



Original Article

# Assessment of personality characteristics in parents of children and adolescents with obsessive-compulsive disorder compared to control group

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## Abstract

**Introduction:** According to the researchers' viewpoint, parents' personality traits and their behavior can affect the development of the psychiatric disorders such as anxiety disorders and obsessive-compulsive disorders among children and adolescents. The present study assessed the personality types and characteristics in parents of children and adolescents with obsessive-compulsive disorder (OCD) compared to control group.

**Materials and Methods:** The statistical community of this cross-sectional descriptive study included all parents of children and adolescents with OCD who referred to the children and adolescents psychiatric clinic of Ibn-e-Sina hospital of Mashhad during March-September 2013. Parents of 30 children and adolescents (6-18 years) with OCD based on DSM-IV-TR criteria and confirmation of diagnosis by two child psychiatrists were selected (n=60) via available sampling method. Parents of 30 matched healthy children from schools in Mashhad were selected as the control group. All participants fulfilled the Myers-Briggs personality type questionnaire. Data analyzed using descriptive statistics, chi square test and SPSS software version 15.

**Results:** Findings showed that two groups of parents were not different in terms of extraversion-introversion, sensing-intuition and thinking-feeling personality dimensions ( $P>0.05$ ). There was only a significant difference between two groups in judgment-perception dimension ( $P=0.026$ ).

**Conclusion:** It seems that there are not significant relations between almost of parents' personality traits and prevalence or incidence of obsessive-compulsive disorders in children and adolescents.

**Keywords:** Obsessive-compulsive disorder, Parents, Personality

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## Introduction

Obsessive-Compulsive Disorder (OCD) is concerned as the one of the most prevalent psychiatric disorders in childhood and adolescence. OCD afflict approximately 0.5 to 2% of this population (1). This disorder yields impairment in children's psychosocial function and relates to a lot of risks in growing to adulthood (2). The main

characteristics of this disorder are severe and recurrent obsessions which lead to major distress for patients and even in some cases the symptoms began in the second year of age. Among adults the ratio gender of prevalence rate is equal but among children and adolescent's population, boys are afflicted more than girls (3).

Despite effective molecular and genetic mechanism in formation of this disorder, environmental factors such as familial factors and parent-child relations as familial distress, acceptance, blame sense or shame can affect the course and nature of disorder even these factors can change treatment outcomes (4-10).

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Indeed, familial environment and type of parents' behavior influence this chronic and disabling childhood disorder (11).

As mentioned, the parents' psychological status and characteristics of OCD children play important role in prognosis and treatment outcomes. Some studies have been conducted on parents of OCD children. For example, Lenane et al. reported high prevalence of psychiatric disorders among first relatives of 46 children and adolescents with OCD (5). Another study aimed to assess the lifetime prevalence of OCD and other psychiatric disorders among parents of OCD children. For this purpose, they assessed parents (n=63) of 32 OCD children (20 boys and 12 girls, mean age: 13.3 years) and parents (n=63) of 32 children without psychiatric disorders who matched in the items of age and gender with case group. The results showed that parents of OCD children received higher scores in harm avoidance and lower scores of self-conductance and reward dependence (12).

Barret et al. compared the parents' behaviors in families who have at least one OCD child with control parents (who have no child with one clinical psychiatric or anxiety disorders). The results showed that there is obvious difference between parents of two groups. The parents of OCD children have less trust to their children and they show less feedback to their children's independence. Also it found that these children have less self-esteem in problem solving and they have fewer tendencies to interact with parents (13).

The researchers did not find any study about personality characteristics among parents of OCD children in Iran so according the necessity of the same researches, the present study aimed to assess the personality characteristics among parents of OCD children compared to the control group (parent without children with anxiety disorders).

It is obvious that the results of these studies can aware the families about their personality characteristics and help them to control themselves and have correct relations with their children therefore these studies can provide the background to treat personality characteristics which aggravate obsessive-compulsive disorder and the same disorders in children.

## Materials and Methods

The statistical community of this descriptive-cross sectional study concluded all children and adolescents who referred to children and adolescent psychiatry clinic of Ibn-e-Sina hospital in Mashhad during April-September 2013 with net diagnosis of

obsessive-compulsive disorder by two children and adolescent psychiatrists.

The sample size estimated 30 cases based on the formula so through available sampling method number of 30 children and adolescents in range age of 6-18 years with net diagnosis of obsessive-compulsive disorder by two children and adolescent psychiatrists and based on the DSM-IV criteria entered to this study. All parents had written consent. The control group selected from families without children with psychiatric disorders and they matched to case group in items of age, gender and socio-economic status.

Inclusion criteria included: age 6 to 18 years, net diagnosis of obsessive-compulsive disorder by two children and adolescent psychiatrist, lack of major psychiatric disorder such as schizophrenia and bipolar disorder, epilepsy or other neurologic disorders, consent for participation. Exclusion criteria were the lack of cooperation and fulfillment of inventory.

## Research instruments

Data gathered through interview and inventory. Myers-Briggs Type Indicator-form M (MBTI) is a pencil-paper inventory that it could be fulfilled as individually or group. This inventory included questions notebook, response paper and introduction book. The notebook of questions included 93 items that 56 items are related to question and predictive sentences with 2 responses and other 47 items are two separated words. The questions are generally as mandatory option. The response paper is a 93 cells paper with "a" and "b" options. The participant's information and introduction are in the top of paper and the scores of each scale and the code of personality type are recorded in the down of paper (14).

The response forms with specific numbers of empty cells were excluded. This inventory which applied in this research translated by Narges Yaghoubi and it standardized through question-response theory and comparison with classic theory on industrial community of Tehran and rural area. The validity of inventory was 0.73 that it increased to 0.82 after exclusion of some questions. The primary validities for scales were respectively: extraversion-introversion (0.70), intuition-sensing (0.60), thinking-feeling (0.68) and judging-perceiving (0.75) that exclusion of some questions led to higher validity (respectively 0.72, 0.74, 0.77 and 0.75). Its content and formal validity approved by expert students and attends. The criteria validity was assessed through Eysenck personality questionnaire. This analysis indicated that there is

correlation as 0.56 between extraversion-introversion scale with the same scale of Eysenck personality questionnaire. Factorial analysis was used for assessment of validity and 4 factors were resulted through Varimax rotation method by TESTFACT 4.0 software that the first to fourth factors have load factors as 13.92, 7.12, 5.98 and 5.54 respectively (15). The collected data analyzed through descriptive statistics, chi-square and SPSS software.

**Results**

The demographic indexes are as follow:

Age groups among fathers are 25-36 year (10%), 36-45 year (58.3%) and over 46 years (31.7%). Also the percentages of these age groups among mothers are 45%, 46.7% and 8.3% respectively. Highest percentage of two genders is related to the group of 36-45 year.

The education level assessed among parents and these degrees reported: illiterate (fathers: 1.7% and mothers: 3.3%), elementary school (fathers: 11.7% and mothers: 13.3%), middle elementary and high school (fathers: 23.3% and mothers: 21.7%), diploma (fathers: 23.3% and mothers: 31.7%), associate degree (fathers: 18.3% and mothers: 6.7%), bachelor degree (fathers: 16.7% and mothers: 20%) and master degree (fathers: 5% and mothers: 3.3%).

**Table 1.** Distribution of parents of children with and without obsessive-compulsive disorder based on Meyers-Briggs personality types

Analysis/personality type	Obsessive-compulsive group		Control group		Total	
	Prevalence	Percentage	Prevalence	Percentage	Prevalence	Percentage
Perceiving feeling intuition introversion	2	3.3	0	0.0	2	1.7
Perceiving feeling sensing introversion	1	1.7	3	5.0	4	3.3
Judging feeling sensing introversion	4	6.7	6	10.0	10	8.3
Judging thinking sensing introversion	15	25.0	17	28.3	32	26.7
Perceiving feeling intuition extraversion	3	5.0	2	0.0	3	2.5
Judging feeling intuition introversion	0	0.0	4	6.7	2	1.7
Perceiving feeling sensing extraversion	44	6.7	4	6.7	8	6.7
Judging feeling sensing extraversion	15	25.0	6	10.0	21	17.5
Perceiving thinking sensing extraversion	2	3.3	0	0.0	2	1.7
Judging thinking sensing	14	23.3	22	36.7	36	30.0

extraversion	60		100		120	
	60	100	60	100	120	100

Briggs theory (respectively  $P=0.350$ ,  $P=0.143$ ,  $P=0.211$ ) but the difference in thinking-feeling dimension between two groups is significant ( $P=0.026$ ).

Also there are no significant differences between two groups in personality types of intuition-introversion, sensing-introversion, intuition-extraversion and sensing-extraversion ( $P=0.374$ ). In addition, the same result found about personality types of feeling-introversion, thinking-introversion, feeling-extraversion and thinking-extraversion ( $P=0.234$ ), also perceiving-introversion, judging-introversion, perceiving-extraversion and judging-extraversion ( $P=0.510$ ).

Therefore, there are not significant differences between parents of OCD and healthy children in distribution of personality types of intuition-sensing, feeling-sensing, sensing-thinking, intuition-perceiving, intuition-judging, sensing-perceiving and sensing-judging.

Also the same result was found about types of feeling-perceiving, feeling-judging, thinking-perceiving and thinking-judging.

So it be mentioned that there are no significant differences between parents of children with and without obsessive-compulsive disorder in 16 personality types of Meyers-Briggs theory. Also there is not significant difference between two genders (mothers and fathers) in distribution of personality dimensions of extraversion-introversion, sensing-intuition, thinking-feeling and judging-perceiving of Meyers-Briggs theory ( $P>0.05$ ).

**Discussion**

The present study aimed to assess the personality characteristics of parents of children with and without obsessive-compulsive disorder. Based on the findings, there is no significant difference between two groups in distribution of personality dimensions of extraversion-introversion, sensing-intuition, thinking-feeling and judging-perceiving of Meyers-Briggs theory exceptionally sensing-thinking dimension. Also, there is no significant difference between parents of children with and without obsessive-compulsive disorder in 16 personality types of Meyers-Briggs theory.

The same studies have been conducted such as Calvo et al. study that they assess the prevalence of psychopathologies among 63 parents of 32 children with diagnosis of obsessive-compulsive disorder (mean age: 13.3 years) and 63 parents of 32 children without psychiatric disorders. They resulted that the

prevalence of personality disorders is higher among parents of OCD children compared to control group (37.9% of fathers and 20.6% of mothers of OCD children vs 10% of fathers and 18.8% of mothers of healthy children). Most prevalent personality disorders were obsessive personality and avoidant personality disorder (16).

It is mentioned that Young theory names 4 personality dimensions. The introversion-extraversion refers to the style of communication with surrounding environment. The dimension of sensing-intuition refers to the receiving information from surrounding environment. The dimension of feeling-thinking refers to the style of making decision and finally the dimension of perceiving-judging refers to the life style and attitude about the surrounding world (17). The results of the present study showed that there is significant difference in the dimension of feeling-thinking among parents of

children with and without OCD. It be explained that anxious parents perform high control in their relations and they show more aggression (18).

Also, Hirshfeld et al. found that usually mothers of children with anxiety disorders such as obsession use more criticism and they have more control and less intimacy and acceptance about their children (19).

The little size of sample volume is concerned as a limitation of this research and it is recommended that the same researchers conducted to assess the other psychiatric disorders in children population.

### Conclusion

It seems that there is no significant relationship between the prevalence or incidence of obsessive-compulsive disorders in children and most of parents' personality characteristics based on Meyers-Briggs personality type questionnaire.

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