bias and the over- or under-reporting of distress. Further, trauma exposure was considered based on participants' positive endorsement of traumatic events and did not account for criterion A2. Future studies should utilize structured clinical interviews to assess psychological distress, more comprehensive forms of trauma assessment, and more detailed assessments of coping, ideally in a longitudinal manner. Time since trauma was not taken into account and may be an important factor in coping choices of traumatized Veterans. Additionally, participants were asked to report the coping strategies they used with their most stressful situation during the prior two weeks and not their traumas per se. Although informative, as coping styles are thought to represent a characteristic manner of responding to stress and our measure of EAC demonstrated good test-retest reliability (Stanton, Kirk, et al., 2000), we cannot speak to the nature of coping techniques used specifically in response to trauma exposure. Lastly, our sample was comprised of participants with primarily complex

trauma backgrounds, making it difficult to speak to differences that may occur as a function of trauma type or frequency.

In sum, findings from the present study highlight the value of assessing the full range of emotional coping strategies as well as perceptions of hope as they relate to posttraumatic adjustment. Specifically, although the direction of causality cannot be determined in the current study, our results suggest that employing coping techniques that encourage emotional expression may promote improved adjustment among trauma-exposed individuals, while reduced perceptions of hope and the use of avoidant coping strategies may place individuals at greater risk for depression following exposure to traumatic events.

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Note

1. Covariates were not significantly associated with PTSD and depression outcomes at the bivariate level. When regressions were conducted without controlling for age, gender, and ethnicity results were the same except hope no longer significantly moderated the relationship between emotional avoidance coping and depression symptoms ($p > .10$).

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