

## Processing Mode Influences the Relationship Between Trait Rumination and Emotional Vulnerability

Nicholas J. Moberly, Edward R. Watkins, University of Exeter

Watkins (2004) found that the mode of processing adopted during expressive writing following a failure influenced emotional recovery from the failure as a function of level of trait rumination. At higher levels of trait rumination, negative mood 12 hours after the failure was greater, but only in an abstract, evaluative writing condition and not in a concrete, process-focused condition. The current study examined whether this interaction of trait rumination with processing mode would generalize to emotional vulnerability to a subsequent negative stressor. Participants repeatedly focused on both positive and negative scenarios in either a concrete, process-focused or an abstract, evaluative mode, before a failure experience. As predicted, after the failure experience, higher levels of trait rumination were associated with lower levels of positive affect, but only for participants in the abstract, evaluative condition and not for participants in the concrete, process-focused condition. This finding is consistent with processing mode influencing the relationship between trait rumination and emotional vulnerability.

ELUCIDATING THE PROCESSES THAT influence emotional vulnerability—the extent to which affect becomes less positive or more negative and persists as such in response to a stressful event—is particularly important in understanding the development of psychopathology (Harvey, Watkins,

Mansell, & Shafran, 2004). One process implicated in emotional vulnerability is depressive rumination, defined as “behavior and thoughts that focus one’s attention on one’s depressive symptoms and on the implications of these symptoms” (Nolen-Hoeksema, 1991, p. 569). Focus on depressed mood, problems, and other aspects of negative self-experience has detrimental consequences: increased self-focus is associated with depression (Ingram, 1990; Pyszczynski & Greenberg, 1987), and depressive rumination increases the likelihood, severity, and duration of syndromal depression (e.g., Just & Alloy, 1997; Kuehner & Weber, 1999; Nolen-Hoeksema, 2000; Spasojevic Alloy, 2001). In experimental studies, depressive rumination intensifies dysphoric mood and negative thinking and impairs problem-solving (e.g., Lyubomirsky & Nolen-Hoeksema, 1995; Lyubomirsky, Tucker, Caldwell, & Berg, 1999; Watkins & Baracaia, 2002).

Rumination has been conceptualized more broadly as repetitive and recurrent thinking about personal concerns and unresolved goals (Martin & Tesser, 1996; Segerstrom, Stanton, Alden, & Shortridge, 2003). This conceptualization subsumes the construct of depressive rumination, as well as including problem solving and repetitive dwelling on past events. Recent evidence has suggested that there are a number of distinct modes or types of rumination, each of which has distinct functional properties, some adaptive and others maladaptive (McFarland & Buehler, 1998; Trapnell & Campbell, 1999; Treynor, Gonzalez, & Nolen-Hoeksema, 2003). Of the various distinct modes that have been proposed, one potentially important distinction is that hypothesized between an abstract, evaluative mode of processing, and a concrete, process-focused mode of processing (Rimes & Watkins, 2005; Watkins, 2004; Watkins & Baracaia, 2002; Watkins & Moulds, 2005;

This research was supported by a project grant from the Wellcome Trust, UK, to Dr Edward Watkins. We are grateful to Emily Holden and Lucy O’Sullivan for their assistance with data collection.

Address correspondence to Edward Watkins, Mood Disorders Centre, School of Psychology, University of Exeter, Exeter, EX4 4QG, United Kingdom; e-mail: [e.r.watkins@exeter.ac.uk](mailto:e.r.watkins@exeter.ac.uk).

0005-7894/06/0281-0291\$1.00/0

© 2006 Association for Behavioral and Cognitive Therapies. Published by Elsevier Ltd. All rights reserved.

Watkins & Teasdale, 2001, 2004). The abstract, evaluative mode is focused on evaluating the higher-level causes, meanings, consequences, and implications of self-experience. In contrast, the concrete, process-focused mode is focused on the lower-level, specific, contextual, and concrete moment-by-moment details of how self-experience unfolds. The theoretical rationale for this distinction comes from reduced concreteness theory (Borkovec, Ray, & Stöber, 1998; Stöber, 1998; Stöber & Borkovec, 2002) and Interacting Cognitive Subsystems theory (ICS; Teasdale, 1999; Watkins, 2004). Both these theories propose that self-experience can be processed in a more concrete, process-focused way or in a more abstract, evaluative way. Moreover, both theories hypothesize that when applied to negative self-experience, abstract, evaluative processing is maladaptive relative to concrete, process-focused processing. First, when focusing on negative self-experience, abstract, evaluative processing may provide event descriptions that are less detailed, less action-oriented, and therefore less effective for generating plans during problem solving (Stöber, 1998; Williams, 1996). Second, abstract, evaluative processing evokes less vivid imagery of emotional events (Paivio & Marschark, 1991), resulting in reduced emotional and physiological arousal during recall (Clark & Collins, 1993) and therefore poorer emotional processing (Foa & Kozak, 1986; Pennebaker, 1997; Teasdale, 1999). Third, an abstract, evaluative mode of processing during negative self-experience is more likely to result in overgeneralization, which has been identified as a key process in depression (Ganellen, 1988). Therefore, the processing mode hypothesis predicts that during rumination the concrete, process-focused mode should be adaptive, whereas the abstract, evaluative mode should be maladaptive (Watkins, 2004; Watkins & Moulds, 2005).

Results from a number of studies are consistent with this hypothesis. In depressed patients, focus on self and symptoms in an abstract, evaluative mode (“Think about the causes, meanings and consequences of ...”) reduced specificity of autobiographical memory recall (Watkins & Teasdale, 2001, 2004), impaired social problem-solving (Watkins & Moulds, 2005), and increased endorsement of global negative self-judgments (Rimes & Watkins, 2005) compared to focus on self and symptoms in a concrete, process-focused mode (“Focus your attention on your experience of ...”). Thus, during rumination, processing mode causally influences cognitive processes associated with increased vulnerability to depression.

Furthermore, Watkins (2004) has shown that processing mode interacts with trait rumination to predict emotional recovery following an upsetting event. Following an induced failure experience on a bogus “intelligence test,” participants wrote about their failure for 15 min, three times over the next 24 hours, in a modification of the expressive writing paradigm (Hunt, 1998; Pennebaker, 1993). Participants were randomly allocated to expressive writing about the failure in either an abstract, evaluative way (e.g., Why did you feel this way?) or a concrete, process-focused way (How did you feel moment-by-moment?). Participants were also assessed for individual differences in trait rumination as indexed by the Action Control Scale–Preoccupation Subscale (Kuhl, 1994). At higher levels of trait rumination, levels of negative mood 12 hours after the failure were greater, but only in the abstract, evaluative condition and not in the concrete, process-focused condition. Thus, the interaction between trait rumination and processing condition was associated with the rate at which individuals recovered from the negative mood induced by the failure. This finding suggests that processing mode causally influences emotional regulation as a function of level of trait rumination.

The current study examined whether the causal effects of processing mode on emotional regulation generalize to emotional vulnerability. More specifically, we expected that inducing different processing modes prior to an upsetting event would causally influence the emotional response to the subsequent upsetting event. This was predicted for three reasons. First, an induced processing mode is unlikely to cease abruptly at the end of the training period. During a subsequent failure, participants may still be processing in the induced mode, thereby influencing emotional regulation (Watkins, 2004). Second, as mentioned above, there is evidence that an abstract, evaluative mode results in less specific autobiographical memory, less effective problem-solving, and more global negative self-judgments than a concrete, process-focused mode. These cognitive consequences are likely to influence the way in which individuals appraise and cope with a subsequent stressor, resulting in a more maladaptive response. Third, there is evidence that modifying cognitive processes implicated in psychopathology (e.g., attentional bias) through repeated training on cognitive-experimental tasks can influence the emotional response to a subsequent stressor (MacLeod, Rutherford, Campbell, Ebsworthy, & Holker, 2002; Mathews & MacLeod, 2002). Because processing mode is also implicated in the development of

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات