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Resilience to depressive symptoms: The buffering effects of enhancing cognitive style and positive life events

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ABSTRACT

Background and Objectives: There are two lines of research examining the role of cognition in depression. One line of research focuses on risk for depression, and shows that a negative cognitive style interacts with stressful life events to create depression. The second line of research focuses on recovery, and shows that an enhancing cognitive style interacts with positive life events to reduce depression. The goal of this study was to integrate these two areas and provide a more comprehensive test of the cognitive model of depression.
Methods: A 4-week prospective longitudinal design was used to test the interaction between cognitive style (both negative and enhancing) and life events (both negative and positive) in a sample of undergraduates ($n = 128$).
Results: Cognitively vulnerable individuals were buffered from the depressive effects of stress if they also possessed an enhancing cognitive style or experienced high numbers of positive life events. Individuals with low levels of negative cognitive style and life stress, but high levels of enhancing cognitive style or positive life events were the most resilient to depressive symptoms.
Limitations: Future research is needed to determine if the results of this study generalize to a more diverse sample as well as to clinically significant forms of depression.
Conclusions: The results provide some of the first evidence for the protective role of enhancing cognitive style and positive live events among vulnerable individuals. These findings underscore the importance of examining a broader environmental context when investigating risk and resiliency to depression.

1. Introduction

According to the hopelessness theory of depression (Abramson, Metalsky, & Alloy, 1989), some individuals have a *negative cognitive style* (i.e., a cognitive vulnerability) that interacts with stressful life events to produce depression. Hopelessness theory defines a negative cognitive style as the tendency of an individual to make particular kinds of inferences about the cause, consequences, and self-worth implications of stressful life events. Specifically, when faced with a stressful life event, an individual who has a negative cognitive style is likely to: (a) attribute the event to stable and global causes; (b) view the event as likely to lead to other negative consequences; and (c) construe the event as implying that he or she is unworthy or deficient. Individuals who generate these three types of negative inferences are hypothesized to be at high risk for depression.

Recent research has provided strong support for hopelessness theory's cognitive vulnerability hypothesis (see Abramson et al., 2002 for review). Prospective studies (Gibb, Beevers, Andover, & Holleran, 2006; Haeffel et al., 2007; Hankin, Abramson, Miller, & Haeffel, 2004; Metalsky & Joiner, 1992) have consistently found that a negative cognitive style interacts with stressful events to predict the development of depressive symptoms (even after statistically controlling for participants' baseline level of depressive symptoms). Moreover, research has demonstrated that a negative cognitive style is associated with the onset of clinically significant depression as measured by structured diagnostic interview. For example, results from the Temple-Wisconsin Cognitive Vulnerability to Depression (CVD) Project (Abramson et al., 1999; Alloy et al., 2006) found that participants with a negative cognitive style were approximately 7 times more likely than participants without a negative cognitive style to experience an episode of major depressive disorder during the 2.5-year prospective follow-up.

Taken together, research indicates that a negative cognitive style is a potent risk factor for depression. Thus, it is important to begin to understand the factors that can buffer or protect a cognitively vulnerable individual from becoming depressed. Clearly, one strategy for protecting cognitively vulnerable individuals is to try to change their cognitive style with an intervention such as

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cognitive-behavioral therapy. However, it is also important to identify naturally occurring factors that might increase resiliency (e.g., Shahar & Priel, 2002). Understanding how a negative cognitive style operates in the "real world" has the potential to reveal new resiliency factors that can be used to create novel interventions. To date, studies testing the hopelessness theory have focused almost exclusively on the role of stressful life events (and their interpretation) on risk for depression. This makes sense in light of hopelessness theory's cognitive vulnerability hypothesis. However, it is important to recognize that an individual's natural environment does not consist solely of stressful life events. Indeed, an individual who is experiencing stressful events may also be experiencing positive events at the same time. The omission of positive life events in previous research is a problem because their occurrence, and subsequent interpretation, may have important implications for individuals who have a negative cognitive style.

Despite the lack of empirical studies, there is a strong theoretical rationale for including positive life events (and their interpretation) in the cognitive vulnerability framework. In 1990, Needles and Abramson proposed a recovery model of depression based on the hopelessness theory. They hypothesized that the occurrence of positive life events would interact with an "enhancing cognitive style" to create hopefulness, and in turn, decrease depression. In their recovery model, enhancing cognitive style is defined as the tendency to: (a) attribute positive events to stable and global causes; (b) view the events as likely to lead to other positive consequences; and (c) construe the events as implying that he or she is special in some way. Individuals who generate these three types of enhancing inferences are hypothesized to experience a restoration of hope, and in turn, fewer depressive symptoms.

Preliminary studies have generally supported the Needles and Abramson (1990) recovery model. Research has shown that individuals with an enhancing cognitive style (alone or in combination with positive life events) were more likely to experience decreases in depressive symptoms than individuals without an enhancing cognitive style (Edelman, Ahrens, & Haaga, 1994; Johnson, Crofton, & Feinstein, 1996; Johnson, Han, Douglas, Johannet, & Russel, 1998; Needles & Abramson, 1990; Voelz, Haeffel, Joiner, & Wagner, 2003). Moreover, the results appear to hold in both adult and adolescent samples (e.g., Voelz et al., 2003).

In summary, there are two lines of research examining the role of cognition in depression. One line of work focuses on risk for depression, and shows that a negative cognitive style interacts with stressful life events to predict depression (Abramson et al., 1989). The second line of work focuses on recovery from depression, and shows that an enhancing cognitive style interacts with positive life events to predict reductions in depression (Needles & Abramson, 1990). Surprisingly, these two lines of research have developed in relative isolation. Research testing the effect of negative cognitive style on depression has typically ignored the role of enhancing cognitive style (and positive life events). Similarly, research testing the effect of enhancing cognitive style has typically ignored the role of negative cognitive style (and stressful life events). Furthermore, in the few studies that actually measured all of these factors, the analyses were conducted in a manner that still separated the effects of negative and positive events (e.g., Fresco, Alloy, & Reilly-Harrington, 2006). Thus, researchers have created an artificial separation between the different cognitive styles (and life events) that does not appear to hold in nature. Both theory and data support the idea that negative and enhancing cognitive styles can coexist within an individual. Similarly, an individual can experience both negative and positive life events. All of these factors can occur simultaneously to influence depressive outcomes. For example, Needles and Abramson (1990) stated, "…even among those at risk for hopelessness depression, there may be a subset who have the hypothesized enhancing style

for positive events and who thereby may be better able to recover." Indeed, studies reveal that negative and enhancing cognitive styles are either statistically unrelated (e.g., Voelz et al., 2003) or weakly positively correlated (correlations ranging from 0.01 to 0.40 in prior studies) and exhibit different patterns of associations with depressive symptoms (e.g., Sweeney, Anderson, & Bailey, 1986; Voelz et al., 2003; Zautra, Guenther, & Chartier, 1985).

To understand risk for depression, it is necessary for researchers to investigate a wider range of cognitive and environmental factors. Specifically, prior research indicates that there are at least four factors to consider: negative cognitive style, enhancing cognitive style, stressful life events, and positive life events. To date, no study has simultaneously tested the interaction of all four factors. However, a study by Voelz et al. (2003) provides some insight about how these factors might behave. Using a longitudinal design with a sample of child psychiatric inpatients, they examined the interaction of negative and enhancing cognitive styles. They found that children with a negative cognitive style and no enhancing cognitive style exhibited the greatest levels of depressive symptoms. However, children with both a negative cognitive style and an enhancing cognitive style exhibited decreased levels of depressive symptoms. Interestingly, the children with the lowest level of depressive symptoms were those who had neither a negative nor enhancing cognitive style.

Unfortunately, the conclusions that can be drawn from the Voelz et al. (2003) study are limited because they did not include measures of positive and stressful life events. Rather, the researchers assumed that the participants' admission to a hospital would act as a positive life event. Thus, it was not possible for Voelz and colleagues to test the vulnerability by stress interaction hypothesis. Moreover, the study did not address risk for depression, but rather focused on recovery in an already symptomatic clinical sample. It is important to examine cognitive style and life events in a non-clinical sample using a prospective design in order to gain a more comprehensive understanding of what factors precede and predict depressive symptoms.

The goal of the current study was to provide a more rigorous and comprehensive test of the cognitive model of depression. To this end, the study used a 4-week longitudinal prospective design to investigate risk and resilience to depression in a non-clinical adult sample. The study is the first to simultaneously examine the interaction of negative cognitive style, enhancing cognitive style, and natural occurring negative and positive life events. By including all four of these factors, this study should provide important insights into the etiology of depression. It should also reveal protective factors that can be used to inform treatment and prevention interventions.

Based on the results of the Voelz et al. (2003) study, we tested three hypotheses: (a) individuals with a negative cognitive style and high levels of stressful life events would exhibit the greatest increases in depressive symptoms over the prospective interval; (b) individuals with a negative cognitive style and high levels of stress would be buffered from depressive symptoms if they also possessed an enhancing cognitive style and experienced high levels of positive events; and, (c) individuals with neither a negative cognitive style nor an enhancing cognitive style would exhibit the lowest levels of depressive symptoms when faced with either negative or positive life events.

2. Method

2.1. Participants

Participants were 131 unselected undergraduates from the volunteer psychology participant pool at the University of Notre Dame. Specific data regarding ethnicity was not collected; however, the sample was likely largely Caucasian given the ethnic diversity of

the university more generally (76% Caucasian, 11% Hispanic, 8% Asian, 5% African American). Participants were recruited through an on-line sign-up procedure and were given extra credit points for their participation. A total of 128 (88 women, 40 men) participants (mean age = 19.32) completed both the T1 and T2 assessments, and thus, were included in the analyses.

2.2. Measures

2.2.1. Acute Life Events Questionnaire (ALEQ; Haeffel et al., 2007)

The ALEQ was used to assess naturally occurring *acute* life events important to college students that could have occurred over the previous week. Forty-eight items assessed a broad range of positive and stressful life events from school/achievement to interpersonal/romantic. Participants were instructed to indicate which of the life events had occurred to them over the previous week. Participants simply marked yes or no to indicate the occurrence of the event. Scores for stressful events can range from 0 to 30 with higher scores indicating the occurrence of more stressful events. Scores for positive events can range from 0 to 18 with higher scores indicating the occurrence of more positive events. The ALEQ was administered at both time points.

2.2.2. Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979)

The BDI is a 21-item self-report inventory that assesses depressive symptoms. Total scores on the BDI can range from 0 to 63, with higher scores indicating greater levels of depressive symptoms. The BDI has high internal consistency, test-retest reliability, and validity with both psychiatric and normal samples (Beck, Steer, & Garbin, 1988). The BDI was administered at both time points.

2.2.3. Cognitive Style Questionnaire (CSQ; Haeffel et al., 2008)

The CSQ assesses participants' inferences for the 12 hypothetical negative events and 12 hypothetical positive events. For each hypothetical event, participants are first instructed to vividly imagine themselves in that situation, as if the situation were happening in real time (example event: *You take an exam and receive a low grade on it*). Next, they are instructed to write down what they believe to be the one major cause of the event. Participants then use a 7-point Likert-type scale to rate the cause that they have specified on dimensions of stability and globality. Finally, participants are asked to think about what the occurrence of the hypothetical situation would mean to them, and to use a 7-point Likert-type scale to rate the consequences and self-worth implications of the hypothetical event. An individual's negative cognitive style score is their average rating across the scales relevant to the vulnerability factor featured in the hopelessness theory (stability, globality, consequences, and self-worth characteristics) for the 12 hypothetical stressful life events. Similarly, an individual's enhancing cognitive style score is their average rating of the same four subscales (stability, globality, consequences, and self-worth characteristics) for the 12 hypothetical positive life events. Composite scores (total score divided by the number of items) can range from 1 to 7, with higher scores reflecting greater levels of negative or enhancing cognitive styles. The CSQ has good internal consistency, reliability, and validity (see Haeffel et al., 2008 for review). For example, Alloy et al. (2000) reported a one-year test-retest correlation of 0.80 in a sample of college students. The CSQ was administered at Time 1.

2.3. Procedure

The study used a 4-week prospective longitudinal design. At time 1, participants were administered an informed consent form,

a brief demographics questionnaire, measures of negative and enhancing cognitive styles (CSQ), positive and stressful life events (ALEQ), and depressive symptoms (BDI). The consent form, demographics questionnaire, and CSQ were administered via paper-and-pencil questionnaire. The ALEQ and BDI were administered on a computer using the web-based Survey Monkey software. Participants were run in groups of four, and each participant completed the questionnaires in a semi-private computer station. Participants completed the same measures of depressive symptoms (BDI) and life events (ALEQ) 4 weeks later; they were again administered on computer using the web-based Survey Monkey software.

3. Results

We used hierarchical multiple regression (Cohen, Cohen, West, & Aiken, 2003) to test the hypotheses. The Time 1 depression score (T1 BDI) was entered in the first step of the regression equation to create a residual change score for the same measure at Time 2 (T2 BDI). In the second step, the main effects of negative cognitive style (T1 CSQ), enhancing cognitive style (T1 CSQ), stressful life events (T1 ALEQ) and positive life events (T1 ALEQ) were entered. Next, all two-way interaction terms were entered. Then, the three-way interaction terms were entered. Finally, the four−way interaction of Negative Cognitive Style × Enhancing Cognitive Style × Stressful Life Events × Positive Life Events was entered. Consistent with the recommendations of Cohen et al. (2003), all continuous independent variables were centered and individual variables within a given set were not interpreted unless the set as a whole was significant, thereby reducing Type I errors. Descriptive statistics and correlations for the measures are listed in Table 1.

As can be seen in Table 2, the results replicated prior work by demonstrating a significant two-way interaction between negative cognitive style and stressful life events. This interaction was qualified by three significant three-way interactions. As predicted, the three-way interaction among negative cognitive style, stressful life events, and enhancing cognitive style was significant, $b = 1.60$, $t = 2.34$, $p = 0.02$. Similarly, the three-way interaction among negative cognitive style, stressful life events, and positive events was significant, $b = 0.32$, $t = 2.76$, $p = 0.007$. Moreover, there was a significant three-way interaction among negative cognitive style, enhancing cognitive style, and positive life events, $b = 0.57$, $t = 2.46$, $p = 0.02$. The four-way interaction was not significant, $b = -0.14$, $t = -0.85$, $p = 0.40$.

To illustrate the patterns of significant three-way interactions, we plotted BDI scores at T2 as a function of the interaction terms (negative cognitive style, enhancing cognitive style, negative life

Table 1
Means, standard deviations, and correlations.

	1	2	3	4	5	6
1 Negative style	—					
2 Enhancing style	**0.38**	—				
3 ALEQ Neg	**0.21**	0.13	—			
4 ALEQ Pos	**−0.18**	0.14	**0.30**	—		
5 BDI T1	**0.42**	0.10	**0.32**	**−0.19**	—	
6 BDI T2	**0.30**	0.05	0.17	−0.13	**0.68**	—
M	4.24	5.04	2.34	7.51	6.44	3.56
SD	0.70	0.60	2.44	3.27	5.37	5.35

Note. N = 128. Negative Style = Negative cognitive style subscale of the Cognitive Style Questionnaire at Time 1. Enhancing Style = Enhancing cognitive style subscale of the Cognitive Style Questionnaire at Time 1. ALEQ Neg = Stressful Events subscale of the Acute Life Events Questionnaire at T1. ALEQ Pos = Positive Events subscale of the Acute Life Events Questionnaire at T1. BDI T1 = Beck Depression Inventory at Time 1. BDI T2 = Beck Depression Inventory at Time 2.
For all measures, scores indicate greater levels of the construct being measured.
Correlations in bold are significant at the 0.05 level.

Table 2
Negative cognitive style × enhancing cognitive style × stressful life events × positive life events predicting time 2 depressive symptoms.

Predictor	b	pr	t	R^2 change
Step 1				0.47***
BDI (T1) covariate	0.68	0.68	10.31***	
Step 2				0.01
Negative style	−0.14	−0.02	−0.21	
Enhancing style	−0.07	−0.01	−0.10	
Stressful events	0.04	0.02	0.25	
Positive events	−0.15	−0.13	−1.38	
Step 3				0.02
Negative × enhancing	0.02	0.00	0.03	
Negative × stressful events	−0.71	−0.17	−1.85*	
Negative × positive events	−0.07	−0.04	−0.41	
Enhancing × stressful events	0.07	0.03	0.29	
Enhancing × positive events	0.23	0.11	1.21	
Stressful events × positive events	−0.08	−0.11	−1.18	
Step 4				0.08**
Negative × stressful × enhancing	1.60	0.22	2.34**	
Negative × stressful × positive	0.32	0.26	2.76***	
Negative × enhancing × positive	0.57	0.23	2.46**	
Enhancing × stressful × positive	−0.03	−0.03	−0.31	
Step 5				0.00
Negative × stressful × enhancing × positive	−0.14	−0.08	−0.85	
Model $R^2 = 0.58$, $F(16, 106) = 9.14$, $p < 0.001$				

Note. BDI = Beck Depression Inventory; Negative style = Negative cognitive style subscale of the Cognitive Style Questionnaire. Enhancing style = Enhancing cognitive style subscale of the Cognitive Style Questionnaire. Stressful events = Stressful events subscale of the Acute Life Events Questionnaire; Positive events = Positive events subscale of the Acute Life Events Questionnaire.
*$p < 0.10$. **$p < 0.05$. ***$p < 0.01$.

events and positive life events; high vs. low levels of variables were determined by median split). As shown in Figs. 1 and 2, results generally supported the hypotheses. Individuals with a negative cognitive style who experienced a high proportion of stressful events typically experienced the greatest level of depressive symptoms. However, if these individuals also had an enhancing cognitive style (Fig. 1) or a high level of positive events (Fig. 2), then they were buffered from depressive symptoms and displayed levels of depressive symptoms similar to those without a negative cognitive style. Tests of the simple slopes (Aiken & West, 1991) confirmed the pattern of the interactions (i.e., the protective effects) for both enhancing cognitive style ($t = 2.57$, $p = 0.01$) and positive life events ($t = 2.17$, $p = 0.03$). Fig. 3 displays the pattern of the negative cognitive style by enhancing cognitive style by positive events interaction. This interaction was not predicted a priori, but showed that individuals with a negative cognitive style and low levels of enhancing cognitive style experienced high levels of depressive in the absence of positive life events. Finally, none of the interaction patterns supported our hypothesis that those with low levels of both cognitive styles would exhibit the lowest level of depressive symptoms. Rather, participants with a low negative cognitive style combined with a high enhancing cognitive style and/or high levels of positive life events were the most resilient to depression.

4. Discussion

This study was the first to simultaneously test the interaction of negative cognitive style, enhancing cognitive style, and naturally occurring negative and positive life events. There were a number of important findings. First, the results corroborated prior work showing that a negative cognitive style is a potent risk factor for depression. Individuals with a negative cognitive style reported the highest level of depressive symptoms, particularly when faced with
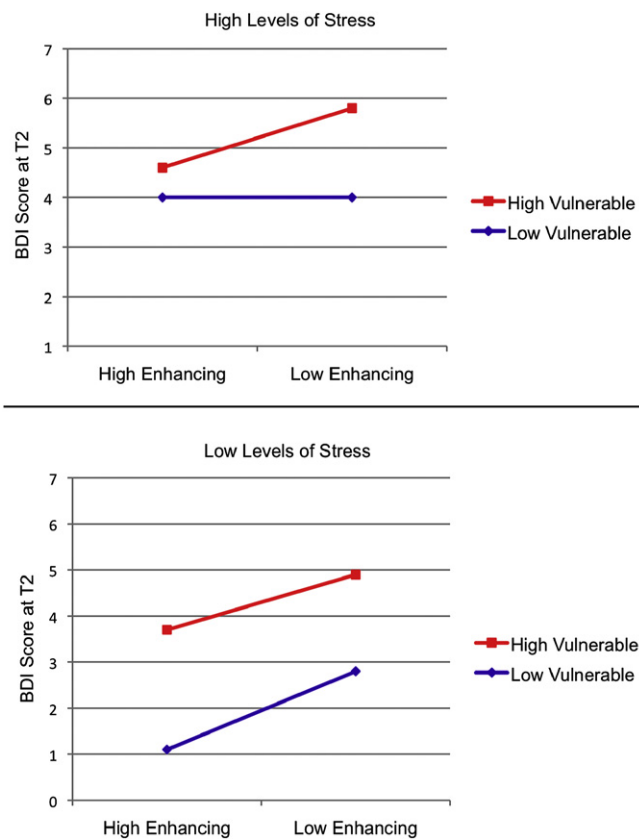

Fig. 1. Top Panel: Time 2 BDI score as a function of cognitive vulnerability (high negative style vs. low negative style) and enhancing cognitive style (high vs. low) for individuals with high levels of stressful life events. Bottom Panel: Time 2 BDI score as a function of cognitive vulnerability (high negative style vs. low negative style) and enhancing cognitive style (high vs. low) for individuals with low levels of stressful life events.

high levels of stress. The results also support prior work indicating that negative and enhancing cognitive styles are relatively independent. In the current study, there was only a small positive correlation between the two styles, which supports Needles and Abramson's (1990) hypothesis that there is a subset of cognitively at risk individuals who also have an enhancing cognitive style.

There were also a number of novel findings. The results provide some of the first evidence for the protective role of enhancing cognitive style and positive life events among vulnerable individuals. In the present study, individuals with a negative cognitive style were buffered from increases in depressive symptoms if they had either an enhancing cognitive style or high levels of positive life events. Impressively, these individuals exhibited depression levels similar to the group of participants who did not have a negative cognitive style. It is noteworthy that enhancing cognitive style and positive events exerted their protective effects separately rather than in combination (e.g., the 4-way interaction was not significant). Although this finding is consistent with recent studies showing that positive life events, by themselves, may increase resilience to negative moods, they are inconsistent with the Needles and Abramson (1990) recovery model. According to the recovery model, positive life events should be most likely to lead to decreases in depressive symptoms for those with an enhancing cognitive style. Thus, future work is still needed to clarify how an enhancing cognitive style increases resilience even in the absence of positive life events.

The results also provided evidence that the absence of positive life events might be depressogenic. Indeed, individuals with high
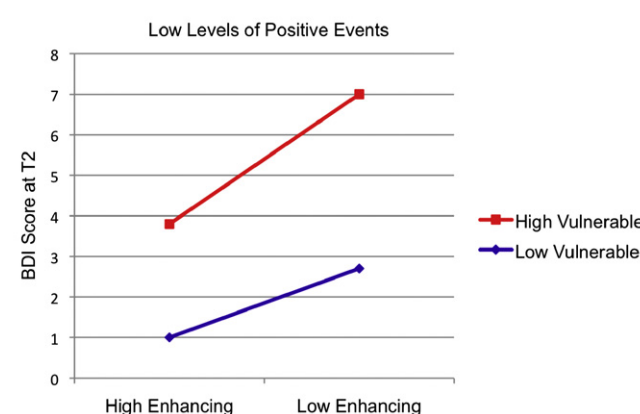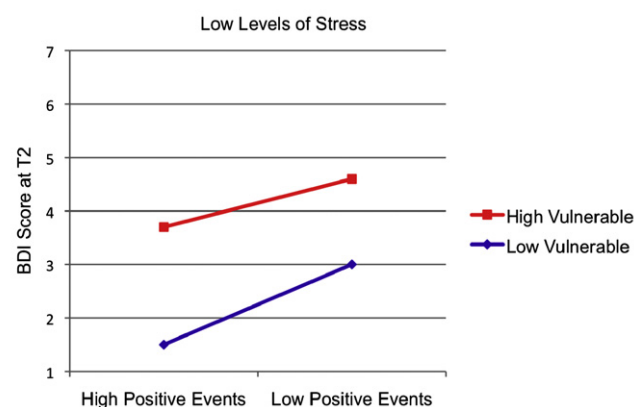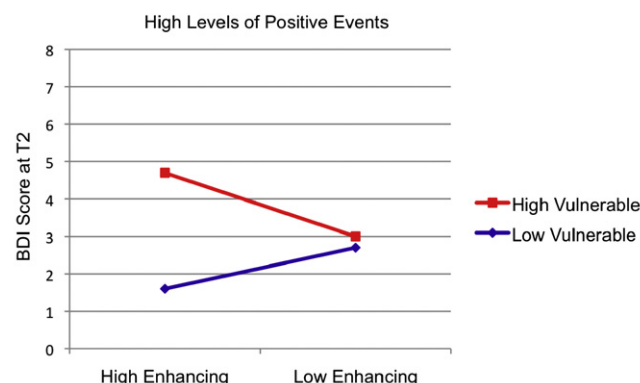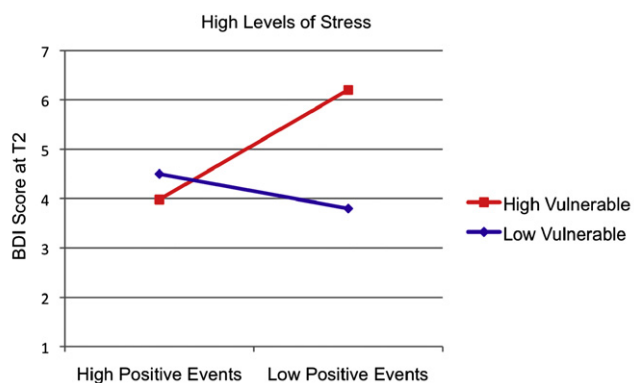
Fig. 2. Top Panel: Time 2 BDI score as a function of cognitive vulnerability (high negative style vs. low negative style) and positive life events (high vs. low) for individuals with high levels of stressful life events. Bottom Panel: Time 2 BDI score as a function of negative cognitive style (high vs. low) and positive life events (high vs. low) for individuals with low levels of stressful life events.

Fig. 3. Top Panel: Time 2 BDI score as a function of cognitive vulnerability (high negative style vs. low negative style) and enhancing cognitive style (high vs. low) for individuals with high levels of positive events. Bottom Panel: Time 2 BDI score as a function of cognitive vulnerability (high negative style vs. low negative style) and enhancing cognitive style (high vs. low) for individuals with low levels of positive events.

levels of negative cognitive style (and low levels of enhancing cognitive style) and low levels of positive life events reported some of the highest levels of depressive symptoms. This finding, although not predicted a priori, is consistent with the original theorizing of the hopelessness theory (Abramson et al., 1989), which proposed that *either* the occurrence of stressful life events or the nonoccurrence of positive life events could set the causal chain in motion.

Contrary to hypotheses, individuals with neither a negative cognitive style nor an enhancing cognitive style did not report the fewest depressive symptoms. Rather, it was individuals with a low negative cognitive style and either high enhancing cognitive style or high positive life events that were most resilient to depression. These findings conflict with those of Voelz et al. (2003) who showed that individuals with low levels of both styles were most resilient. One explanation for the discrepancy is that Voelz et al. used a sample of children whereas the current study used a sample of adults. It is possible that a more neutral style is adaptive in childhood, but an enhancing style is more adaptive in adulthood. Another explanation is that Voelz et al. (2003) did not directly measure positive and stressful life events, and thus, did not test the cognitive style by life events interaction.

The current findings are also at odds with recent mindfulness-based therapies (e.g., Coelho, Canter, & Ernst, 2007; Segal, Teasdale, & Williams, 2004), which emphasize the benefits of accepting a neutral cognitive style. Patients who receive these therapies are taught to give up control and be present in the effort of acceptance and "being." However, our results suggest that it might be beneficial to "take credit" and reflect on positive events and positive self-cognitions. This view is consistent with research on positivity biases.

Studies in this area indicate that healthy people tend to have a self-serving bias in which they are more likely to make stable global attributions for positive events than they are for stressful events. Importantly, this positivity bias is associated with psychological health, less psychopathology, and optimism (Mezulis, Abramson, Hyde, & Hankin, 2004). In line with these findings, our results suggest that an enhancing cognitive style can protect a vulnerable individual from depression. It is important to note, however, that recent work on bipolar spectrum disorders suggests that this "good thing" can be taken too far (Lex & Meyer, 2009; Thompson & Bentall, 1990). For example, Alloy, Reilly-Harrington, Fresco, Whitehouse, & Zechmeister (1999) found that enhancing cognitive style and positive events interacted to predict increases in manic symptoms in a sample of bipolar spectrum participants (see Reilly-Harrington, Alloy, Fresco, & Whitehouse, 1999 for exception). Thus, it is possible that the resiliency effect in our study may only apply to individuals at risk for unipolar, but not bipolar, depression.

The current study had both strengths and weaknesses. A significant strength of this study was the inclusion of measures of negative style, enhancing style, stressful events, and positive events. This is the first study to examine all of these factors simultaneously. Previous research (e.g., Fresco et al., 2006) had arbitrarily tested the negative and positive factors separately despite the fact that all of these factors can occur simultaneously and influence one another. Moreover, this study used the most recent and empirically valid measure of cognitive style (CSQ; Haeffel et al., 2008). Previous studies relied on the Attributional Style Questionnaire (ASQ; Peterson et al., 1982), which only

measures causal attributions, and does not measure the other two types of inferences featured in the hopelessness theory (consequences and self-worth). Finally, the results have potential treatment implications. For example, cognitive interventions tend to focus on helping patients change their style for interpreting stressful life events. However, the current results suggest that emphasizing the generation and interpretation of positive life events may also be important, as it could have a prophylactic effect.

There were also limitations to the current study. For example, the study used a college sample with a high proportion of females so it is possible that the results may not generalize to a more diverse sample (e.g., a community sample). However, research suggests that the results of studies using college samples are often generalizable, particularly when basic processes (e.g., cognition) are being studied (e.g., Anderson, Lindsay, & Bushman, 1999). Another potential limitation of the current study is that it examined depressive symptoms, but not clinical diagnoses. Thus, we cannot make conclusions about clinically significant forms of depression. Along these lines, it is important to highlight that the majority of the sample experienced low levels of depression symptoms (typically in the mild range). Thus, at this point, we can only conclude that the protective effects of enhancing cognitive style and positive life events hold for mild fluctuations in depressive symptoms. However, given that research on hopelessness theory applies to both depressive symptoms and clinically significant depression, we expect that future research will provide evidence that our pattern of results also extends to more severe symptomatology and depressive disorders.

In conclusion, the current results indicate that an enhancing cognitive style and positive life events can buffer an individual with a negative cognitive style from depressive symptoms. These results advance theorizing as well as indicate new avenues for creating interventions. They also highlight the usefulness of examining a broader environmental context when investigating risk and resiliency to depression. We look forward to further studies testing this expanded cognitive model of depression.

Acknowledgements

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