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The relationship between adverse childhood experience and obsessive-compulsive symptoms and beliefs: The role of anxiety, depression, and experiential avoidance

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ABSTRACT

Current cognitive-behavioral models of the etiology of obsessive-compulsive disorder (OCD) suggest that maladaptive appraisal of otherwise normal intrusive thoughts have their origins in early learning experiences. The present study investigated the relationship between adverse childhood experience and OCD symptoms and related dysfunctional beliefs in a general population using a structural equation modeling approach. The role of experiential avoidance and anxiety and depression were also explored in the model. Results indicated that adverse childhood experience was strongly associated with OCD symptoms and beliefs, but after controlling for anxiety and depression the relationship with OCD symptoms became non-significant and only a weak relationship with OCD beliefs remained. Experiential avoidance was significantly associated with OCD symptoms and beliefs and remained significant after controlling for anxiety and depression. Implications of these results in the context of a complete model of the development of OCD are discussed.

Obsessive-compulsive disorder (OCD) is an anxiety condition characterized by recurrent obsessions, compulsions, or both, and which are recognized by adult sufferers as excessive or unreasonable (American Psychiatric Association, 2000). Several studies have now established that the obsessions, or intrusive thoughts, experienced as so distressing by many OCD sufferers, are also experienced by 80–90% of the general population (e.g., Freeston, Ladouceur, Thibodeau, & Gagnon, 1991; Rachman & De Silva, 1978). Contemporary cognitive-behavioral theories of OCD propose that the critical difference between the experience of OCD sufferers and the general population is related to the way unwanted intrusive thoughts are appraised, evaluated, and responded to, rather than their content or occurrence (Salkovskis & McGuire, 2003). These theories propose that adverse early experiences lead to assumptions and general beliefs about personal responsibility which then lead to maladaptive interpretations of normally occurring intrusive thoughts. Transition from a 'normal' intrusive thought to a clinical obsession is suggested to occur when an individual interprets the occurrence or content of the intrusive thought as having personal significance, and as indicating personal responsibility for causing or preventing harm to oneself or others (Salkovskis & McGuire, 2003). These misinterpretations result in a range of behavioral outcomes, including neutralising responses aimed at preventing harm from occurring, such as thought suppression, checking, washing, or counting. The present study investigated the relationship between adverse early experience and the degree to which individuals held OCD-related dysfunctional beliefs and exhibited obsessive-compulsive symptoms in a general population sample.

1. Factors in a model of OCD

1.1. Cognitive factors

A range of maladaptive beliefs including responsibility, threat estimation, intolerance of uncertainty, need for thought control, and importance of thoughts, has been associated with a greater prevalence of obsessive-compulsive disorder symptoms (Frost & Steketee, 2002). Patients with OCD also tend to score higher on the belief instruments than non-clinical control subjects (Clark, Purdon, & Wang, 2003; Freeston, Ladouceur, Gagnon, & Thibodeau, 1993; Steketee, Frost, & Cohen, 1998). Although these studies indicate that OCD-related dysfunctional beliefs are positively correlated with OCD symptoms, it is not clear whether these beliefs are a cause or a consequence of OCD symptoms. However, a 3-month study designed to address this issue, found that dysfunctional beliefs in new mothers and fathers predicted

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the later development of obsessive-compulsive symptoms even after controlling for pre-existing OCD symptoms, anxiety and depression (Abramowitz, Khandker, Nelson, Deacon, & Rygwall, 2006).

Similarly, evidence for a causal role for responsibility beliefs in the development of OCD symptoms has been demonstrated (Bouchard, Rhéaume, & Ladouceur, 1999; Ladouceur et al., 1995; Lopatka & Rachman, 1995). For example, Lopatka and Rachman (1995) tested thirty obsessive-compulsive checkers and ten obsessive-compulsive cleaners and demonstrated that when perceived responsibility was decreased, a decline in discomfort and in the urge to carry out compulsive checking was observed. Shafran (1997) reported that these effects were not confined to obsessive-compulsive checkers but occurred in obsessional patients with a range of symptoms. These studies suggest that dysfunctional beliefs may be causal in the development of OCD symptoms.

OCD patients may overestimate the importance of thoughts in three ways (Freeston, Rhéaume, & Ladouceur, 1996). First, some patients interpret the frequent and persistent presence of intrusive thoughts as meaning they must be important. Second, some patients interpret their obsessional thoughts as meaning that that they must reflect their true nature, or that their thoughts mean they are a morally bad person. Third, some patients make the interpretation that thinking about a bad event makes the event more likely to happen. The second and third of these misinterpretations of intrusive thoughts have been described as 'thought-action-fusion,' the belief that one's thoughts can influence events in the world, and suggest a process by which a sense of inflated responsibility for one's thoughts might occur (Shafran & Rachman, 2004).

1.2. Experiential avoidance

Recent research has also highlighted the role of 'experiential avoidance' in the development and maintenance of anxiety conditions and general psychological distress (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996; Kashdan, Barrios, Forsyth, & Steger, 2006). Experiential avoidance has been defined as "a process involving excessive negative evaluations of unwanted private thoughts, feelings, and sensations, an unwillingness to experience these private events, and deliberate efforts to control or escape from them" (Kashdan et al., 2006, p. 1301). In other words, experiential avoidance relates to attempts to hide or inhibit unpleasant thoughts, feelings, and bodily sensations and a belief that personal control over threatening events rests outside oneself. Experiential avoidance is understood to become a disordered process when it is "applied rigidly and inflexibly, such that enormous time, effort, and energy is devoted to managing, controlling, or struggling with unwanted private events" (Kashdan et al., 2006, p. 1302). Strategic attempts to escape or avoid stressful experiences, or to detach from aversive events and their emotions, or to suppress the expression of emotions, are regarded as component processes of experiential avoidance (Kashdan et al., 2006).

Experiential avoidance has been found to correlate well with measures of general psychopathology (Hayes et al., 2004) and with specific measures of anxiety and depression (Forsyth, Parker, & Finlay, 2003; Marx & Sloan, 2005; Roemer, Salters, Raffa, & Orsillo, 2005). In a series of studies that induced acute emotional distress in healthy individuals (via panicogenic CO_2 inhalation and hyperventilation challenges), greater experiential avoidance was found to be associated with more panic symptoms and greater perceived uncontrollability, despite there being no difference between groups on physiological reactions to the panicogenic stimulus, and even after accounting for other risk factors such as anxiety sensitivity (Feldner, Zvolensky, Eifert, & Spira, 2003; Karekla, Forsyth, & Kelly, 2004; Spira, Zvolensky, Eifert, & Feldner, 2004). These studies demonstrate that a predisposition for experiential avoidance may exacerbate anxiety symptoms in individuals with no history of anxiety-related disorders. Thus, there is evidence that experiential avoidance may represent a central, causal component in the development of anxiety-related pathology.

1.3. Anxiety and depression

Studies of comorbidity in OCD sufferers have consistently highlighted the co-occurrence of anxiety and depression in this population (Carter, Pollock, Suvak, & Paul, 2004; Crino & Andrews, 1996; Nestadt et al., 2001; Weissman et al., 1994). Intrusive thoughts are common in depressed or anxious mood (Freeston, Ladouceur, Thibodeau, & Gagnon, 1992; Rachman & Hodgson, 1980); however, whether symptoms of anxiety and depression precede or follow the presence of OCD symptoms (or both) has not been established. Reynolds and Salkovskis (1992) found that happy and sad mood induction procedures led to changes in the frequency of cognitive intrusions consistent with expected mood congruency effects, suggesting that negative affect may precede intrusive, obsession-like cognitions. Other studies have indicated that OCD symptoms may predate depressive symptoms (Bellodi, Sciuto, Diaferia, Ronchi, & Smeraldi, 1992; Demal, Lenz, Mayrhofer, Zapotoczky, & Zitterl, 1993), suggesting that the mood disturbance can occur as a response to the distress and functional impairment associated with obsessions and compulsions.

1.4. Adverse childhood experience

The relationship between adverse childhood experience and psychiatric morbidity in adulthood has been well studied (Browne & Finkelhor, 1986; Bryer, Nelson, Miller, & Krol, 1987; Kessler, Gillis-Light, Magee, Kendler, & Eaves, 1997). In particular, a relationship between childhood abuse or trauma and the subsequent development of anxiety disorders has been widely reported (Briere, 1992; David, Giron, & Mellman, 1995; Fierman et al., 1993; Kent & Waller, 1998). Two epidemiological studies have found that childhood sexual victimisation predicted the later onset of agoraphobia, obsessive-compulsive disorder, and social phobia (Burnam et al., 1988; Saunders, Villeponteaux, Lipovsky, Kilpatrick, & Veronen, 1992). A study of inner-city women also reported that early adverse experience (including neglect, physical abuse and sexual abuse) predisposed them to the development of anxiety disorders in adulthood (Brown, Harris, & Eales, 1993). Kent and Waller (1998) found significant positive correlations between adult anxiety and depression and self-reported levels of childhood trauma in a general sample of young females.

Current cognitive-behavioral theories propose that maladaptive appraisals of intrusive thoughts by OCD sufferers have their origins in learned assumptions and beliefs which initially form as adaptive ways of coping with problematic aspects of early experience (Salkovskis & Forrester, 2002). However, these assumptions and beliefs have "usually outlasted their initial usefulness and have thereby been transformed from protective to vulnerability factors" (p. 48). The theories further postulate that these assumptions and beliefs may trigger an obsessional disorder, particularly when activated by critical incidents (Salkovskis & Forrester, 2002).

Mechanisms by which childhood trauma might relate to the development of maladaptive appraisals of intrusive thoughts are not clear. However the effects of childhood trauma and abuse can be understood to represent a psychological, cognitive, and