The transdiagnostic model of worry: The mediating role of experiential avoidance

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ABSTRACT

The aim of this study was to examine a transdiagnostic risk factor for predicting pathological worry among non-clinical population. The prediction model of worry was examined according to the propositions of the four cognitive models of generalized anxiety disorder; including intolerance of uncertainty model, metacognitive model, model of emotional schemas and acceptance-based model. Participants were 557 students whom were studied at University of Tehran in Iran. Data were gathered by Penn State Worry Questionnaire (PSWQ), Metacognitions Questionnaire-30 (MCQ-30), Leahy Emotional Schema Scale (LESS), Intolerance of Uncertainty Scale (IUS), and Acceptance and Action Questionnaire–II (AAQ-II). Structural equation modeling confirmed the proposed model and indicated that intolerance of uncertainty, metacognitive beliefs and emotional schemas predicted worry both directly and indirectly through experiential avoidance (χ^2/df = 1.19, CFI = 0.98, NFI = 0.96, GFI = 0.97, SRMR = 0.03, RMSEA = 0.05). These risk factors had reciprocal relationships and experiential avoidance explained the commonalities between them as a linking mechanism. The variables in the model accounted for 74% of the variance in participants' worry. According to the examined model, individual differences in the ways people use to control their internal experiences and the process of inability to accept these experiences, act like vulnerability and maintenance mechanisms in explaining worry. The findings of this study support the rationale of recent psychotherapies for generalized anxiety disorders that emphasizes both the challenging cognitions and facilitating the acceptance of internal experiences.

1. Introduction

Since the addition of excessive worry as the hallmark criterion for Generalized Anxiety Disorder (GAD) in DSM-III-R (APA, 1987), worry has been received considerable attention in the literature. It has been defined as a cognitive phenomenon which reflects negative recurrent thoughts concerning about the future, which elicit anxiety (e.g., Borkovec, Robinson, Pruzinsky, & Depree, 1983). Excessive worry has been shown to be associated with psychological distress (Olatunji, Broman-Fulks, Bergman, Green, & Zlomke, 2010) and poor quality of life (Dugas, Schwartz, & Francis, 2004). Although worry is considered as a main cognitive feature of generalized anxiety disorder, it exists in different types of mental disorders (Wells, 1999a, 1999b) and there were dimensional views about the relationship between normal and pathological worry (Ruscio & Borkovec, 2004). This general role of worry in vast areas of normal and abnormal psychology (Mathews, 1990) showed that it is possible to understand the mechanisms that underlies worry by studying worry in non-clinical individuals.

Several psychological processes may be responsible for the development and maintenance of worry. Examining the competing etiological theories of worry among non-clinical population often leads to new insights about psychological processes, which are fundamental to worry and in turn can lead to better understanding of mechanisms, which transform normal worries to pathological ones. There were four etiological models, which have been proposed for explaining worry. These models were the intolerance of uncertainty model (Dugas, Gosselin, & Ladouceur, 2001), the metacognitive model (Wells, 1995; Wells, 1999a, 1999b), the acceptance-based model (Roemer, Salters, Raffa, & Orsillo, 2005) and the emotional schema model (Leahy, 2007).

1.1. Intolerance of uncertainty model and worry

According to intolerance of uncertainty model (IUM), intolerance of uncertainty (IU) is considered as a dispositional characteristic, which results from a set of negative beliefs about uncertainty and its implications, and involves the tendency to react negatively on an

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emotional, cognitive, and behavioral level to uncertain situations and events (Buhr & Dugas, 2009). Non-clinical and clinical studies have provided empirical supports for the role of IUM as a maintain factor for worry. Empirically, studies have found that high levels of IU are positively associated with severity of worry (Buhr & Dugas, 2006). In a series of experimental studies, manipulations of IU by using gambling tasks led to higher levels of worry (Ladouceur, Gosselin, & Dugas, 2000). It has also been showed that IU could be activated only by worrisome thoughts or situations (De Bruin, Rassin, & Muris, 2006). The results of a meta-analysis about the associations between intolerance of uncertainty and some of the emotional disorders, including generalized anxiety disorder, obsessive compulsive disorder and major depressive disorder, revealed that the power of associations between intolerance of uncertainty and symptoms of mental disorders was higher for generalized anxiety disorder than other disorders (Gentes & Ruscio, 2011). In addition, the results of a recent study about the role of intolerance of uncertainty showed that this factor had an important linking role, which could relate psychological vulnerabilities such as attachment to the worry (Wright, Clark, Rock, & Coventry, 2017). According to these studies, we could deduce that individual differences in IU could lead to experience higher or lower level of pathological worry among non-clinical population.

1.2. The metacognitive model and worry

The metacognitive model (MCM) of worry and GAD proposed by Wells (1995), Wells (1999a, 1999b), Wells (2004) and Wells (2005a, 2005b, 2005c) posits that individuals with GAD experience two types of worry. When individuals face with an anxiety-provoking situation, positive beliefs about worry are engendered (e.g., the belief that worry will help them cope with the situation). This process is known as Type 1 worry, which Wells defines as worry about non-cognitive events such as external situations or physical symptoms (Wells, 2005a, 2005b, 2005c). During the course of Type 1 worry, negative beliefs about worry are activated. Individuals with GAD begin to worry about their Type 1 worry; they fear that the worry is uncontrollable or may even be inherently dangerous. This "worry about worry" (i.e., "meta-worry") is labeled by Wells as Type 2 worry. According to the MCM, negative beliefs about worry and Type 2 worry could distinguish individuals with GAD from nonclinical worriers (Wells, 2005a, 2005b, 2005c). Thus, the worriers are locked in a dilemma of positive and negative beliefs about worry. Previous studies revealed that these model was very robust in predicting worry among clinical and non-clinical population (Wells, 2005a, 2005b, 2005c; Davis & Valentiner, 2000; Sica, Steketee, Ghisi, Chiri, & Franceschini, 2007; Pretorius, Walker, & Esterhuyse, 2015), but we need to determine how much metacognitive model could predict worry when the role of other cognitive or emotional models is considered in a unified transdiagnostic model.

1.3. The emotional schema model and worry

The emotional schema model (ESM) was proposed to overcome treatment resistance in patients with anxiety and mood disorders. The main tenet of this model is that people's schemas about emotions can act like monitoring mechanisms which can have a role in emotional disorders as generalized anxiety disorders (Leahy, 2002, 2007, 2015; Leahy, Tirch, & Napolitano, 2011). In this model, "schemas" represent interpretations, evaluations, attributions, and other cognitive assessments of emotion, as well as emotion regulation strategies that may prove to be helpful or unhelpful. Research on the ESM model indicates that higher scores on the emotional schema scale are associated with depression (Leahy, 2002), anxiety (Leahy, 2002; Tirch, Leahy, Silberstein, & Melwani, 2012), psychological flexibility (Tirch et al., 2012), dispositional mindfulness (Silberstein, Tirch, Leahy, & McGinn, 2012), risk aversion (Leahy, Tirch, & Melwani, 2012), bipolar disorder (Wenze, Goldberg, Singer, Endick, & Leahy, 2003), and metacognitive

factors underlying worry (Leahy & Wupperman, 2015). The emotional schema model proposes that emotions which are elicited by appraisals and individuals maintain theories about the causes, legitimacy, duration, control, dangerousness, and management of emotions; and these theories are applied to how one views his or others emotions. As a result of these appraisals, judgements and theories of causation of an emotion, those individuals who endorse negative theories of their own emotions are more likely to use problematic strategies to cope with their emotions by avoiding, escaping, bingeing, ruminating, worrying, or blaming themselves or others (Leahy, 2002, 2015).

1.4. The acceptance-based model and worry

The acceptance-based model of mental distress stipulates that the key component in maintaining anxiety disorders is the activation of a rigid and inflexible response to inner aversive experiences, which is called termed experiential avoidance. The model stems from Hayes' model of experiential avoidance (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). According to this model, increased worry was the by-product of failed attempts to control or avoid unpleasant experiences through the ineffective strategy of experiential avoidance, and as a result, behaviors that the individual engages in are narrowed (Hayes et al., 1996; Hayes, Luoma, Bond, Masuda, & Lillis, 2006). People who habitually avoid from internal experiences were more prone to emotional distress, because much of their time was spent for escaping and avoiding the inner natural experiences (Hayes et al., 2006). Therefore, it seems experiential avoidance has a role in increasing the severity of worry and transforming worry from a common cognitive activity to a pathological experience.

In sum, the predictions of these four competing theories (i.e. intolerance of uncertainty model, metacognitive belief model, emotional schema model and experiential avoidance model) have been examined in predicting worry separately, but it seemed these theories had some commonalities that could be unified in an integrated model. These theoretical constructs were regarded as different entities in each model, but it seemed that they could be related to each other and act as a unified model for better understanding of worry. The aim of this study was to examine a transdiagnostic risk factor model or transtheoric model for predicting pathological worry based on intolerance of uncertainty, metacognitive beliefs, emotional schemas and experiential avoidance in a non-clinical population. In this study, the following hypotheses were formulated: 1) metacognition has direct and indirect effects, through experiential avoidance, on worry among non-clinical population, 2) Intolerance of uncertainty has direct and indirect effects, through experiential avoidance, on worry among non-clinical population, 3) emotional schemas have direct and indirect effects, through experiential avoidance, on worry among non-clinical population, and 4) experiential avoidance has a direct effect on worry among non-clinical population. By assessing and examining these transdiagnostic risk factor models, we could reach to a more comprehensive model of worry, which could better explain it.

2. Method

2.1. Participants and procedure

Participants of this study were 586 undergraduate students at University of Tehran in Iran. The research sample has been selected from the non-clinical population. The sample size decreased to 577 (298 males and 279 females) with the age range of 18 to 24 (M = 20.14, SD = 2.19) after 9 participants were removed due to incomplete data. Participants filled out a series of measures that assessed metacognitions, intolerance uncertainty, experiential avoidance, emotional schemas and worry. The procedures followed were also in accordance with the ethical standards of the Helsinki Declaration of 1975, as revised in 2013. Participants were recruited from university