



Research paper

The Mediating Role of Disgust Sensitivity in the Relationship between Anxiety Sensitivity, Worry and Obsessive-Compulsive Syndrome

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Abstract

The present study was conducted with the aim of investigating the mediating role of disgust sensitivity in the relationship between anxiety sensitivity, worry and obsessive-compulsive symptoms in non-clinical population. The descriptive research method was of the correlation type (path analysis) and the statistical population of the research included the general population of 20 to 50 years old living in Tehran city and 300 subjects participated in the research through an internet call with convenience sampling method. The instruments were the obsessive-compulsive disorder-revision, Anxiety Sensitivity Index Revised, Pennsylvania State Worry Scale and the revised disgust sensitivity scale. The results showed that disgust sensitivity has a mediating role in the relationship between anxiety sensitivity and worry with obsessive-compulsive symptoms and planning to promote education for people in the area of worry, anxiety sensitivity can play an important role in reducing obsessive-compulsive symptoms due to disgust sensitivity.

Keywords: Anxiety sensitivity, disgust sensitivity, obsessive-compulsive symptoms, worry.

Introduction

Obsessive Compulsive disorder (OCD) is classified by recurrent and intrusive thoughts (obsessions), as well as persistent behaviors (compulsions), which are created to combat the distress associated with obsessions (American Psychiatric Association, 2013). According to previous research, anxiety sensitivity is one of the structures associated with obsessive-compulsive disorder. Anxiety sensitivity, the tendency to fear the symptoms of anxiety, is a key risk factor for the development anxiety disorders, one of the essential and important factors of anxiety sensitivity is cognitive concerns that are significantly related to the dimensions of obsessive-compulsive symptoms (Krebs, et al., 2020, Raines, et al., 2022). Worry can be perceived as a complex emotion derived from the more rudimentary emotions of fear and anxiety (Ojala, et al., 2021). Previous research has shown that worry is positive and significant relationship with obsessive-compulsive symptoms (Hartmann, et al., 2019). Although many cases remain unknown about the growth of obsessive-compulsive disorder; Several studies have shown that disgust sensitivity plays an important role in developing obsessive-compulsive disorder (Georgiadis, et al., 2020). Disgust is a universal emotion characterized by the feeling of revulsion or profound disapproval of something unpleasant or offensive (Bhikram, et al., 2017). Few researches have studied the effect of disgust sensitivity on obsessive-compulsive disorder and also, the available findings have reported different results. Examining vulnerable or at-risk groups who engage in coercive behaviors or experience obsessive-compulsive

disorder has significant implications for early intervention. Based on this, to examine different areas and structures of obsession, it is important to use non-clinical population in the study of this disorder. Therefore, the hypothesis of this study was to present a model of the mediating role of disgust sensitivity in the relationship of between anxiety sensitivity, worry on obsessive-compulsive disorder.

Method

The present study was descriptive-correlational (structural equations, path analysis). The statistical population of the present study was the general population of 20 to 50 years living in Tehran in ۲۰۲۱-۲۰۲۲. A sample of 300 participants were selected by available methods. In order to collect data, the link of the questionnaires was provided to the participants through an online call and in order to observe the ethical points, the questionnaires were anonymous.

Tools

Obsessive-compulsive Disorder-revision (OCD-R): The OCD-R has 18 items, which has been standardized by Mohammadi, et al. (2008). The Cronbach's alpha was reported to be 0.85 for the total score. In this study, Cronbach's alpha 0.88 was obtained.

Anxiety Sensitivity Index Revised (ASI-R): This questionnaire has 16 items with 3 subscales of, fear of anxiety, cognitive inhibition, and fear of physical symptoms. The reliability of the questionnaire was reported to be 0.85 using Cronbach's alpha (Reiss, et al., 1986). In this study, Cronbach's alpha was 0.91.

Pennsylvania State Worry Questionnaire (PSWQ): This questionnaire has 16-items with 7 subscales and developed by Mayer et al. (1990). Generality of worry and uncontrollable of worry are subscales The internal reliability of this questionnaire is in the range of 0.90 to 0.91. In this study, Cronbach's alpha was 0.84.

Disgust scale Revised (DS-R): The DS measures individuals' disgust propensity across eight domains: Animals, Bodily Products, Body-Envelope Violations, Death, Food, Hygiene, Sex, and Sympathetic Magic. Haidt, et al. (1994) calculated. the internal reliability was in the range of 0.80 to 0.92. In this study, Cronbach's alpha 0.92 was obtained.

Results

In order to investigate the mediating role of disgust sensitivity in the relationship between anxiety sensitivity, worry and obsessive-compulsive disorder symptoms, the path analysis method was used by using AMOS 22 software. The normality assumption of scores by the Kolmogorov-Smirnov test was confirmed. For analysis of structural equations based on the sample correlation matrix, between Anxiety sensitivity, worry with the components of obsessive-compulsive disorder symptoms and disgust sensitivity, as well as between each of the variables of disgust sensitivity were tested by Pearson correlation coefficients. Table 1 shows the standard coefficients of the direct paths of the model. According to the proposed conceptual model, it was expected that anxiety sensitivity and worry through disgust sensitivity was related to obsessive-compulsive symptoms ($P < 0.01$). The results of the analyzes in Figure 1 show that there is a good fit between the data and the model.

Table 1. the standard coefficients of the direct paths of the model.

| Predictor variable | Criterion variable | Beta | T | SE | CR | P |
|---------------------|-------------------------------|------|------|-------|------|-------|
| Anxiety sensitivity | Disgust sensitivity | 0.34 | 0.16 | 0.031 | 5.39 | 0.001 |
| Anxiety sensitivity | Obsessive-compulsive disorder | 0.34 | 0.24 | 0.048 | 5.06 | 0.001 |
| worry | Disgust sensitivity | 0.39 | 0.24 | 0.102 | 2.41 | 0.016 |
| worry | Obsessive-compulsive disorder | 0.29 | 0.26 | 0.139 | 1.92 | 0.047 |
| Disgust sensitivity | Obsessive-compulsive disorder | 0.40 | 0.59 | 0.132 | 4.48 | 0.001 |

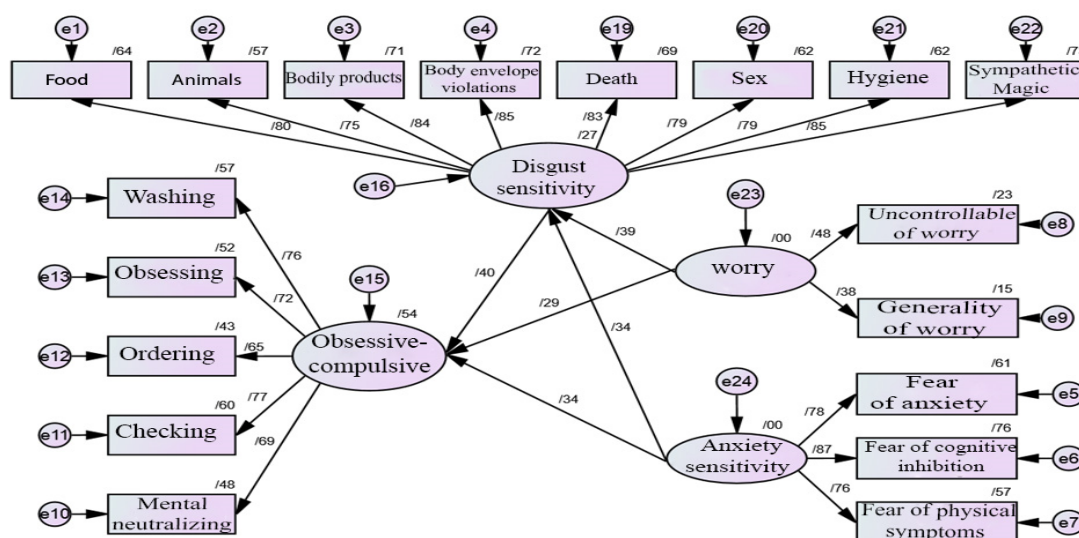


Figure 1: The Obtained model of the mediating role of disgust sensitivity in the relationship between Anxiety sensitivity, worry and obsessive-compulsive disorder symptoms.

According to Table 2, The results of Bootstrap test showed that disgust sensitivity plays a significant mediating role in the relationship between anxiety sensitivity and worry with obsessive-compulsive symptoms.

Table 2. The results of Bootstrap test

| Routes | Indirect Effect | SD Error | Up-level | Lower-level | P |
|--|-----------------|----------|----------|-------------|-------|
| Anxiety Sensitivity → Disgust Sensitivity → Obsessive-Compulsive | 0.136 | 0.127 | 0.124 | 0.098 | 0.017 |
| worry → Disgust Sensitivity → Obsessive-Compulsive | 0.156 | 0.017 | 0.215 | 0.101 | 0.001 |

Discussion and Conclusion

The results showed that the proposed model has an acceptable fit. Accordingly, disgust sensitivity is one of the factors affecting anxiety sensitivity, worry and obsessive-compulsive disorder. disgust sensitivity is considered as a latent factor that affects a wide range of obsessive

behaviors, anxiety sensitivity and worry. In general, anxiety sensitivity is directly and indirectly related to the symptoms of obsessive-compulsive disorder and worry through its effect on disgust sensitivity. The accidental sampling method, not using clinical samples and using self-report tools to collect data are among the limitations of the research. By focusing on disgust sensitivity as well as teaching ways to control anxiety sensitivity and worry, it is possible to take steps towards the prevention of obsessive-compulsive disorder problems in the general population.

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Conflicts of interest

Authors found no conflict of interests.



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