Anxiety, Stress, & Coping
2012, 1–13, iFirst article

Routledge
Taylor & Francis Group

Coping profiles characterize individual flourishing, languishing, and depression

Kathryn E. Faulk, Christian T. Gloria and Mary A. Steinhardt*

Department of Kinesiology and Health Education, The University of Texas at Austin, Austin, TX, USA

(*Received 10 February 2012; final version received 21 June 2012*)

According to the broaden-and-build theory of positive emotions, negative emotions narrow one's thought–action repertoire. In contrast, positive emotions have a broadening effect, expanding cognitive capacity, increasing potential coping strategies that come to mind, and enhancing decision-making, reaction, and adaptation to adversity. Fredrickson and Losada determined that a positivity ratio – the ratio of experienced positive to negative emotions – at or above 2.9 promotes human flourishing. A ratio below 2.9 is indicative of languishing individuals, whereas a ratio below 1.0 is a marker of depression. This study examined whether adaptive and maladaptive coping profiles differentiated those who flourish, languish, or are depressed in two convenience samples – military spouses ($n = 367$) and public school teachers ($n = 267$). Results were consistent with the theoretical predictions, as coping profiles of the groups differed significantly, with flourishing individuals favoring adaptive coping strategies more than those who were languishing or depressed. Conversely, depressed individuals reported greater use of maladaptive coping strategies than those who were languishing or flourishing. These results provide further empirical support for the mathematical model of Fredrickson and Losada, as the set of positivity criteria were predictive of coping profiles in two samples where successful coping and adaptation are important.

Keywords: adaptive coping; maladaptive coping; positivity; emotions; teachers; military spouses

Introduction

Coping involves the use of cognitive and behavioral strategies in an effort to prevent or diminish threat, harm, or loss, while reducing the associated emotional distress (Carver & Connor-Smith, 2010; Lazarus & Folkman, 1984). Coping strategies can be either adaptive or maladaptive, where adaptive refers to "the effectiveness of coping in improving the adaptational outcome" (Lazarus, 1993). Factor analytic studies suggest that strategies such as active coping, planning, and positive reframing are adaptive strategies in managing stress. Conversely, coping strategies such as behavioral disengagement and venting of emotions are maladaptive (Carver, Scheier, & Weintraub, 1989). Differences in coping profiles – whether an individual predominately utilizes adaptive or maladaptive coping strategies – have been repeatedly linked to overall well-being (Lazarus & Folkman, 1984). For example,

*Corresponding author. Email: msteinhardt@austin.utexas.edu

ISSN 1061-5806 print/1477-2205 online

http://dx.doi.org/10.1080/10615806.2012.708736
http://www.tandfonline.com

meta-analyses indicate that adaptive coping is related to improved physical and psychological health (Duangdao & Roesch, 2008; Moskowitz, Hult, Bussolari, & Acree, 2009; Roesch et al., 2005), whereas increased use of maladaptive coping leads to more negative outcomes, such as anxiety, depression, and poor physical health (Moskowitz et al., 2009; Roesch et al., 2005).

Adoption of effective coping strategies is particularly important in highly stressed populations, such as military spouses and public school teachers. For example, military spouses face not only family related stressors, including finances, child-rearing responsibilities, and household duties, but also stressors unmatched in the civilian world, such as lengthy and repeated deployments (Black, 1993; Drummet, Coleman, & Cable, 2003). Their ability to successfully cope with these demands not only impacts their emotional and physical well-being (Dimiceli, Steinhardt, & Smith, 2010; Rosen, Westhuis, & Teitelbaum, 1994) but also their satisfaction with military life (Drummet et al., 2003; Pittman, Kerpelman, & McFayden, 2004). Further, spouses' ability to cope plays a critical role in soldier readiness and the retention of an experienced military force, as spouses who cope well with the demands of military life are more supportive of a soldier's career. As a result, these soldiers become more committed to the military (Bourg & Segal, 1999; Pittman et al., 2004).

Similarly, public school teachers face a considerable number of stressors that necessitate the use of effective coping strategies, including disruptive students, nonsupportive parents, performance evaluations, and high-stakes testing (Kyriacou, 2001; Manthei, Gilmore, Tuck, & Adair, 1996; Montgomery & Rupp, 2005). When teachers are unable to cope with these demands, both their physical and psychological well-being decline (Travers & Cooper, 1996). For example, teachers who utilized maladaptive coping strategies were at an increased risk for burnout (Hastings & Brown, 2002), whereas those who used adaptive coping strategies reported a greater sense of personal accomplishment (Mitchell & Hastings, 2001). Furthermore, the strength of the educational system also suffers when teachers fail to cope with the demands of the job, as 40%–50% of teachers leave the profession within the first 3 years of employment (Ingersoll & Smith, 2003).

Coping strategies have also been linked to an individual's experience of positive and negative emotions. Negative emotions have been associated with maladaptive coping strategies, such as behavioral disengagement (Ntoumanis & Biddle, 1998), whereas adaptive coping strategies (e.g., positive reframing) have been linked to positive emotions (Fredrickson & Joiner, 2002; Moskowitz, Folkman, Collette, & Vittinghoff, 1996; Ntoumanis & Biddle, 1998). The broaden-and-build theory of positive emotions provides a framework that demonstrates the utility of positive and negative emotions in the coping process (Fredrickson, 1998; 2001; 2009). According to the theory, negative emotions (e.g., anger, fear) narrow one's thought–action repertoire by preparing an individual to react to a situation in a particular manner (e.g., escape when afraid; Fredrickson, 1998, 2001; Tugade & Fredrickson, 2004). This constricted cognitive capacity expedites decision-making to immediately alleviate the threat; however, this strategy is often maladaptive in circumstances that require more thoughtful actions, such as when faced with persistent and unrelenting stressors.

In contrast, the theory suggests that positive emotions (e.g., contentment, joy) elicit a variety of enduring benefits, including the production of pleasant sensations, as well as increases in cognition and social connectedness. These positive experiences broaden one's thought–action repertoire, thereby expanding the individual's

cognitive processes, widening the potential coping strategies that come to mind, and resulting in improved decision-making and adaptation to adversity (Fredrickson, 1998; 2001; 2009). That is, individuals who experience positive emotions have access to a larger repertoire of coping resources that they can use in creative and flexible ways, thereby promoting the use of adaptive coping strategies (Zeidner & Saklofske, 1996). Evidence suggests that individuals who frequently experience positive emotions during stressful situations benefit from their broadened mindset, are able to enhance their ability to downregulate lingering negative emotions, successfully cope with stressors, and ultimately reduce undesirable outcomes (Folkman & Moskowitz, 2000; Fredrickson, 2001, 2009; Fredrickson, Tugade, Waugh, & Larkin, 2003; Tugade & Fredrickson, 2004; Zeidner & Saklofske, 1996). Positive emotions were also found to facilitate adaptive coping in the face of both acute and chronic stressors (Folkman & Moskowitz, 2000). For example, positive emotions helped individuals accelerate cardiovascular recovery from laboratory-induced negative arousal and find positive meaning in adverse situations (Tugade & Fredrickson, 2004); furthermore, men who frequently experienced positive emotions were able to cope more effectively with the stressors related to dealing with a partner with AIDS (Folkman, 1997).

Fredrickson and Losada (2005) and Losada (1999) used a mathematical model to determine a critical positivity ratio, or crucial tipping point, from which broadened thinking and resilience resources emerge and distinguish individuals who lead a flourishing life, full of possibility and growth. According to the model, the crucial tipping point of experienced positive emotions to negative emotions that promotes human flourishing is 2.9. That is, to lead a flourishing life, an individual should experience at least an average of 2.9 positive emotions for every negative emotion – for practical purposes a ratio of 3:1 indicates human flourishing. For example, an individual who is flourishing would experience feeling at least three positive emotions (e.g., hopeful, inspired, and optimistic) for every negative emotion experienced (e.g., anger, fear, and irritation). Conversely, a positivity ratio below 2.9 is indicative of languishing, or individuals who are "stuck in a rut" and "yearning for more" (Fredrickson, 2008). Furthermore, positivity ratios less than 1.0 are frequently reported by individuals who are clinically depressed, as this ratio is suggestive of a pathological level of functioning (Fredrickson, 2009; Schwartz et al., 2002). Support for these three positivity ratio criteria is evident in a number of populations. For example, individuals, couples, and businesses that consistently flourish report positivity ratios at or greater than 2.9 (Fredrickson & Losada, 2005; Gottman, 1994; Losada & Heaphy, 2004; Schwartz et al., 2002). Those who report positivity ratios between 1.0 and 2.9, while not diagnosed with a clinical disorder, report only moderate mental health and experience similar frequencies of illnesses and lost workdays as those who are depressed (Keyes & Lopez, 2002). Individuals being treated for clinical depression, couples with troubled marriages, and unprofitable businesses score below 1.0 (Fredrickson & Losada, 2005; Gottman, 1994; Losada & Heaphy, 2004; Schwartz et al., 2002).

The purpose of the present study was to examine whether coping profiles differentiate three groups (viz., flourishing, languishing, and depressed) as categorized according to the broaden-and-build theory of positive emotions using Fredrickson and Losada's mathematical model (Fredrickson & Losada, 2005; Losada, 1999). Using two convenience samples, military spouses and public school

teachers, we hypothesized that the flourishing group would use more adaptive coping strategies (viz., planning, positive reframing, and active coping), followed by the languishing and depressed groups. Conversely, we hypothesized that the depressed group would more likely utilize maladaptive coping strategies (viz., venting, behavioral disengagement, and self-blame) followed by the languishing and flourishing groups.

Method

Participants and procedures

Military spouses

Participants were recruited from a convenience sample of military spouses whose husbands were currently deployed with infantry units of the United States Army ($n = 367$) and ranged in age from 19 to 54, with a mean of 27 ($\pm$ 5.75) years. Participants had been married an average of five ($\pm$ 4.71) years, 83% had children, with approximately two children per household, and 22% were employed outside the home. The ethnic distribution of participants was 66% Caucasian, 18% Hispanic/Latino, 11% African American, 3% Asian/Pacific Islander, 1% Native American, and 1% other. With regard to education, 4% had a postgraduate degree, 26% had a bachelor's degree, 7% had an associate's degree, 51% had attended college, 11% had a high school diploma/GED, and 1% had attended high school.

Participants whose husbands were deployed in Iraq ($n = 77$) were given the opportunity to complete the survey as they gathered on Spouse Appreciation Day. This day, hosted once per month by the Family Readiness Group (FRG), is designed to provide spouses with information and support. Participants whose husbands were deployed in Afghanistan ($n = 290$) were granted access to an online version of the survey via flyers posted on the FRG's password-protected website. This website is visited frequently, as it is a primary source of information for spouses. All participants were assured that their responses were anonymous, and their decision whether or not to participate would have no effect on their relationship with the Army or the university conducting the study.

Public school teachers

The public school teachers ($n = 267$) were primarily female (75%) and ranged in age from 23 to 68, with a mean of 45 ($\pm$ 11.46) years. The majority were high school teachers (75%), with the minority teaching either at middle school (13%) or elementary school (12%). Most teachers had a bachelor's degree (55%), whereas the remaining 45% had received a postgraduate degree. The ethnic distribution of participants was Caucasian (85%), followed by Hispanic/Latino (8%), African American (3%), Asian/Pacific Islander ($< 1\%$), and Native American ($< 1\%$). Overall, the teachers were highly experienced, reporting an average of 18 ($\pm$ 10.86) years in the profession.

Recruitment of the public school teacher sample was initiated with the identification of a convenience sample ($n = 170$) of public school teachers who had received a teaching excellence award from the alumni association of a large university. These teachers were mailed a packet containing six surveys via the US

postal service; they were asked to complete one survey and distribute the other five surveys to teachers representing a variety of teaching skills and years of experience. This snowball sampling technique resulted in a final sample of $n = 267$, 20% of whom were recipients of the teaching excellence award. All responses were anonymous, and the survey was completed at a time and location of the teachers' choosing. All study procedures were reviewed and approved by the Institutional Review Board of the sponsoring university.

Measures

Demographics

Both military spouses and public school teachers were asked to report general demographic characteristics, such as age, gender, ethnicity, and highest level of education. In addition, military spouses were asked to report their length of marriage, number of children, whether they were employed, and to what country their husbands were deployed. Public school teachers were asked to report characteristics related to their teaching, including number of years they had been teaching, grade-level taught, and whether they had received a teaching excellence award.

Coping strategies

Coping strategies were assessed by the Brief Coping Orientations to Problems Experienced Scale (Brief COPE; Carver, 1997). Participants were asked to what extent they utilized specific coping strategies during the past month. Of the 14 subscales originally included in the Brief COPE, 6 of the most commonly used strategies were included in the present study. Each subscale contained two items answered on a four-point Likert scale ranging from 1 (*never*) to 4 (*regularly*). The subscales identified as adaptive coping strategies included planning, positive reframing, and active coping. Planning involves outlining the strategic steps an individual plans to take to deal with the stressful situation (e.g., "I've been thinking hard about what steps to take"). Positive reframing is a cognitive coping strategy in which a stressful situation is reappraised in an attempt to see the situation differently or to reduce the negative affect experienced (e.g., "I've been looking for something good in what is happening"). The active coping items reflect direct attempts to deal with the stressor by altering the situation (e.g., "I've been taking action to try to make the situation better"). Reliabilities were moderate to strong for the three adaptive coping subscales in both military spouses ($\alpha = .74–.82$) and teachers ($\alpha = .69–.81$).

Venting, behavioral disengagement, and self-blame were identified as maladaptive coping strategies. Venting involves the expression of negative feelings one is experiencing (e.g., "I've been saying things to let my unpleasant feelings escape"). Behavioral disengagement involves reducing one's effort to cope with the stressor (e.g., "I've been giving up trying to deal with it"). Self-blame involves the internalization of the stressful situation in a hostile manner (e.g., "I've been blaming myself for things that happened"). Reliabilities were moderate to strong for the three maladaptive coping subscales in both military spouses ($\alpha = .71–.79$) and teachers ($\alpha = .70–.80$).

Positivity

Positive and negative emotions were measured using the 20-item Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988), with positivity representing the ratio of positive emotions (e.g., excited, enthusiastic, and interested) to negative (e.g., afraid, distressed, and irritable) emotions (Fredrickson & Losada, 2005). On a Likert scale from 1 (*not at all*) to 5 (*very much so*), participants were asked to respond to the following instructions: "This scale consists of a number of words that describe different feelings and emotions. Read each item and then indicate how you generally feel." The number of positive emotions experienced at least *moderately* (≥ 3) and the number of negative emotions experienced at least *a little* (≥ 2) were tallied, with the different thresholds in place to account for negativity bias and positivity offset. Negativity bias reflects the phenomenon that individuals give more weight to negative rather than positive emotions (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001), whereas positivity offset reflects the phenomenon that people tend to feel at least mild positive emotions most of the time (Cacioppo, Gardner, & Berntson, 1999). A positivity score was then calculated by dividing the frequency of the positive emotion items by the frequency of the negative emotion items. Reliability was strong for both the positive emotion items ($\alpha = .91$, .89) and negative emotion items ($\alpha = .84$, .84) in the military spouse and teacher samples, respectively. Based on the cutoff scores identified by Fredrickson and Losada (2005), positivity scores were trichotomized, and participants were classified as either flourishing (positivity ratio ≥ 2.9), languishing (positivity ratio $= 1.0$ to < 2.9), or depressed (positivity ratio < 1.0).

Statistical analyses

For each sample, a one-way multivariate analysis of variance (MANOVA) was conducted on the six dependent variables (venting, behavioral disengagement, self-blame, planning, positive reframing, and active coping), with level of positivity (flourishing, languishing, and depressed) serving as the independent variable. Post hoc analyses were performed using Tukey's Honestly Significant Difference (HSD) to control for potential Type I error rate inflation. Cohen's *d* effect sizes were computed to characterize the size of the differences between group means. Preliminary analyses indicated that the statistical assumptions of normality, independence, and equality of variances and covariance matrices were satisfied. All analyses were performed using Statistical Package for the Social Sciences (SPSS) version 18. The MANOVA analysis approach required us to drop 15 military spouses and 13 public school teachers with partially missing data, resulting in final samples of $n = 352$ and $n = 254$, respectively.

Results

Military spouses

Table 1 displays the means for each of the six coping subscales by level of positivity (viz., flourishing, languishing, and depressed). On average, military spouses in the depressed group scored higher on the maladaptive coping strategies, whereas those in the flourishing group scored higher on the adaptive coping strategies.

Table 1. Group mean subscale scores (SD) for the six coping strategies in military spouses and public school teachers.

	Variable	Flourishing	Languishing	Depressed	$F^{\dagger}$
Military spouses	Venting	2.87 (.74)	3.11 (.73)	3.38 (.70)	9.96***
	Behavioral disengagement	1.16 (.29)	1.46 (.49)	1.80 (.60)	36.02***
	Self-blame	1.35 (.41)	1.53 (.44)	1.90 (.62)	28.48***
	Planning	3.23 (.54)	3.02 (.59)	2.48 (.74)	33.23***
	Positive reframing	3.27 (.45)	2.99 (.59)	2.50 (.69)	37.31**
	Active coping	3.26 (.52)	3.10 (.55)	2.62 (.62)	30.67***
Public school teachers	Venting	1.99 (.73)	2.18 (.71)	2.40 (.76)	3.73*
	Behavioral disengagement	1.36 (.35)	1.60 (.45)	1.93 (.70)	16.15***
	Self-blame	1.30 (.35)	1.59 (.43)	1.92 (.64)	20.80***
	Planning	3.63 (.51)	3.52 (.54)	3.21 (.63)	7.61**
	Positive reframing	3.18 (.71)	3.06 (.70)	2.74 (.72)	5.06**
	Active coping	3.64 (.44)	3.50 (.55)	3.22 (.57)	7.39**

†Degrees of freedom are (2, 349) and (2, 251) for military spouses and public school teachers, respectively.
*$p < .05$, **$p < .01$, ***$p < .001$

Interestingly, it appears that military spouses in the depressed and languishing groups used the maladaptive strategy of venting more than any other coping strategy. The test of the multivariate null indicated group differences on the set of dependent variables [$F_{\text{Wilks' Lambda}}$ (12, 688) = 11.86, $p < .001$]. The accompanying multivariate partial eta square ($\eta_p^2 = .17$) indicated a relatively strong effect associated with the level of positivity. Examinations of the univariate test for each of the dependent variables show that group differences were present for all six coping subscales (see Table 1).

Examination of the pairwise comparisons showed that military spouses who are flourishing reported significantly lower use of all three maladaptive coping strategies than both languishing and depressed spouses. Further, flourishing spouses reported greater use of planning and positive reframing than the other groups, whereas both languishing and flourishing spouses reported equal use of active coping. Conversely, spouses who reported a depressed level of positivity scored significantly higher on all three maladaptive coping strategies than both the languishing and flourishing groups. Further, depressed individuals scored significantly lower than both the languishing and flourishing groups on all three adaptive coping strategies. The Cohen's d effect sizes for positivity level of military spouses ranged from small effects ($d = .29$) to large effects ($d = 1.32$) across the dependent variables (see Table 2).

Public school teachers

Table 1 displays the means for each of the six coping subscales by level of positivity. Across all three groups, it appears that teachers favored adaptive coping strategies over maladaptive coping strategies, albeit lower use of positive reframing in relation to the other two adaptive coping strategies and higher use of venting in relation to the other two maladaptive coping strategies. On average, teachers in the depressed group reported greater use of maladaptive coping strategies, whereas those in the

Table 2. Pairwise comparisons for the dependent variables using the Tukey HSD procedure.

		Military spouses		Public school teachers	
Dependent variable	Comparison	Point estimate (SE)	Cohen's *d*	Point estimate (SE)	Cohen's *d*
Venting	Flourishing vs. depressed	−.50*** (.11)	−.69	−.41* (.15)	−.57
	Flourishing vs. languishing	−.24* (.10)	−.33	−.19 (.12)	−.26
	Languishing vs. depressed	−.27* (.10)	−.37	−.22 (.12)	−.31
Behavioral disengagement	Flourishing vs. depressed	−.63*** (.07)	−1.32	−.58*** (.10)	−1.18
	Flourishing vs. languishing	−.29*** (.06)	−.61	−.25* (.08)	−.51
	Languishing vs. depressed	−.34*** (.06)	−.71	−.34*** (.08)	−.69
Self-blame	Flourishing vs. depressed	−.55*** (.07)	−1.14	−.63*** (.10)	−1.36
	Flourishing vs. languishing	−.19* (.06)	−.39	−.29** (.08)	−.63
	Languishing vs. depressed	−.36*** (.06)	−.75	−.34*** (.08)	−.73
Planning	Flourishing vs. depressed	.74*** (.10)	1.20	.42** (.12)	.76
	Flourishing vs. languishing	.21* (.08)	.34	.10 (.09)	.18
	Languishing vs. depressed	.53*** (.08)	.86	.32** (.09)	.58
Positive reframing	Flourishing vs. depressed	.77*** (.09)	1.32	.44** (.15)	.62
	Flourishing vs. languishing	.27** (.08)	.46	.12 (.12)	.17
	Languishing vs. depressed	.49*** (.08)	.84	.32* (.12)	.45
Active coping	Flourishing vs. depressed	.64*** (.09)	1.14	.42** (.11)	.78
	Flourishing vs. languishing	.16 (.07)	.29	.14 (.09)	.26
	Languishing vs. depressed	.48*** (.07)	.86	.28** (.09)	.52

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

flourishing group reported greater use of adaptive coping strategies. The test of the multivariate null indicated group differences on the set of dependent variables [$F_{\text{Wilks' Lambda}}$ (12, 492) = 5.17, $p < .001$]. The accompanying multivariate partial eta square ($\eta_p^2 = .11$) indicated a relatively strong effect associated with the level of positivity. Examinations of the univariate test for each of the dependent variables show that group differences were present for all six coping subscales (see Table 1).

The flourishing teachers reported lower use of behavioral disengagement and self-blame than both depressed and languishing teachers; however, flourishing and languishing teachers reported similar use of venting and all three adaptive coping strategies. Conversely, teachers with a depressed level of positivity scored significantly higher on behavioral disengagement and self-blame than both the languishing and flourishing groups and higher on venting than the flourishing group. In addition, depressed teachers scored significantly lower than both the languishing and flourishing groups on the adaptive coping strategies of planning, positive reframing, and active coping. The Cohen's *d* effect sizes for positivity level of teachers ranged from small ($d = .17$) to large effects ($d = -1.36$) across the dependent variables (see Table 2).

Discussion

This study examined whether coping profiles differed by positivity level as outlined by the broaden-and-build theory of positive emotions. As hypothesized, flourishing individuals engaged in more adaptive coping strategies (viz., planning, positive reframing, and active coping) and fewer maladaptive coping strategies than both languishing and depressed individuals. On the other hand, depressed individuals engaged in more maladaptive coping strategies (viz., venting, behavioral disengagement, and self-blame) and fewer adaptive coping strategies than languishing and flourishing individuals.

Importantly, these results provide further support for the mathematically derived positivity cutoffs of Fredrickson and Losada (Fredrickson & Losada, 2005; Losada, 1999), as the set of positivity criteria were successfully differential in the context of coping in two samples where successful coping is important. Human flourishing is associated with generativity, indexed by a broadened thought–action repertoire as well as innovative and flexible behavior (Fredrickson & Losada, 2005). The preference for adaptive coping strategies rather than maladaptive coping strategies in flourishing individuals suggests that those with a positivity ratio at or above 2.9 possessed characteristics of generativity. Conversely, depressed individuals utilized more maladaptive coping strategies, which are indicative of the rigidity and behavioral inflexibility associated with an extreme level of negativity (Fredrickson & Losada, 2005).

Although the overall pattern among the flourishing, languishing, and depressed groups was similar in both military spouses and public school teachers, differences in the utilization of specific coping strategies did emerge. Regardless of positivity level, public school teachers favored the three adaptive coping strategies over the three maladaptive coping strategies; however, this was not the case with military spouses, as depressed and languishing military spouses reported using the maladaptive strategy of venting more than any other coping strategy. This is especially problematic, as venting of emotions has been negatively associated with both physical and psychological well-being in military spouses during deployment separations (Padden, Connors, & Agazio, 2011). It may be that this overuse of venting is contributing to poor mental health in military spouses, as they experience rates of depression nearly three times that of the general population (Kessler et al., 2005; Mansfield et al., 2010). Future research should examine this preference for

venting based on a larger sample of military spouses, as this maladaptive strategy may serve as a target in health promotion programs in this population.

Another differential pattern that emerged was the lower use of positive reframing in relation to the other two adaptive coping strategies by the public school teachers. It may be that teachers are burned out because of the chronic stressfulness of their profession and feel that positive reframing is not as effective, or realistic, as other adaptive coping strategies in managing stress; however, positive reframing has been shown to be effective in improving the health and quality of life for those facing unrelenting strain either because of their occupation (i.e., police officers and emergency responders; Iwasaki, Mannell, Smale, & Butcher, 2005) or health status (i.e., HIV and AIDS patients; Hayajneh & Al-Hussami, 2009). Future research should incorporate qualitative methodology to identify the reasoning behind teachers' reduced use of positive reframing as an adaptive coping strategy.

The results of this study also found no differences between flourishing and languishing teachers in the use of all three adaptive coping strategies and the maladaptive coping strategy of venting. These findings were unexpected and unique to the public school teachers, as differences were present in military spouses. It may be that flourishing teachers are using additional adaptive coping strategies that were unmeasured in this study, such as acceptance or social support. Future research, then, should examine whether other coping strategies are successful in distinguishing flourishing and languishing teachers, as well as the impact of venting as a frequently used coping strategy.

From a practical standpoint, interventions have been successful in eliciting increased positivity and the accompanying resilience resources (Emmons & McCullough, 2003; Seligman, Steen, & Park, 2005), and highly stressed individuals could benefit from such interventions. The experience of positive emotions has been shown to improve coping in a number of individuals facing negative circumstances, including those contemplating suicide (Joiner et al., 2001), grieving the loss of a loved one (Folkman, 1997), and disclosing sexual abuse (Bonanno et al., 2002). Further, the relationship between positivity and coping is reciprocal, in that positivity not only predicts successful coping, but the use of adaptive coping strategies subsequently increases positive emotions (Fredrickson & Joiner, 2002). Prospective designs examining the relationship between positivity and coping should be adopted to determine the efficacy of such interventions in both teachers and military spouses.

The findings of the present study should be considered in light of several limitations. First, this study was cross-sectional in nature, and therefore, causal inference cannot be determined. Second, there are inherent limitations associated with the use of single self-report survey data, including common method variance and potentially untruthful or inaccurate responses, because of a lack of self-awareness; therefore, future research should incorporate objective measures of positivity and coping strategies. Third, military spouses comprised a convenience sample of women married to deployed Army infantrymen; therefore, the results may not generalize to those serving in other branches of the armed forces or different military occupations. Similarly, the teacher sample was highly experienced, with an average of 18 years of experience, and consequently, the results may not generalize to a sample of novice teachers. Finally, the response rate of 26% for teachers was moderate (Alreck & Settle, 2004); however, the response rate for military spouses was unavailable, as the number

of spouses in attendance at the Spouse Appreciation Day as well as the number of spouses who were members of the FRG website were unknown.

Despite these limitations, the results of this study carry important health implications for the well-being of both military spouses and public school teachers. Our study supports the broaden-and-build theory of positive emotions and the mathematical model for positivity cutoffs using two different samples with unique stressors. Further, the results revealed distinct strengths and areas in which both samples could benefit from positive health interventions.

References

Alreck, P.L., & Settle, R.B. (2004). *The survey research handbook* (3rd ed.). New York: McGraw-Hill.

Baumeister, R.F., Bratslavsky, E., Finkenauer, C., & Vohs, K.D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*(4), 323–370. doi:10.1037//1089-2680.5.4.323

Black, W.G. (1993). Military-induced family separation: A stress-reduction intervention. *Social Work*, *38*(3), 273–280.

Bonanno, G.A., Keltner, D., Noll, J.G., Putnam, F.W., Trickett, P.K., LeJeune, J., & Anderson, C. (2002). When the face reveals what words do not: Facial expressions of emotion, smiling, and the willingness to disclose childhood sexual abuse. *Journal of Personality and Social Psychology*, *83*(1), 94–110. doi:10.1037//0022-3514.83.1.94

Bourg, C., & Segal, M.W. (1999). The impact of family supportive policies and practices on organizational commitment to the Army. *Armed Forces & Society*, *25*(4), 633–652. doi:10.1177/0095327X9902500406

Cacioppo, J.T., Gardner, W.L., & Berntson, G.G. (1999). The affect system has parallel and integrative processing components: Form follows function. *Journal of Personality and Social Psychology*, *76*(5), 839–855. doi:10.1037//0022-3514.76.5.839

Carver, C.S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*, *4*(1), 92–100. doi:10.1207/s15327558ijbm0401_6

Carver, C.S., & Connor-Smith, J. (2010). Personality and coping. *Annual Review of Psychology*, *61*, 679–704. doi:10.1146/annurev.psych.093008.100352

Carver, C.S., Scheier, M.F., & Weintraub, J.K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, *56*(2), 267–283. doi:10.1037//0022-3514.56.2.267

Dimiceli, E.E., Steinhardt, M.A., & Smith, S.E. (2010). Stressful experiences, coping strategies, and predictors of health-related outcomes among wives of deployed military servicemen. *Armed Forces & Society*, *36*(2), 351–373.

Drummet, A.R., Coleman, M., & Cable, S. (2003). Military families under stress: Implications for Family Life Education. *Family Relations*, *52*(3), 279–287.

Duangdao, K.M., & Roesch, S.C. (2008). Coping with diabetes in adulthood: A meta-analysis. *Journal of Behavioral Medicine*, *31*(4), 291–300. doi:10.1007/s10865-008-9155-6

Emmons, R.A., & McCullough, M.E. (2003). Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. *Journal of Personality and Social Psychology*, *84*(2), 377–389. doi:10.1037//0022-3514.84.2.377

Folkman, S. (1997). Positive psychological states and coping with severe stress. *Social Science and Medicine*, *45*(8), 1207–1221. doi:10.1016/S0277-9536(97)00040-3

Folkman, S., & Moskowitz, J.T. (2000). Stress, positive emotion, and coping. *Current Directions in Psychological Science*, *9*, 115–118. doi:10.1111/1467-8721.00073

Fredrickson, B.L. (1998). What good are positive emotions? *Review of General Psychology*, *2*(3), 300–319. doi:10.1037//1089-2680.2.3.300

Fredrickson, B.L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, *56*(3), 218–226. doi:10.1037//0003-066X.56.3.218

Fredrickson, B.L. (2008). Promoting positive affect. In M. Eid & R.J. Larsen (Eds.), *The science of subjective well-being* (pp. 449–468). New York: Guilford Press.
Fredrickson, B.L. (2009). *Positivity*. New York: Crown Publishers.
Fredrickson, B.L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science*, *13*(2), 172–175. doi:10.1111/1467-9280.00431
Fredrickson, B.L., & Losada, M.F. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist*, *60*(7), 678–686. doi:10.1037/0003-066X.60.7.678
Fredrickson, B.L., Tugade, M.M., Waugh, C.E., & Larkin, G.R. (2003). What good are positive emotions in crises? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. *Journal of Personality and Social Psychology*, *84*(2), 365–376. doi:10.1037//0022-3514.84.2.365
Folkman, S. (1997). Positive psychological states and coping with severe stress. *Social Science & Medicine*, *45*(8), 1207–1221. doi:10.1016/S0277-9536(97)00040-3
Folkman, S., & Moskowitxz, J.T. (2000). Stress, positive emotion, and coping. *Current Directions in Psychological Science*, *9*, 115–118. doi:10.1111/1467-8721.00073
Gottman, J.M. (1994). *What predicts divorce? The relationship between marital processes and marital outcomes*. Hillsdale, NJ: Erlbaum.
Hastings, R.P., & Brown, T. (2002). Coping strategies and the impact of challenging behaviors on special educators' burnout. *Mental Retardation*, *40*(2), 148–156. doi:10.1352/0047-6765(2002)040 <0148:CSATIO >2.0.CO;2
Hayajneh, F.A., & Al-Hussami, M.A. (2009). Predictors of quality of life among women living with Human Immunodeficiency Virus/AIDS. *Journal of Hospice and Pallative Nursing*, *11*(5), 255–261. doi:10.1097/NJH.0b013e3181b41f6c
Ingersoll, R.M., & Smith, T.M. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, *60*(8), 20–33.
Iwasaki, Y., Mannell, R.C., Smale, B.J.A., & Butcher, J. (2005). Contributions of leisure participation in predicting stress coping and health among police and emergency response services workers. *Journal of Health Psychology*, *10*(1), 79–99. doi:10.1177/1359105305048557
Joiner, T.E., Pettit, J.W., Perez, M., Burns, A.B., Gencoz, T., Gencoz, F., & Rudd, M.D. (2001). Can positive emotion influence problem-solving among suicidal adults? *Professional Psychology: Research and Practice*, *32*(5), 507–512. doi:10.1037//0735-7028.32.5.507
Kessler, R.C., Chiu, W.T., Demler, C., & Walters, E.E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, *62*(6), 617–627. doi:10.1001/archpsyc.62.6.617
Keyes, C.L.M., & Lopez, S.J. (2002). Toward a science of mental health: Positive directions in diagnosis and interventions. In C.R. Snyder & S.J. Lopez (Eds.), *Handbook of positive psychology* (pp. 45–59). New York: Oxford University Press.
Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, *53*(1), 27–35. doi:10.1080/00131910124115
Lazarus, R.S. (1993). Coping theory and research: Past, present, and future. *Psychosomatic Medicine*, *55*(3), 234–247.
Lazarus, R.S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
Losada, M.F. (1999). The complex dynamics of high performance teams. *Mathematical and Computer Modeling*, *30*(9–10), 179–192. doi:10.1016/S0895-7177(99)00189-2
Losada, M.F., & Heaphy, E. (2004). The role of positivity and connectivity in the performance of business teams: A nonlinear dynamics model. *American Behavioral Scientist*, *47*(6), 740–765. doi:10.1177/0002764203260208
Mansfield, A.J., Kaufman, J.S., Marshall, S.W., Gaynes, B.N., Morrissey, J.P., & Engel, C.C. (2010). Deployment and the use of mental health services among US Army wives. *The New England Journal of Medicine*, *362*(2), 101–109. doi:10.1056/NEJMoa0900177
Manthei, R., Gilmore, A., Tuck, B., & Adair, V. (1996). Teacher stress in intermediate schools. *Educational Research*, *38*(1), 3–19. doi:10.1080/0013188960380101
Mitchell, G., & Hastings, R.P. (2001). Coping, burnout, and emotion in staff working in community services for people with challenging behaviors. *American Journal of Mental Retardation*, *106*(5), 448–459. doi:10.1352/0895-8017(2001)106<0448:CBAEIS >2.0.CO;2

Montgomery, C., & Rupp, A.A. (2005). A meta-analysis for exploring the diverse causes and effects of stress in teachers. *Canadian Journal of Education*, *28*(3), 458–486. doi:10.2307/4126479

Moskowitz, J.T., Folkman, S., Collette, L., & Vittinghoff, E. (1996). Coping and mood during AIDS-related caregiving and bereavement. *Annals of Behavioral Medicine*, *18*(1), 49–57.

Moskowitz, J.T., Hult, J.R., Bussolari, C., & Acree, M. (2009). What works in coping with HIV? A meta-analysis with implications for coping with serious illness. *Psychological Bulletin*, *135*(1), 121–141. doi:10.1037/a0014210

Ntoumanis, N., & Biddle, S.J.H. (1998). The relationship of coping and its perceived effectiveness to positive and negative affect in sport. *Personality and Individual Differences*, *24*(6), 773–788. doi:10.1016/S0191-8869(97)00240-7

Padden, D.L., Connors, R.A., & Agazio, J.G. (2011). Stress, coping, and well-being in military spouses during deployment separation. *Western Journal of Nursing Research*, *33*(2), 247–267. doi:10.1177/0193945910371319

Pittman, J.F., Kerpelman, J.L., & McFayden, J.M. (2004). Internal and external adaptation in Army families: Lessons from Operations Desert Shield and Desert Storm. *Family Relations*, *53*(3), 249–260. doi:10.1111/j.0197-6664.2004.0001.x

Roesch, S.C., Adams, L., Hines, A., Palmores, A., Vyas, P., Tran, C., ... Vaughn, A.A. (2005). Coping with prostate cancer: A meta-analytic review. *Journal of Behavioral Medicine*, *28*(3), 281–293. doi:10.1007/s10865-005-4664-z

Rosen, L.N., Westhuis, D.J., & Teitelbaum, J.M. (1994). Patterns of adaptation among Army wives during Operations Desert Shield and Desert Storm. *Military Medicine*, *159*(1), 43–47.

Schwartz, R.M., Reynolds, C.F., Thase, M.E., Frank, E., Fasiczka, A.L., & Haaga, D.A.F. (2002). Optimal and normal affect balance in psychotherapy of major depression: Evaluation of the balanced states of mind model. *Behavioural and Cognitive Psychotherapy*, *30*(4), 439–450. doi:10.1017/S1352465802004058

Seligman, M.E.P., Steen, T.A., & Park, N. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, *60*(5), 410–421. doi:10.1037/0003-066X.60.5.410

Travers, C.J., & Cooper, C.L. (1996). *Teachers under pressure: Stress in the teaching profession*. London, UK: Routledge.

Tugade, M.M., & Fredrickson, B.L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*, *86*(2), 320–333. doi:10.1037/0022-3514.86.2.320

Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*(6), 1063–1070. doi:10.1037//0022-3514.54.6.1063

Zeidner, M., & Saklofske, D. (1996). Adaptive and maladaptive coping. In M. Aeidner & N.S. Endler (Eds.), *Handbook of coping: Theory, research, applications* (pp. 505–531). San Francisco: John Wiley.