



## Are worry, rumination, and post-event processing one and the same? Development of the repetitive thinking questionnaire

Peter M. McEvoy<sup>a,b,\*</sup>, Alison E.J. Mahoney<sup>c</sup>, Michelle L. Moulds<sup>d</sup>

<sup>a</sup> Centre for Clinical Interventions, Perth, Australia

<sup>b</sup> School of Psychology, University of Western Australia, Perth, Australia

<sup>c</sup> Clinical Research Unit for Anxiety and Depression, Sydney, Australia

<sup>d</sup> School of Psychology, University of New South Wales, Sydney, Australia

### ARTICLE INFO

#### Article history:

Received 7 December 2009

Received in revised form 26 February 2010

Accepted 19 March 2010

#### Keywords:

Rumination

Worry

Post-event processing

Repetitive thinking

Transdiagnostic

### ABSTRACT

Accumulating evidence suggests that repetitive negative thinking (RNT) is a transdiagnostic phenomenon. However, various forms of RNT such as worry, rumination, and post-event processing have been assessed using separate measures and have almost exclusively been examined within the anxiety, depression, and social phobia literatures, respectively. A single transdiagnostic measure of RNT would facilitate the identification of transdiagnostic maintaining factors of RNT, and would be more efficient than administering separate measures for each disorder. Items from three existing measures of RNT were modified to remove diagnosis-specific content and administered to a sample of undergraduate students ( $N = 284$ ). Exploratory factor analysis yielded two factors labeled *Repetitive Negative Thinking* and *Absence of Repetitive Thinking (ART)*. The RNT scale demonstrated high internal reliability and was associated with anxiety, depression, anger, shame, and general distress. Moreover, the RNT scale was associated with constructs that are theoretically related to engagement in RNT, including positive and negative metacognitions, cognitive avoidance, thought suppression, and thought control strategies. The ART scale had little predictive utility. Theoretical and clinical implications are discussed.

© 2010 Elsevier Ltd. All rights reserved.

### 1. Introduction

The seminal work of Fairburn and colleagues in the context of eating disorders prompted what has become known as a transdiagnostic approach to the maintenance of psychological disorders. Fairburn, Cooper, and Shafran (2003) developed a transdiagnostic model of eating disorders by highlighting the mechanisms that maintain eating pathology across the DSM-IV eating disorder categories, and thus departed from the more traditional disorder-focused approach. Harvey, Watkins, Mansell, and Shafran (2004) adopted and broadened this transdiagnostic perspective and sought to identify shared cognitive and behavioral processes that are linked to the persistence of a range of clinical conditions. Their systematic review of the empirical literature highlighted repetitive negative thought as one such transdiagnostic process that is characteristic of the cognitive profile of a range of psychopathologies (Harvey et al., 2004). In a more recent review, Ehring and Watkins (2008) concluded that elevated repetitive negative thought is a fea-

ture of most Axis I disorders, and cited depression, social phobia and posttraumatic stress disorder (PTSD) among their examples. In another recent review, Watkins (2008) identified key factors that determine whether repetitive thought has adaptive or maladaptive consequences; namely, (i) thought valence, (ii) the context of the repetitive thought, and (iii) the mode of processing adopted during repetitive thought.

Depressive rumination (Nolen-Hoeksema, 1991, 2004) is arguably the most studied form of repetitive thought in the clinical literature. Depressive rumination refers to a pattern of repetitive thinking in response to sad mood in which an individual analyses the causes, meanings and implications of their mood, problems and events from the past. Rumination is a core cognitive feature of clinically and residually depressed individuals, and has been linked to the duration, severity and maintenance of depressive episodes (see Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008). Longitudinal evidence has demonstrated that individuals who engage in depressive rumination have an elevated likelihood of depression onset (Nolen-Hoeksema, Morrow, & Fredrickson, 1993) and maintenance (Nolen-Hoeksema, 2000). Experimental studies confirm that rumination exacerbates depressed mood (Nolen-Hoeksema & Morrow, 1993), and causally implicate rumination in poor problem solving (Watkins & Moulds, 2005a), preferential encoding of negative self-referent material (Moulds, Kandris, Starr, & Wong, 2007), the

\* Corresponding author at: Centre for Clinical Interventions, 223 James Street, Northbridge, Perth, Western Australia 6003, Australia. Tel.: +61 8 9227 4399; fax: +61 8 9328 5911.

E-mail address: peter.mcevoy@health.wa.gov.au (P.M. McEvoy).

retrieval of overgeneral memories (Watkins & Teasdale, 2001), and poor emotional processing of negative events (Watkins, 2004) in depressed and dysphoric samples.

As the hallmark diagnostic feature of generalized anxiety disorder, worry is a form of repetitive thought that has been most investigated in the context of anxiety. Worry and rumination have primarily been distinguished in terms of their temporal focus (i.e., worry is future-oriented, rumination is past-oriented; Papageorgiou & Wells, 1999). Nonetheless, there is evidence that these two types of repetitive thought share common processes (e.g., Watkins, Moulds, & Mackintosh, 2005) and that both are reported by individuals across different clinical groups (e.g., Gruber, Eidelman, & Harvey, 2008). In addition, some researchers have examined the relationship between worry and rumination by comparing participants' responses on self-report measures that tap both types of repetitive thought. Segerstrom, Tsao, Alden, and Craske (2000) reported that worry and rumination were significantly associated with a measure of repetitive thinking, and that both types of repetitive thought were, in turn, associated with anxiety and depression (see also Fresco, Frankel, Mennin, Turk, & Heimberg, 2002). However, in other studies, worry and rumination have loaded on distinct factors (e.g., Fresco, Heimberg, Mennin, & Turk, 2002; Goring & Papageorgiou, 2008). Thus, the degree to which worry and rumination may be associated with a common underlying construct of repetitive thinking requires further investigation.

According to theoretical accounts of social phobia (Clark & Wells, 1995; Rapee & Heimberg, 1997), repetitive thinking about social events is a core maintaining process. Post-event processing (PEP) has been documented in high socially anxious and socially phobic samples, following real-life social events as well as laboratory-based social-evaluative tasks, such as giving a speech (e.g., Abbott & Rapee, 2004; Kocovski, Endler, Rector, & Flett, 2005; Lundh & Sperling, 2002; Mellings & Alden, 2000; Perini, Abbott, & Rapee, 2006; Rachman, Grüter-Andrews, & Shafran, 2000). In line with the suggestion that rumination and worry may be captured by a common construct of repetitive thought, it is plausible that post-event processing might similarly reflect this construct. To our knowledge, the interrelationship of post-event processing and other types of repetitive thought (i.e., worry, rumination) has not been examined.

Lundh and Sperling (2002) recruited an undergraduate sample to record their experience of PEP following a distressing social situation. These researchers found that while PEP following negative-evaluative events (i.e., those involving a degree of negative evaluation or the respondent as the focus of attention) was associated with a measure of social anxiety (i.e., Social Phobia Scale), PEP following other socially evaluative situations (i.e., those involving guilt, anger, or no explicit evaluative component) was not. Interestingly, however, PEP was rated as similarly prevalent (How much did you think about the event afterwards?) and distressing (How distressing was it to think about the event?) regardless of whether all socially distressing situations or only negative-evaluative situations were considered. This finding suggests that respondents experienced distressing PEP to the same degree regardless of whether or not there was an evaluative component to the social experience. Thus, PEP appears to be common regardless of whether the core feature of social phobia is present (i.e. fear of negative evaluation), further supporting the notion that repetitive negative thinking is a common experience following distressing events.

Fehm, Schneider, and Hoyer (2007) examined the specificity of PEP for social anxiety by comparing social situations to non-evaluative phobic situations. These researchers found that while respondents reported engaging in PEP following both phobic and social situations, PEP was more intense in social situations. However, in a multiple regression analysis, PEP following a social

situation significantly predicted PEP following a phobic situation after controlling for fear of negative evaluation, phobic anxiety, general anxiety, and depression. The reverse was also true. That is, PEP following a phobic situation significantly predicted PEP following social situations. The authors suggested that these findings point to a general predisposition to ruminative thinking. Interestingly, the Fear of Negative Evaluation scale was only associated with PEP following social situations, rather than phobic situations. Although the authors argued that this is evidence of the specificity of PEP for social fears, an alternative possibility is that fear of negative evaluation is simply a moderator of repetitive negative thinking. It may also be that the version of the Post-Event Processing Questionnaire used in this study was more valid for social fears compared to phobic situations. A transdiagnostic measure could shed light on this issue.

Kocovski and Rector (2008) attempted to examine the diagnostic specificity of PEP in relation to depressive rumination. Measures of social anxiety, depression and depressive rumination were administered to a sample of patients with social anxiety disorder attending group CBT. Measures of PEP were then administered during the second treatment session (with reference to the first treatment session) and again in session four (with reference to an exposure task completed in session 3). Interestingly, PEP was associated with social anxiety but not with depressive rumination (rumination in response to depressive symptoms). Moreover, the partial correlation between PEP and social anxiety controlling for depression was greater in magnitude than the partial correlation between PEP and depression when controlling for social anxiety. However, this finding is perhaps not surprising given that (a) the instructions on the RRS ask respondents to complete the items with respect to times when they feel down, depressed or blue rather than socially anxious, (b) some Ruminative Response Scale (RRS, Nolen-Hoeksema & Morrow, 1991) items include depressive symptoms, and (c) depressive rumination was measured some (unspecified) weeks before PEP. The significant partial correlation between depression and PEP when controlling for social anxiety is also consistent with a general tendency to ruminate, irrespective of content. The lack of a measure not tied to diagnosis-specific content has limited researchers' ability to test this possibility, and then to examine the notion that common maintaining factors are at play across disorders regardless of the content of the rumination. The alternative hypothesis would of course be that the diagnosis-specific content has important implications for our understanding and treatment of various emotional disorders.

Some researchers who have investigated the association between different types of repetitive thought have administered standard self-report instruments that index the constructs of interest, and examined the degree to which responses on these measures are associated. Several researchers have conducted factor analyses of common measures of worry (typically the Penn State Worry Questionnaire, PSWQ, Meyer, Miller, Metzger, & Borkovec, 1990) and rumination (typically the RRS, Nolen-Hoeksema & Morrow, 1991) to determine whether items from these scales load on a common repetitive thinking factor or separate factors. Some studies have found that the PSWQ and RRS scale items exclusively or almost exclusively load on separate factors (e.g., Fresco, Frankel, et al., 2002; Fresco, Heimberg, et al., 2002; Goring & Papageorgiou, 2008; Muris, Roelofs, Meesters, & Boomsma, 2004). However, there is at least one potentially important source of method variance across the scales that could explain this finding. Specifically, all items within the PSWQ include the word "worry", whereas none of the RRS items do. At present, a validated measure of repetitive thinking that contains items not anchored to disorder-specific content remains absent from the literature. As highlighted by Ehling and Watkins (2008), an ongoing challenge for investigators in the field is the absence of such a generic measure that is independent

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