Relationship between obsessive symptoms and cognitive fusion of working women

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Abstract:
In this study, we determined the relationship between obsessive and practical symptoms and cognitive fusion in Working Women. The research method used in this research is descriptive (correlation). The statistical population of this research includes all the working women of Beijing city. We have used G*Power software to determine the sample size. Considering that in correlation methods, the minimum sample size of 10 to 40 people is suggested for each observed variable, in this study, 24 people were considered as samples for each observed variable, and due to the existence of 3 observed variables, the number of 70 people was sufficient. . Considering the drop of the subjects and to increase the generalizability of the results, 100 people were selected and participated in this study by available sampling method.To collect data, we used two questionnaires: the Maudsley Obsessive-Compulsive Inventory (MOCI) by Hodgson and Rachman , and the Cognitive Fusion Questionnaire (CFQ) by Gillanders et al. (2014). To analyze the data obtained in this study, descriptive and inferential statistical methods were employed. Descriptive statistics were utilized to calculate key descriptive indices such as mean and standard deviation. For assessing the correlation between variables, Pearson's correlation and multiple regression analysis were employed, with SPSS 16 software acting as the analytical tool. The significance level for this study was set at 0.001, signifying a small error tolerance. on the results of the statistical analyses conducted in this study, it can be concluded that the role of Cognitive Fusion in predicting the symptoms of obsessive-compulsive disorder (OCD) in employed women is positive and significant. In fact, Cognitive Fusion has the ability to predict the symptoms of OCD in employed mothers. Based on this finding, It is suggested that Development, validation, and evaluation of communication enhancement training programs are recommended to effectively educate employed women, particularly those with OCD symptoms, on navigating workplace interactions, home dynamics, and managing their intrusive thoughts and associated "shoulds.

Keywords: obsessive and practical symptoms, cognitive fusion, Working Women.

Introduction

We are living in an era that is characterized by a growing sense of anxiety. Contributing factors include the decline of traditional values, the pervasiveness of technology in our lives, the complexity of interpersonal interactions, and the diminishing importance of religious values, family, and indigenous values (Fathi et al., 2021). OCD symptoms are often observed in the form of obsessive thoughts related to washing, pathological doubts, order and arrangement, and symmetry (Schieber et al., 2015). Other types of obsessions include sexual obsessions, preoccupations with aggression, and triggers of frightening impulses. In addition to causing mental disturbances, the characteristics of this psychological disorder are its incompatibility with oneself. This incompatibility is reflected in the occurrence of behaviors in people involved that are beyond their inner control (self). The goal of these compulsory mental activities and repetitive behaviors, like obsessive thoughts, is to reduce the pain and discomfort caused by obsessive thoughts (Golestani & Nezam-al-Eslami, 2021). OCD affects 3% of people at some point in their lives and can lead to impaired occupational functioning, social relationships, and a significant decline in quality of life (Abolhasani et al., 2019). Studies suggest that about 2% of people suffer from serious obsessive symptoms (Sadri et al., 2021). However, the prevalence of OCD varies

across different human populations. The cause of this disorder has not yet been determined, but research has shown that genetic factors, dysfunctions of neurotransmitters, and abnormal biochemical changes can cause this disorder in people (Grune & Pittenger, 2017). . A report by Jaisoorya et al. (2017) found that the highest risk of OCD occurs in individuals aged 18 to 25 years.

Cognitive fusion is manifested when individuals become excessively and intensely involved in their thoughts (Reuman et al., 2018). As if these thoughts are real. In this group of people, it is these thoughts that control their behavior, and individuals completely focus their attention on internal cognitive actions and are less responsive and sensitive to external stimuli and realities (Gillanders et al., 2015). This construct is a new construct in the theoretical realm associated with the third wave of cognitive-behavioral therapies (Asghari et al., 2019). Due to this cognitive-social construct, individuals experience perceptual distortion of reality, and gradually, real experiences as a criterion of reality and decision-making are replaced by the person's interpretations of reality (Reuman et al., 2018). Cognitive fusion is associated with most psychological disorders and distresses such as anxiety and OCD (Krafft et al., 2019). In fact, research findings suggest that cognitive fusion and psychological distresses such as anxiety, depression, and OCD have a positive and significant bidirectional relationship (Barden & Fergus, 2016). This metacognitive construct has also been the focus of attention in studies of obsessive-compulsive disorder in recent decades. The results of studies show that cognitive fusion plays a role in the development and maintenance of OCD (Abramowitz et al., 2003; Einstein and Menzies, 2004; Rassin et al., 2001a & b; Bakhshipour et al., 2013).

Given the high prevalence of obsessive-compulsive disorder in working mothers, the importance of this research on this group of people is felt even more. Therefore, we aim to answer this question in this study: Can Cognitive fusion to predict the symptoms of obsessive-compulsive disorder in working women?

Methods

The research method used in this study is descriptive (correlational). The statistical population of this study included all working women in Beijing City. To determine the sample size, we used the G*Power software. Since in correlational methods, a minimum sample size of 10 to 40 people for each observed variable is suggested, in this study, 24 people were considered as a sample for each observed variable, and due to the presence of 2 observed variables, 70 people were sufficient. With consideration of the loss of subjects and to increase the generalizability of the results, 100 people were selected by convenience sampling and participated in this study. The link to the research questionnaires was sent to them via WhatsApp, Instagram, and Telegram. To observe ethical considerations in this study, all subjects had the freedom to participate in the research, and they were also assured that the data obtained would be analyzed as a group and their information would not be provided to others. To collect data, we used two questionnaires: the Maudsley Obsessive-Compulsive Inventory (MOCI) by Hodgson and Rachman (1997) , and the Cognitive Fusion Questionnaire (CFQ) by Gillanders et al. (2014). We will explain each one below:

The Maudsley Obsessive-Compulsive Inventory (MOCI): The Maudsley Obsessive-Compulsive Inventory (MOCI) is a self-report questionnaire that measures the severity of obsessive-compulsive symptoms. It was developed by Hodgson and Rachman (1997) for research on the type and scope of obsessive-compulsive problems. It consists of 30 items, half of which are key correct and half are key incorrect. In the initial validation at Maudsley Hospital, it was able to distinguish 50 obsessive patients from 50 neurotic patients. Also, this questionnaire identified four major components that reflected four types of obsessive problems in patients through content analysis of the responses of 100 patients. These four components are checking, cleaning, slowness, and obsessive doubt, which form four subscales. By using a simple scoring method, a total obsessive score and 4 sub-scores can be obtained. Rachman and Hodgson (1980) argued that these types of complaints are relatively normal, exaggerated, and severe forms of learned behavior. In a study with 40 patients, Hodgson and Rachman (1977) showed that the total score of the MOCI is sensitive to therapeutic changes. In conclusion, the Maudsley Obsessive Inventory has been shown to be a valid and reliable measure of obsessive-compulsive symptoms. It is a useful tool for therapists and researchers in understanding and treating obsessive-compulsive disorder. It is also a good tool for studying the etiology, course, and prognosis of various types of obsessive complaints. The reliability coefficient with the method of test-retest was 0.89.

Cognitive Fusion Questionnaire (CFQ): The Cognitive Fusion Questionnaire (CFQ) is a self-report questionnaire that measures the extent to which an individual's thoughts are fused with their sense of self. The scale was developed by Gillanders et al. (2014) and consists of seven items. Participants rate their agreement with each item on a Likert scale from "Never true (1)" to "Completely true (7)." Higher scores reflect greater

cognitive fusion. In a study of over 1,800 participants from a variety of samples, the CFQ showed good initial evidence of factor structure, reliability, test-retest reliability, validity, discriminant validity, and treatment sensitivity. The test-retest reliability of the CFQ after a four-week period was reported to be 0.81.

To analyze the data obtained in this study, descriptive and inferential statistical methods were employed. Descriptive statistics were utilized to calculate key descriptive indices such as mean and standard deviation. For assessing the correlation between variables, Pearson's correlation and multiple regression analysis were employed, with SPSS 16 software acting as the analytical tool. The significance level for this study was set at 0.05, signifying a small error tolerance.

Results

A total of 45 working mothers participated in this study, with an average age of 37.64 and a standard deviation of 8.42. In terms of education, 10 were at the associate level, 40 were at the bachelor's level, 35 were at the master's level, and 15 were at the doctoral level.

Table 1- *Descriptive Indices of the Research Variables*

Indices	Cognitive Fusion	obsessive-compulsive symptoms
Mean	110.41	201.17
Standard deviation	13.87	36.98

According to the results of Table 1 and the analyses related to the descriptive indices, the mean (and standard deviation) of the variables of Cognitive Fusion , and obsessive-compulsive symptoms are equal to 110.41 (13.87), and 201.17 (36.98), respectively.

Table 2- *Pearson Correlation Between the Variables Studied in the present Study*

Variables	Obsessive-compulsive symptoms	Cognitive Fusion
Obsessive-compulsive symptoms	1	
Cognitive Fusion	0.251	1

** $p < 0.001$

The results of Table 2 show that the relationship between obsessive-compulsive symptoms and Cognitive Fusion is positive and significant.

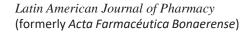**Table 3- *Direct , and Total Effects of Predicting Obsessive-Compulsive Symptoms***

Variable	Direct effect	Total effect	P value
Cognitive Fusion on obsessive-compulsive symptoms	**0.102**	**0.102**	**> 0.001**

Based on the results of Table 4 and the fact that the significance level of the test in research hypotheses is less than 0.001, it can be said that the relationship between obsessive-compulsive symptoms and Cognitive Fusion of working mothers is positive and significant. Additionally, according to Figure 1, the rounded coefficients that are visible are related to the correlation coefficients of Table 4, so that Cognitive Fusion has been able to explain 14% of the obsessive-compulsive symptoms variable.

In conclusion, According to these findings, it can be said that the Cognitive Fusion can predict the symptoms of obsessive thoughts and actions.

Discussion and Conclusion

In this study, we determined the relationship between obsessive and thought symptoms and Cognitive Fusion in working women. The results of statistical analyses showed that Cognitive Fusion has a direct relationship on obsessive-compulsive symptoms. Similar findings have been observed in the results of studies conducted by Karft et al. (2019), Bardin and Fergus (2016), Hayes et al. (2004), and Soltani et al. (2023). The common conclusion of these studies is that cognitive fusion is a mediating process that plays a key and fundamental role in most psychological disorders, including OCD.

In the context of this study, cognitive fusion is associated with psychological disorders and emotional disturbances such as anxiety and OCD. In this regard, various models have been proposed, all of which suggest that cognitive fusion and experiential avoidance can have a reciprocal effect on anxiety, depression, stress, and overall psychological distress. In fact, cognitive fusion causes people to have negative and incompatible assessments of real events. They tend to cling to their destructive assessments and perceptions, which can lead to the creation and continuation of psychological tension. This suggests that there is a direct and significant correlation between cognitive fusion and factors associated with anxiety, and consequently, the occurrence of obsessive and ruminative symptoms. In other words, it is the construct of cognitive fusion that causes people to consider false and incompatible beliefs with reality (a stressful situation) as absolute and ultimate reality, even though they are transient and changeable. This rigid and persistent way of perception has a negative impact on human functioning and emotions.

Based on the results of the statistical analyses conducted in this study, it can be concluded that the role of Cognitive Fusion in predicting the symptoms of obsessive-compulsive disorder (OCD) in employed women is positive and significant. In fact, Cognitive Fusion has the ability to predict the symptoms of OCD in employed mothers. Based on this finding, Development, validation, and evaluation of communication enhancement training programs are recommended to effectively educate employed women, particularly those with OCD symptoms, on navigating workplace interactions, home dynamics, and managing their intrusive thoughts and associated "shoulds. . In the discussion of research proposals, it is recommended to used different measurement methods (clinical interviews) instead of questionnaires to achieve better results. Additionally, subsequent studies can be designed with time intervals to give the findings more predictive power.Every research has its own limitations, and this research is no exception.

Every research has its own limitations, and this research is no exception. The limitation of this research is the use of a cross-sectional design, which should be addressed in future research by using longitudinal methods.

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