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### **Published Results:**

Fracalanza, K. , Raila, H. , Avanesyan, T. & Rodriguez, C. (2024). Written Imaginal Exposure for Hoarding Disorder. *The Journal of Nervous and Mental Disease*, 212 (5), 289-294.  
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Study Overview: Hoarding disorder (HD) is marked by difficulty discarding possessions. Many refuse treatment or drop out, which may be due to treatment's incorporation of in-home decluttering, which is feared and avoided. Thus, strategies to prepare patients for decluttering/discarding are needed. Imaginal exposure (IE), or imagining one's worst fears about discarding, could be one such strategy. This pilot preliminarily tested a short-duration IE intervention compared with a control intervention. Over 3 days, adults diagnosed with HD (  $n = 32$ ) were randomly assigned to either write about and imagine their worst fears about discarding (IE condition) or a neutral topic (control writing [CW] condition). The IE condition showed significant improvements in HD symptoms from preintervention to 1-week follow-up, with medium to large effects; however, the CW condition did as well. Comparing change scores between conditions, the IE condition's improvements were not significantly different than the CW condition's. Overall, IE was helpful in improving HD symptoms, but this pilot did not indicate that it was more helpful than CW. This raises important questions about possible demand characteristics, placebo effects, or regression to the mean, and it has implications for the design and methodology of other studies assessing IE's utility.

### **METHODS**

#### **Participants**

Interested individuals were invited to participate if they were older than 18 years, diagnosed with HD via the SCID-5-RV HD module administered by postdoctoral psychologists or psychiatrists (First et al., 2015), reported clinically significant hoarding symptoms (Saving Inventory Revised [SIR] score  $>41$ ), and had clutter that impaired living conditions as assessed via clinician-rated videoconferencing (Clutter Image Rating [CIR] score  $>4$ ). Participants were excluded if they were at risk of suicide (Columbia Suicide Severity Rating Scale  $>3$ ; Posner et al., 2011) or currently in CBT for HD. Psychotropic medication was allowed if the dose was stable for at least 4 weeks (8 weeks for fluoxetine) before study start. In total, 64 individuals were screened, and 37 met inclusion criteria. Five people screened dropped out before completing study measures, providing a final sample of 32 adults with HD.

Demographic information about the sample can be found in Table 1. The sample was predominantly female (87%), with a mean age of 52.91 (  $SD = 13.79$ ; range, 22–73). The mean SIR score (  $M = 62.50$ ,  $SD = 12.45$ ) of participants in the current study was comparable to that of other clinical HD samples ( e.g. , Kellman-McFarlane et al., 2019; Tolin et al., 2010). Most were recruited via online advertisements (83%), whereas others were recruited by invitation if they had participated in a prior study with the laboratory and indicated interest in additional studies.

#### **Procedure**

##### **Random Assignment to Experimental Conditions**

Participants were randomly assigned to the IE condition (  $n = 17$ ) or the CW (  $n = 15$ ) condition. Participants in both conditions wrote for 20 minutes on three consecutive days, based on a meta-analysis showing that 15 or more minutes of writing over three or more days has significant and large positive effects on a range of psychological outcomes, whereas writing for fewer days has smaller effects (Frattaroli, 2006). Participants were sent writing instructions daily, on the three consecutive days, via a link. Instructions noted that participants were required to stay focused on

their assigned writing topic, write at least 250 words, and that the writing must be timestamped for at least 20 minutes.

Power analysis/sample size: To test whether these pre to follow-up changes were significant in each of the two conditions, we used paired sample t -tests. Examining pre to follow-up change scores in HD symptoms in the IE condition, we found significant improvements in SIR-Total, SIR-DD, CAS, and CIR scores,  $p$ 's  $< 0.030$ , although nonsignificant improvement in SCI score,  $p = 0.053$ . However, unexpectedly, we also found significant improvements in the CW condition on these measures, including on the SCI,  $p = 0.012$ . Examining pre to follow-up change scores in transdiagnostic processes in the IE condition, we found no significant improvements,  $p$ 's  $> 0.086$ . However, unexpectedly, we found significant improvements in the CW condition on the IUS and AAQ-II,  $p$ 's  $< 0.011$ .