Contributions of self-criticism and shame to hoarding

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A B S T R A C T

Pathological hoarding-related beliefs, such as need to control possessions, and inflated sense of responsibility over possessions, have been used to explain the development of symptoms of hoarding disorder (HD). While these beliefs have been the focus of the current standard treatment for HD, it is of significant clinical interest to further examine other constructs that may be linked to, or may underlie these beliefs, as well as the pathology of HD. To this end, the current study aimed to build on existing findings regarding the relationship of compromised self-identity with HD. Specifically, we investigated the relationship between self-criticism, shame, hoarding beliefs, and severity of HD symptoms among 104 treatment-seeking individuals with HD. We found that self-criticism and shame are positively associated with HD symptoms and hoarding related beliefs. Moreover, our data shed light on how these factors are connected by elucidating the indirect effects of self-criticism and shame on HD symptoms, mediated through beliefs about inflated sense of responsibility over possessions. The findings have implications for future research to examine interventions targeting compromised self-identity, including self-criticism and shame, among individuals with HD.

1. Introduction

Hoarding disorder (HD) is defined by the American Psychiatric Association (APA, 2013) as pathological difficulty in discarding seemingly valueless possessions, resulting in clutter, and is often accompanied by excessive acquisition of unneeded items. For individuals with HD, the accumulation of large amounts of possessions can interfere with the functionality of their living spaces, their interpersonal relationships, and emotional well-being (APA, 2013).

Pathological beliefs related to saving, acquiring, and discarding are thought to contribute to the development and maintenance of hoarding behaviors (Steketee et al., 2003). For example, the cognitive-behavioral model for HD (Frost and Hartl, 1996) outlines four domains of pathological hoarding-related beliefs: 1) heightened emotional attachment, e.g., "losing this item is like losing a part of me"; 2) desire to rely on possessions as memory aids due to reduced confidence in one's memory, e.g., "I need to leave it in sight, or I will forget about it"; 3) need to control possessions, e.g., "I like to maintain sole control over my things"; 4) inflated sense of responsibility, e.g., "I am responsible for the well-being of my possessions." The associations between these

pathological beliefs and hoarding symptom severity have been established by empirical investigations (e.g., Frost et al., 2004; Steketee and Frost, 2003; Steketee et al., 2003) and may explain why people hoard (Steketee et al., 2003; Wheaton et al., 2011).

One of the focuses of the current standard treatment for HD, cognitive behavioral therapy (CBT; e.g., Steketee and Frost, 2013), is on addressing pathological hoarding beliefs, including the four domains described above (Frost and Hartl, 1996). Although HD-specific CBT has documented efficacy, nearly half of individuals still have symptom severity levels exceeding the cutoff point for clinically significant HD (i.e., ≥ 40 points on the Saving Inventory-Revised; Frost et al., 2004; Tolin et al., 2015) after completing the treatment. This finding indicates that there is still substantial room for improvement in the current treatment approaches. Moreover, while the cognitive-behavioral model for HD (Frost and Hartl, 1996) can be used to explain the development of hoarding symptoms to some degree, it is important to examine other constructs that may be linked to the pathology of HD and therefore lead to more efficacious treatment approaches (Wheaton et al., 2011).

The current study aimed to build on existing findings regarding the relationship of compromised self-identity with HD, since compromised

self-identity has been suggested to underlie the development of obsessive-compulsive and related disorders, including HD (Frost et al., 2007). Among the various aspects of compromised self-identity, the inability to sustain the well-being and cohesion of one's self-identity has been hypothesized to be associated with animal hoarding (Brown, 2011), while self-ambivalence (i.e., presence of incompatible beliefs about oneself, and uncertainty and preoccupation about one's self-worth) has been associated with compulsive hoarding, buying, hoarding beliefs, and materialism among college students in non-clinical samples (Frost et al., 2007). In two studies by García-Soriano and colleagues, the severity of hoarding symptoms was associated with the extent to which self-worth was tied with hoarding beliefs among individuals with obsessive-compulsive disorder (García-Soriano and Belloch, 2012; García-Soriano et al., 2012). In other words, individuals with strong beliefs that they might discard something they would later need, combined with the belief that such a "mistake" would harm their self-worth, tended to report more severe hoarding symptoms. This finding suggests that it is not hoarding beliefs alone, but the coupling of hoarding-related beliefs and compromised self-identity, that predicts hoarding symptom severity most strongly.

However, studies investigating self-identity in clinical HD samples are sparse. The goal of this study, therefore, was to examine the relationship between compromised self-identity and HD-related pathology among individuals with HD. Of the components of compromised self-identity discussed above (e.g., Campbell, 1990; Higgins et al., 1985; Linville, 1985), we were primarily interested in the relationship between self-criticism and HD. Self-criticism is closely related to perfectionism (Gilbert et al., 2006; Sherry et al., 2016), which is associated with HD symptoms and worse treatment response to CBT among individuals with HD (Frost and Gross, 1993; Muroff et al., 2014). Self-criticism has multiple definitions, including perceived failure to meet personal standards, drawing attention to one's inadequate qualities or behaviors (e.g., Thompson and Zuroff, 2004), as well as self-hatred and self-attacking rooted in aggression and disgust toward oneself as a global entity (Gilbert et al., 2004). For this study, we chose to examine a global measure of self-criticism defined by Gilbert et al. (2004) because of its close tie with self-identity as a global self-view, as opposed to a measure with specific qualities.

Another cognitive-affective construct closely related to self-identity is shame. Shame is a deeply painful self-conscious emotion experienced when one judges oneself as wholly negative (i.e., shame about oneself as a person), or when one judges one's mental health conditions as extremely undesirable and unacceptable (i.e., shame about mental health conditions) (Lewis, 1971; Tangney and Dearing, 2002). It has been suggested that shame is the underlying trigger of self-criticism. In order to avoid shame-based feelings, an individual may develop a self-critical style as a defensive strategy, despite this style being shaming itself (Shahar et al., 2015). Shame has been associated with obsessive-compulsive and related disorders (Weingarden and Renshaw, 2015), but empirical examination of its association with HD is sparse.

The primary aim of the current study was to investigate the relationship between self-criticism, the four domains of hoarding beliefs (i.e., emotional attachment, memory, control, responsibility), and severity of HD symptoms. We hypothesized that self-criticism would be associated with more severe HD symptoms, and that this relationship would be mediated through these hoarding beliefs. We also explored the relationships between shame, hoarding beliefs, and HD symptoms, as well as the hypothesis that the relationship between shame and HD symptom would be mediated through hoarding beliefs. As the measure used to assess shame was developed for this study, and its psychometric properties have not yet been established, these analyses are exploratory.

2. Methods

2.1. Procedures

This study was part of a randomized controlled trial (RCT) comparing two types of group therapy for HD (Uhm et al., 2016). The study took place at the University of California, San Francisco (UCSF), and was approved by the UCSF Institutional Review Board. All participants provided informed consent to participate in all study procedures. Participants who screened positive for significant HD symptoms (see criteria below) subsequently participated in a clinical interview aimed at assessing HD (based on DSM-5) and other co-occurring psychiatric disorders (based on DSM-IV-TR). Eligible participants completed self-report questionnaires further assessing HD symptoms, hoarding beliefs, and self-criticism and shame. Not all participants completed the self-criticism and shame questionnaires, as these were added approximately half-way through the RCT enrollment. All data for this study were obtained before the participants received the treatment provided in the RCT. All participants were financially compensated for their time ($100) upon completion of the entire HD treatment study.

2.2. Participant recruitment

Participants were recruited through media advertisements and health clinics throughout the San Francisco Bay Area. Participants were screened positive if they met ≥ 2 out of the 3 screening criteria: 1) a score of ≥ 42 on the Saving Inventory, Revised (SI-R; Frost et al., 2004), 2) a score of ≥ 20 on the UCLA Hoarding Symptom Scale (UHSS; Saxena et al., 2015), and 3) a score of ≥ 12 on the Clutter Image Rating Scale-Revised (CI-R; Frost et al., 2008). Those who screened positive were included in the RCT if they met DSM-5 criteria for HD (American Psychiatric Association, 2013) after clinical interview. Participants were not excluded on the basis of co-occurring psychiatric symptoms or diagnosis. However, individuals with acute suicide risk, actively disruptive psychotic symptoms, intellectual disability, severe dementia, or any acute medical condition that might affect their participation in the treatments were excluded.

2.3. Measures

The clinical interview consisted of the Structured Interview for Hoarding Disorder (SIHD; Nordsletten et al., 2013) and the MINI International Neuropsychiatric Interview (MINI; Sheehan et al., 1998). The SIHD was utilized to determine HD diagnosis, and other psychiatric diagnoses were assessed using the MINI. The Beck Depression Inventory-II (BDI; Beck, Beck et al., 1996) was used to assess depression symptom severity. The BDI is a 21-item scale. It is one of the most commonly used measures for depression symptoms, with its reliability and validity well established across a broad range of populations (Wang and Gorenstein, 2013). Additionally, HD symptom severity was assessed using the Saving Inventory, Revised (SI-R; Frost et al., 2004). The SI-R is a 23-item self-report questionnaire that measures hoarding symptoms and their impact on 3 subscales: excessive acquisition, clutter, and difficulty discarding. Responses range from 0 (not at all) to 4 (extreme), with higher scores indicating more severe hoarding symptoms. The SI-R is widely used in hoarding research, has excellent test-retest reliability (α = 0.96), good convergent validity, and reliably discriminates between HD and elderly community controls (Ayers et al., 2016).

The Saving Cognition Inventory (SCI; Steketee et al., 2003) was used to assess hoarding beliefs. The SCI is a 24-item scale assessing various aspects pertaining to the beliefs and attitudes about possessions. These