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Anxious attachment and emotional instability interact to predict health anxiety: An extension of the interpersonal model of health anxiety

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ABSTRACT

Health anxiety involves persistent worry about one's health and beliefs one has an illness or may contract a disease. The interpersonal model of health anxiety (Noyes et al., 2003) is a conceptual framework linking insecure attachment to health anxiety. The present study, clarified the contribution of insecure attachment to health anxiety by studying two key dimensions of insecure attachment: anxious and avoidant attachment. The unique role of insecure attachment in health anxiety was tested by controlling for emotional instability. The potential interaction between attachment insecurity and emotional instability in predicting health anxiety was also tested using hierarchical regression analyses with data from 147 undergraduates. Anxious attachment uniquely predicted health anxiety even when avoidant attachment and emotional instability were taken into account. An interaction was also observed where high anxious attachment and high emotional instability combined to predict higher health anxiety. This interaction was specific to health anxiety (versus depressive symptoms). An unexpected interaction was found where high avoidant attachment and low emotional instability combined to predict lower health anxiety. The present study extends research on health anxiety by clarifying the nature of insecure attachment in and the role of emotional instability in the interpersonal model of health anxiety.

1. Introduction

Health anxiety (HA) involves persistent fear or worry about one's health along with beliefs one has an illness or may contract a disease (Taylor & Asmundson, 2004). HA is a common public health problem with serious personal, societal, and medical costs (Longley, Watson, & Noyes, 2005). Since the negative effects of HA are not limited to clinical populations (Hadjistavropoulos & Lawrence, 2007), HA may best be conceptualized as a dimensional construct lying on a continuum from mild to severe (Ruscio & Kaczetow, 2009).

In the present study, we adopted a dimensional HA model and studied an undergraduate sample whose average HA levels rest at the milder end of the HA continuum. Even mildly elevated HA levels are associated with decreased quality of life, increased health care utilization, and are a putative risk factor for more severe HA (Ferguson, 2004). There are also numerous, largely unanswered, calls to develop and test models explicating personality traits and interpersonal processes contributing to HA (Stuart, Noyes, Starcevic, & Barsky, 2008). Thus, there is a clear need to expand our knowledge of milder HA levels (which we refer to as HA) so as to better understand, assess, and treat this problem.

1.1. Interpersonal model of health anxiety (IMHA)

The IMHA (Noyes et al., 2003) is a conceptual framework integrating theory and research linking interpersonal processes to HA. According to this model, HA is a pathological manifestation of insecure attachment. The IMHA asserts persons with HA were exposed to aversive experiences (e.g., serious illness) and to negative relations with early caregivers that predisposed insecure attachment and worry about health problems. The unrelenting reassurance-seeking characteristic of persons with HA is understood as an effort to reduce attachment insecurity and worry about health problems by eliciting care from others (e.g., physicians or family members). Because persons with HA experience chronic attachment insecurity, their reassurance-seeking is often unrelenting—despite repeated reassurance by others.

Unrelenting reassurance-seeking is postulated to bring about conflict with others that contributes to alienation from others; conflict and alienation are thought to confirm or to magnify

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attachment insecurity in persons with HA. Both attachment insecurity and a distressing sense of alienation from others are also proposed to amplify worry about health problems in persons with HA. In trying to alleviate such worry, persons with HA are believed to once again seek reassurance from others and a vicious cycle of reassurance-seeking, alienation, and worry is repeated amid an already chronic pattern of attachment insecurity and worry about health (MacSwain et al., 2009; Noyes et al., 2003).

Though initial tests of the IMHA appear promising (Noyes et al., 2003), not all studies clearly support this model (Fortenberry & Wiebe, 2007). In particular, despite the central theoretical importance of attachment insecurity to the IMHA, the nature of attachment insecurity in this model is in need of empirical validation. In the present study, we examined two key domains of attachment insecurity—anxious and avoidant attachment—and tested which of these domains is most relevant to the IMHA. We also tested if anxious and/or avoidant attachment are linked to HA after controlling for emotional instability, a robust, higher-order predictor of HA (Longley et al., 2005). In addition, we extended the IMHA by proposing and testing a trait-by-trait synergy we believe is uniquely important to HA where high levels of insecure attachment interact with high levels of emotional instability to foster HA.

1.2. Insecure attachment in HA

The IMHA proposes insecure attachment underlies HA. However, the nature of this insecure attachment is described in only general terms and needs clarification (MacSwain et al., 2009). Noyes et al. (2003) found two forms of insecure attachment, fearful and dismissing, are uniquely related to HA. Using a single-item measure to classify participants into distinct attachment categories, Wearden, Perryman, and Ward (2006) found the category of preoccupied attachment was uniquely related to HA. In the years since these early studies, advances in the conceptualization and measurement of attachment have occurred. Initial models examined attachment patterns (i.e., internal working models of attachment) using a categorical typology approach measured by projective tests or interviews. However, subsequent research supports the use of dimensional models and self-report measures of attachment styles (Fraley & Shaver, 2000). Dimensional measures of attachment using multiple items are more psychometrically sound than single-item measures and equally valid predictors compared to interviews (Fraley & Shaver, 2000; Wei, Russell, Mallinckrodt, & Vogel, 2007). In the present study, we use a reliable, valid, multiple-item self-report questionnaire assessing different dimensions of insecure attachment styles, thereby incrementally advancing extant research on attachment and HA.

One empirically validated dimensional model of attachment suggests adult insecure attachment is composed of two domains: anxious and avoidant attachment (Fraley & Shaver, 2000). Persons high in anxious attachment have a persistent fear they will be rejected or abandoned by significant others; whereas persons high in avoidant attachment tend to withdraw from close relationships and are uncomfortable relying on others (Fraley & Shaver, 2000).

Although the IMHA does not specify which domain of insecure attachment is most relevant, several factors suggest anxious attachment is most important to HA. Persons high in HA are clingy and insecure. They express an inability to cope independently and worry about the supportiveness of others during time of stress (Fraley & Shaver, 2000). Thus, they seek out others during stressful experiences, such as when they are concerned about their health (Ciechanowski, Walker, Katon, & Russo, 2002). In contrast, persons high in avoidant attachment often see others as unavailable and tend to distance themselves from others during times of stress. Persons high in avoidant attachment appear less likely to express anxiety or use healthcare (Feeney & Ryan, 1994).

1.3. Anxious attachment and emotional instability

The IMHA specifies insecure attachment is a key personality trait underlying HA. However, insecure attachment alone does not fully capture the characterlogical context in which HA occurs. Emotional instability, or neuroticism, is a personality trait involving the tendency to experience negative emotions. It is a higher-order personality trait that predicts HA (Noyes et al., 2003, 2005). Persons high in emotional instability tend to express both negative emotions and somatic complaints, and appear prone to somatic complaints because they interpret normal bodily sensations as threats (Williams & Wiebe, 2000).

Although emotional instability is strongly linked to HA, emotional instability is defined entirely in terms of *intra*personal experiences (e.g., anxiety; Ode & Robinson, 2007). Given the importance of interpersonal processes in HA, we propose a trait-by-trait synergistic effect between the relational style of anxious attachment and the emotional style of emotional instability more fully describes the characterlogical underpinnings of HA. Theoretical accounts, case histories, and empirical studies suggest it is the anxiously attached and emotionally unstable person who characterizes the health anxious individual (Noyes et al., 2003). This individual is embodied by Woody Allen's character in the movie *Hannah and Her Sisters* (Greenhut & Allen, 1986) who is not only needy and dependent but also brooding and emotionally unstable. Evidence shows anxious attachment and emotional instability are correlated but distinct, with each uniquely predicting HA (Wearden et al., 2006). However, research has yet to test the interactive effect of anxious attachment and emotional instability on HA.

1.4. Hypotheses

One objective of the present study is to clarify the nature of insecure attachment underlying HA by studying two key domains of attachment insecurity—anxious and avoidant attachment. Such information will contribute to our understanding of personality traits and interpersonal processes in HA, and the IMHA. We focus on predicting the affective component of HA, which is generally agreed as the core component of HA (e.g., Salkovskis, Rimes, Warwick, & Clark, 2002). Based on theory and evidence (Fraley & Shaver, 2000; Noyes et al., 2003), we hypothesized anxious attachment (as opposed to avoidant attachment) would uniquely predict HA.

Building on past research (Wearden et al., 2006), we also hypothesized anxious attachment would still predict HA after emotional instability was taken into account. Emotional instability is positively associated with anxious attachment and HA (Wearden et al., 2006) and therefore provides a stringent test of the unique contribution of anxious attachment to HA.

Another objective of our study was to test a trait-by-trait interaction model. HA research is limited by a lack of conceptual integration of proposed contributors to HA. In contrast, we draw together complementary literatures into an integrative framework that asserts anxious attachment and emotional instability represent a relational and emotional style that, when paired together, are especially likely to foster HA. Thus, we hypothesized high levels of anxious attachment and high levels of emotional instability would significantly interact to predict HA.

Finally, we explored if the interaction between anxious attachment and emotional instability is specific to HA as compared to a commonly co-occurring construct, depressive symptoms. This specific analysis represents an important first step in determining if the hypothesized synergy between anxious attachment and emotional instability specifically predicts HA.