An Experimental Investigation of Compulsive Ordering and Arranging: Memory Bias for Threat-Relevant Stimuli
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Abstract
Ecologically valid investigations of compulsive washing and checking have shown consistent evidence of a threat-relevant memory bias. This study was designed to assess the presence of a memory bias in association with compulsive ordering and arranging in a sample of undergraduate students. Participants were randomly assigned to one of four room conditions: Orderly; Slightly Orderly; Disorderly; and Slightly Disorderly. After leaving the room and completing a distractor task, participants recalled as many objects from the room that they could remember. Results are discussed in terms of cognitive and behavioural approaches to understanding compulsive ordering and arranging.

Introduction
• Compulsive ordering and arranging is a form of OCD characterized by the need to order and arrange one’s surroundings to ensure their belongings are placed “just right”.
• Previous studies have demonstrated a general preference for order and symmetry among university students, and general feelings of anxiety and discomfort associated with disorderly environments (Radomsky & Rachman, 2004).
• Memory biases for threat-relevant stimuli have been associated with many anxiety disorders (Coles & Heimberg, 2002) and more recently with other subtypes of OCD like compulsive washing (Radomsky & Rachman, 1999) and checking (Radomsky et al., 2001).
• The current investigation examined the link between a natural preference for order and symmetry and a memory bias for threat-relevant stimuli (Radomsky & Rachman, 2004).
• It was hypothesized that participants would show enhanced recall and recognition for threat-relevant objects (disorderly) as opposed to non-threatening orderly objects.

Method
• Participants: 80 volunteer students recruited from Concordia University. 72.5% of participants were female.
• Room Condition: 20 common objects; each object’s position & orientation was standardized for easy replication across conditions and participants.
• Procedure: Assessment: ADIS-IV (DiNardo et al., 1994) and Questionnaire package. Instructions (“Make a plan about how you would organize this room for Part II of the study.”)
• Participants assigned to 1 of 4 room conditions (Timed & Video recorded)
• Recall & Recognition:

Results
• Participants in the Slightly Disorderly and Slightly Orderly conditions remembered (F3,76) = 13.25, p < .05) proportionately more disorderly objects than orderly objects.
• No significant difference in recall or subsequent recognition of orderly and disorderly objects in Orderly or Disorderly conditions.

Discussion
• Evidence for an explicit memory bias in association with threat-relevant stimuli (disordered objects) based on both recall and recognition tests.
• Participants remembered proportionately more disorderly objects than orderly objects in both the Slightly Disorderly and Slightly Orderly conditions.
• The three control conditions (Orderly, Very Disorderly and Slightly Orderly) show that this result is not because the disordered objects in the Slightly Disorderly condition are displayed differently and therefore better remembered because they are more salient.
• These results are consistent with theories of information processing and mood (Bower, 1981; Rogers et al., 1977).
• Researchers investigating memory biases are encouraged to use ecologically valid stimuli.
• There are important implications for psychoeducation and treatment of individuals with ordering and arranging compulsions.
• Future research should assess clinical participants and also investigate whether an implicit memory bias exists for threat-relevant stimuli (disorderly).

References

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