Behaviour Research and Therapy 49 (2011) 234–243

Contents lists available at ScienceDirect

Behaviour Research and Therapy

journal homepage: www.elsevier.com/locate/brat

Characteristics of intrusive memories in a community sample of depressed, recovered depressed and never-depressed individuals

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ARTICLE INFO

Article history:
Received 16 May 2010
Received in revised form
29 October 2010
Accepted 7 January 2011

Keywords:
Depression
Memory
Intrusive memories
Memory characteristics

ABSTRACT

An accumulating body of evidence has revealed that intrusive autobiographical memories of negative events play a role in depression. Despite increasing understanding of the phenomenological experience of these memories, previous research in this area has been conducted in either nonclinical samples, or in clinical samples without an adequate control group. This study aimed to replicate and extend findings with dysphoric samples by comparing the content and characteristics of intrusive memories in clinically depressed ($n = 25$), recovered ($n = 30$) and never-depressed ($n = 30$) participants. Participants completed mood measures, and a battery of self-report questionnaires that indexed intrusive memory frequency, avoidance and characteristics. Intrusive memories were common and shared strikingly similar characteristics across the three groups. The key finding was that depressed participants reported higher levels of intrusion-related distress, associated emotions (especially sadness and helplessness), interference as a result of the memories and memory vividness compared to the never-depressed group. Despite similar levels of intrusion, there were group differences in avoidance such that depressed participants reported higher levels of avoidance than the never-depressed group. These results provide further support for the proposal that clinical interventions for depression could usefully incorporate components that aim to reduce intrusive autobiographical memories and target avoidance strategies.

Like individuals with posttraumatic stress disorder (PTSD), depressed individuals experience frequent and distressing intrusive autobiographical memories (e.g., Brewin, Reynolds, & Tata, 1999). The presence of intrusive memories in both dysphoric (Moulds, Kandris, Williams, & Lang, 2008) and clinically depressed (e.g., Brewin et al., 1999; Patel et al., 2007) samples has been established across a number of studies. These studies have shown that intrusive memories of negative life events are common, with up to 85% of depressed individuals reporting these types of memories (Brewin, Hunter, Carroll, & Tata, 1996; Kuyken & Brewin, 1994). The content of intrusive memories reported by depressed individuals ranges across various types of negative life events such as negative interpersonal events, personal assault and abuse, loss of employment, to death, illness or injury of family members or friends (e.g., Brewin et al., 1996). In addition, the intrusive memories reported by depressed samples have been associated with maladaptive cognitive processes or styles that typically characterise depression, such as negative attribution bias, avoidant coping style, and low self esteem (Kuyken & Brewin, 1999).

Longitudinal studies have demonstrated that intrusive memories play an important role in the persistence of depression. In a prospective study of depressed individuals, Brewin et al. reported that depression symptoms at six-month follow-up were predicted by the degree of intrusiveness (intrusion) and avoidance of intrusive memories of stressful life events at initial interview, even after controlling for initial levels of depression (Brewin et al., 1999). In another prospective study of depressed and non-depressed cancer patients, Brewin, Watson, McCarthy, Hyman, and Dayson (1998) found that higher baseline levels of intrusion of memories were positively associated with depression six months later. In addition, the presence and avoidance of intrusive memories was associated with anxiety at six-month follow-up, even after controlling for initial anxiety levels and stage of illness. These studies suggest that intrusive memories are not just an epiphenomenon of depression, but play a role in the maintenance of the disorder. In samples of patients with PTSD, there is evidence that specific memory characteristics, such as a here and now quality and a lack of context (as well as the degree of distress associated with intrusive memories) predict PTSD symptoms longitudinally (Michael, Ehlers, Halligan, & Clark, 2005). Other researchers have found that the recall of trauma memories from a third person vantage perspective is associated with avoidance, and is argued to be maladaptive in the context of

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doi:10.1016/j.brat.2011.01.003

PTSD (Kenny & Bryant, 2007; McIsaac & Eich, 2004). Adopting a transdiagnostic approach (see Harvey, Watkins, Mansell, & Shafran, 2004), other studies have recently investigated whether the features of intrusive memories that are linked to the persistence of intrusive memories and PTSD symptoms in trauma samples, similarly play a role in the persistence of intrusive memories and depressive symptoms in depressed samples. Initial studies have demonstrated a significant degree of qualitative overlap between the intrusive memories reported in these two disorders. In both samples, intrusive memories are highly vivid, accompanied by similar negative emotions and distress, physical sensations and a sense of reliving the event, and are characterised by efforts to avoid the memories (Birrer, Michael, & Munsch, 2007; Reynolds & Brewin, 1999).

Extending the above findings, Williams and Moulds (2007a) showed that the degree to which intrusive memories were experienced with a here and now quality (i.e., nowness or sense of reliving the event), was associated with current levels of intrusion-related distress and depression in a cross-sectional study of dysphoric university students. Sensory features (including nowness) accounted for unique variance in the prediction of depression over and above that accounted for by intrusion frequency and memory severity. In another study, Williams and Moulds (2007b) found that the vantage perspective from which an intrusive memory is recalled might also be important in depression. Similar to PTSD (e.g., Kenny & Bryant, 2007), the recall of intrusive memories from a third person observer perspective was associated with cognitive avoidance in a high dysphoric sample (Williams & Moulds, 2007b). Moreover, Kuyken and Howell (2006) found that depressed adolescents more frequently retrieved autobiographical memories from an observer perspective when compared with never-depressed controls. Together, these results have led some researchers to suggest that observer perspective may function as a form of avoidance in depression (Kuyken & Moulds, 2009). These findings have implicated similar cognitive processes (e.g., avoidance) and memory features (e.g., nowness, third person vantage perspective) in the maintenance of intrusive memories in depression to those that have been found to play an important role in the maintenance of PTSD (e.g., Dunmore, Clark, & Ehlers, 1999, 2001). While these findings obtained from studies of dysphoric samples are interesting, they represent a preliminary first step and await replication in patients with major depression.

The degree to which the features of intrusive memories outlined above are a function of depressed mood or are instead trait-like features of memory recall that persist beyond the remission of a depressive episode, remains unknown. Given that depression is a highly recurrent disorder (American Psychiatric Association, 2000), research that includes a recovered depressed comparison group is needed in order to examine the similarities and differences in features of intrusive memories in this group. The important next step that is needed in this line of research is a systematic comparison of the characteristics of intrusive memories reported by individuals who: (i) are currently depressed, (ii) have recovered from an episode of major depression and (iii) have never been depressed. To our knowledge, Spenceley and Jerrom (1997) conducted the only study that has directly compared currently depressed, recovered depressed and never-depressed controls in terms of their experience of intrusive memories of distressing or traumatic childhood events. They reported that a substantial proportion of individuals in each of these three groups reported intrusive memories of distressing childhood events (70%, 52%, and 78% for depressed, recovered and never-depressed samples, respectively). The depressed group reported higher levels of memory intrusion than the other groups. The depressed group also reported higher levels of avoidance of the memories than the never-depressed controls, whereas the recovered depressed sample reported intermediate avoidance levels. Furthermore, amongst the depressed sample, those with more severe depression experienced higher levels of intrusion and avoidance of their memories.

Spenceley and Jerrom's (1997) findings suggest that avoidance of intrusive memories is important in depression, and is linked to depression status and severity. These results are consistent with the findings of past studies that have linked various forms of avoidance of intrusive memories (e.g., rumination and suppression) to depressive symptoms (Ehring, Frank, & Ehlers, 2008; Starr & Moulds, 2006). More broadly, they are consistent with evidence that both rumination and suppression are maladaptive processing styles in depression that predict poorer outcome over time (Just & Alloy, 1997; Rude, Wenzlaff, Gibbs, Vane, & Whitney, 2002). Although there are no existing theoretical models to account for the role of avoidance of intrusive memories in depression, dominant PTSD models argue that avoidance of intrusions maintains symptoms by preventing disconfirmation of maladaptive beliefs and appraisals and/or directly increasing symptoms themselves (e.g., suppression of intrusions directly increasing intrusion frequency through rebound effects) (Ehlers & Clark, 2000; Ehlers & Steil, 1995).

The findings of Spenceley and Jerrom (1997) also suggest that the tendency to avoid intrusive memories persists when depressed individuals have recovered from a depressive episode. As the only study in the published literature to have examined a recovered depressed group, these findings require replication and extension. Furthermore, some limitations of this study need to be addressed. First, participants were not administered a structured clinical interview to diagnose past or present depression. A replication that includes a standardised interview would increase confidence in diagnostic reliability. Second, the presence of comorbid Axis I disorders (in particular, PTSD) was not assessed. It is critical to exclude individuals with PTSD (for whom intrusive memories are a key symptom) in studies of intrusive memories in depression, in order to ensure that the findings are attributable to depression and not merely a function of posttraumatic stress.

To our knowledge, the characteristics of intrusive memories that are experienced by recovered depressed individuals (e.g., distress, vividness, lack of context, sensory features) have never been studied. On the basis of preliminary evidence that some of these characteristics of memories predict depression concurrently in dysphoric samples (Williams & Moulds, 2007a), it may be that such features are also linked to later depression symptoms in recovered groups. The absence of studies that include non-depressed control groups prevent the possibility of drawing conclusions about the extent to which the characteristics are unique to depression and/or psychopathology, versus characteristics of intrusive memories that are reported universally (independent of depression).

With these issues in mind, we investigated the content and characteristics of intrusive memories reported by clinically depressed individuals, individuals who had recovered from depression, and never-depressed controls. We sought to examine the extent to which the characteristics and content of intrusive memories reflect current mood state, and which features persist beyond the depressive episode (i.e., which features are associated with current or past depressive episode). Specifically, we extended existing research by examining intrusive memories across a broad range of life events, without restricting the content to upsetting childhood memories, compared the characteristics of the memories across the three groups, and conducted structured clinical interviews to diagnose current and past episodes of major depression and comorbid disorders.

The hypotheses were as follows. First, we expected to replicate established findings in clinically depressed samples; that is, we