

Abstract

Contamination concerns are among the most common symptoms in obsessive-compulsive disorder (OCD). Research in this area has typically focused on contact contamination, with much less known about mental contamination. Recently, researchers have proposed that immoral thoughts may develop from feared self-perceptions. Given the relevance of immoral thoughts in the cognitive model of mental contamination, it is possible that feared self-perceptions are associated with symptoms of mental contamination. Disgust sensitivity has been found to be a transdiagnostic risk factor for various psychopathological problems, and has been associated with both feared self-perceptions and mental contamination. That said, the precise relationship between these three constructs has not yet been examined. Undergraduate participants were recruited from Concordia University (Montreal, Canada) and completed a battery of self-report measures including validated measures of feared self-perceptions, disgust sensitivity, and both mental and contact contamination. We used disgust sensitivity as a moderator in two moderated regression models, with feared self-perceptions predicting mental contamination in the first model, and predicting contact contamination in the second model. While feared self-perceptions significantly predicted both mental and contact contamination, disgust sensitivity was only a significant moderator in mental contamination, such that greater disgust sensitivity strengthened the relationship between feared self-perceptions and mental contamination. These findings highlight the conceptual distinction between mental and contact contamination. This relationship warrants further examination using experimental paradigms manipulating feared self-perceptions and observing their effects on mental contamination. Our results also tentatively highlight potential targets for CBT-based interventions for OCD.

Introduction

- Contamination concerns are among the most common themes of symptomatology in OCD¹
 - Approximately half of people with OCD report some kind of contamination related symptomatology (e.g., cleaning, washing)¹
- Research has typically focused on **contact contamination** while less is known about **mental contamination**
 - Contact contamination:** Contamination concerns triggered by physical contact with perceived contaminant²
 - Mental contamination:** Contamination concerns that arise in absence of direct contact with contaminant²
 - Triggered by thoughts, words, images perceived as immoral, inappropriate or wrong²
- Notions of **feared self-perceptions** are gaining prominence, particularly with regard to their association with immoral/repugnant obsessions in OCD³
 - Feared self-perceptions:** Fear of who one might be, or become (e.g., "I could be a sexual predator")³
 - Areas of a person's life where they fear or distrust their self render them vulnerable to immoral/repugnant obsessions³
- Disgust sensitivity:** A general predisposition to developing disgust⁴
 - DS has been identified as a transdiagnostic risk factor for various psychopathologies, and is particularly relevant in OCD⁵
 - Even when controlling for depression and anxiety, it remained associated with several OCD symptom groups (i.e., washing, checking)⁴
- Research has found connections between all three of these constructs (i.e., contamination concerns, feared self-perceptions, and disgust sensitivity)³⁻⁶
 - However, the precise relationship between them has not been examined
- This study aimed to elucidate the nature of the relationship between these three constructs

Hypothesis

Disgust sensitivity will be a significant moderator between feared self-perceptions and both contact and mental contamination-related symptomatology

Method

Participants:

- Participants were undergraduate Psychology students ($n = 626$) recruited from Concordia University

Gender	
Male N(%) / Female N(%)	70 (11.2) / 556 (88.8)
Age	
Mean (SD), Range	22.54 (4.51), 16-57
Primary Language	
French, N(%)	107 (17.1)
English, N(%)	422 (67.4)
Other, N(%)	97 (15.5)

Measures:

- Fear of Self Questionnaire (FSQ)³:** 20-item measure of endorsement of feared self-perceptions
 - E.g. "I am sometimes afraid to look inside myself because I am afraid of what I could find"
 - $\alpha^{**} = 0.98$
- Vancouver Obsessive Compulsive Inventory – Contamination Subscale (VOCI-CTN)⁷:** 12-item subscale of the VOCI assessing symptoms of contact contamination
 - E.g. "I use an excessive amount of disinfectants to keep my home/myself safe from germs"
 - $\alpha^{**} = 0.90$
- Vancouver Obsessive Compulsive Inventory – Mental Contamination Scale (VOCI-MCS)⁸:** 27-item scale assessing different aspects of mental contamination
 - E.g. "Having an unpleasant image or memory can make me feel dirty inside"
 - $\alpha^{**} = 0.95$
- Disgust Scale (DS):** 32-item questionnaire that measures sensitivity to disgust
 - E.g. "It bothers me to see someone in a restaurant eating messy food with his fingers"
 - $\alpha^{**} = 0.85$

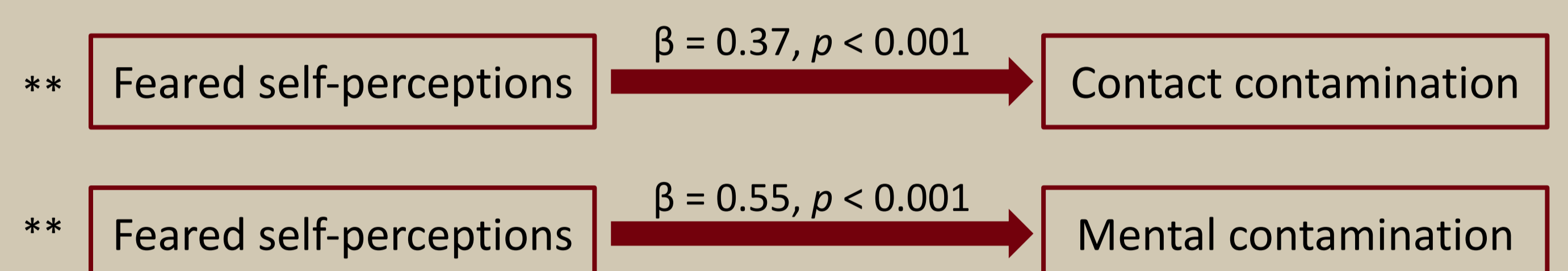
Procedure:

- Participants recruited as part of a larger study validating a new measure of feared self-perceptions
- Those interested in participating completed a computerized battery of self-report measures

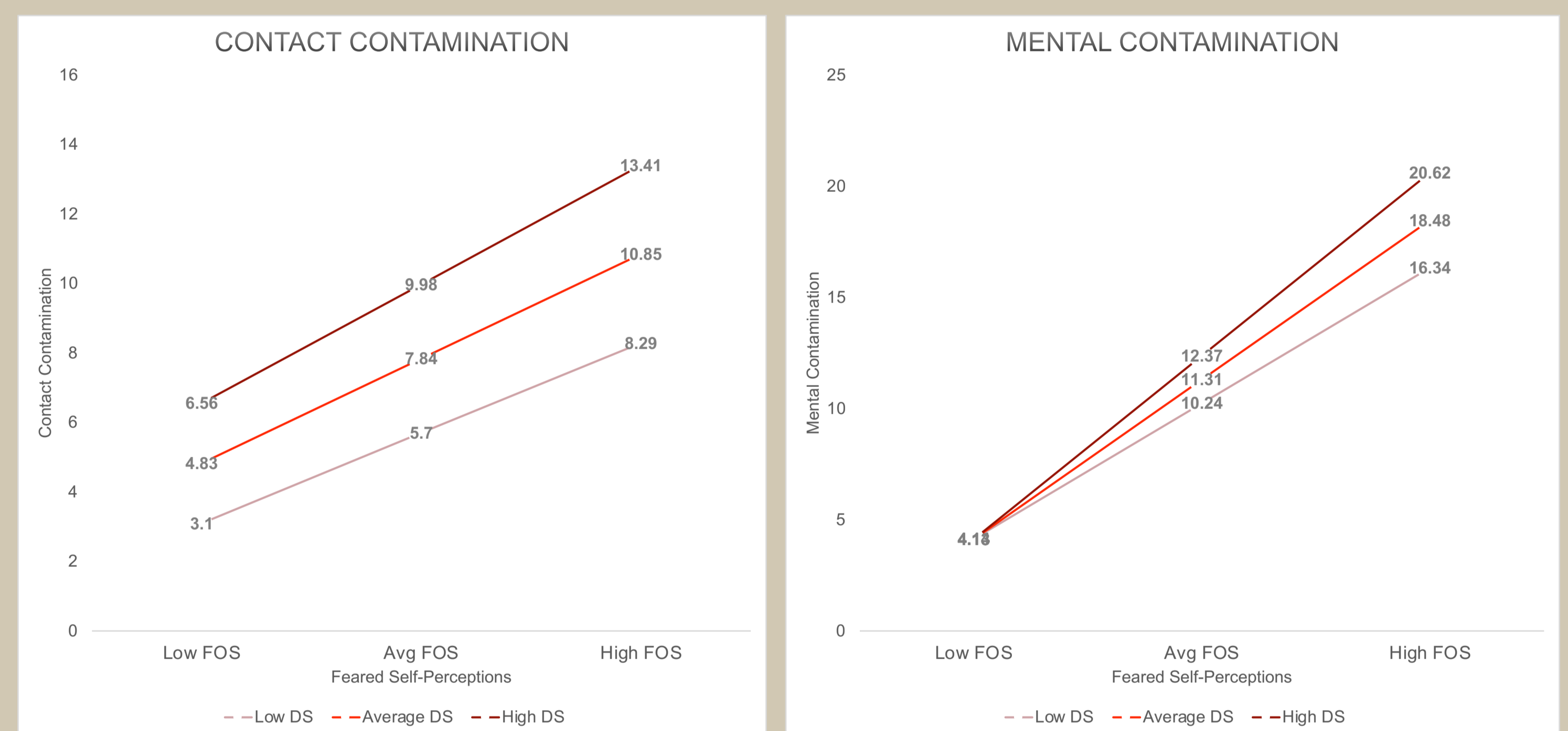
** All alpha coefficients calculated from current sample

Results

Feared Self-Perceptions Predicting Contamination Concerns



Interaction with Disgust Sensitivity



- Feared self-perceptions significantly predicted both contact and mental contamination
- Interaction with Disgust Sensitivity
 - Non-significant for Contact Contamination model
 - $F(1, 596) = 5.48, R^2 \text{ change} = 0.007, \beta = 0.01, p = 0.02$
 - Significant for Mental Contamination model
 - $F(1, 420) = 4.22, R^2 \text{ change} = 0.007, \beta = 2.10, p = 0.04$

Discussion

- Though both significant, there was a stronger association between feared self-perceptions and mental (vs. contact) contamination
- Their differing interactions with disgust sensitivity highlights the conceptual distinction between mental and contact contamination
- Mental contamination may be more closely associated with cognitive constructs (e.g., feared self-perceptions, immoral thoughts) that are more sensitive to one's disgust sensitivity
- These relationships should be further examined using experimental paradigms that manipulate feared self-perceptions, to see their effects on mental and contact contamination

Implications for Clinical Practice

- Cognitive-behavioural models of OCD emphasize the importance of appraisals in the interpretation of intrusive thoughts and the onset/maintenance of OCD
 - These models have generally ignored the role of vulnerable self-themes that may also be linked to OCD symptoms
 - These results underscore the importance of considering vulnerable self-themes (e.g., feared self-perceptions) in the treatment of OCD
- The results also tentatively suggest that to see greater reduction in mental contamination by targeting feared self-perceptions in therapy, clinicians should be mindful of individuals' disgust sensitivity
 - It may be helpful to explore disgust sensitivity in relation to feared self-perceptions using disgust-focused techniques