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Research Article

Investigation of Sociodemographic Factors of The Individuals with Obsessive-Compulsive Disorder *

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Abstract

Obsessive-compulsive disorder (OCD) is a common, chronic, and long-term psychiatric disorder, with which the individual feels uncontrollable, recurring impulses and urging to repeat behaviors. It is described as a disorder with mental actions that cannot be prevented from repeating itself. Millions of people around the world suffer from OCD. According to 2017 data (WHO), %2,3 of the world population cope with this disorder. In this study, environmental factors including sociodemographic factors and OCD were examined. Sociodemographic factors included age, gender, occupation, marital status, and income. Data were collected from 175 individuals. 72 were male and 103 were female. Sociodemographic data form, Diagnosis DSM-V, Global OCD evaluation and Yale-Brown scale were utilized for data collection. Participants received a psychiatric examination at the beginning. Statistical analysis was calculated to reveal relationships between OCD and sociodemographic factors. According to findings, sociodemographic characteristics and individuals' disorder severity confirmed that a strong relationship existed. The most common obsessions involved contamination and suspicion. Control, cleaning, washing, and avoidance were found among the most common compulsions. OCD severity tended to decline as patients' ages increase. There existed a low correlation between income and OCD discourse, aligned with the previous studies.

Keywords: Obsessive-Compulsive Disorder (OCD), Sociodemographic Characteristics, Gender Issues.

Obsesif Kompulsif Bozukluğu Olan Bireylerin Sosyodemografik Faktörlerinin Araştırılması

Öz

Obsesif kompulsif bozukluk (OKB), bireyin kontrol edilemeyen, tekrar eden dürtüler hissettiği ve davranışları tekrarlamaya çağırdığı yaygın, kronik ve uzun süreli bir psikiyatrik bozukluktur. Zihinsel eylemleri olan ve kendini tekrar etmesini önleyemeyen bir bozukluk olarak tanımlanır. Dünya çapında milyonlarca insan OKB'den muzdarip. 2017 verilerine göre (WHO), dünya nüfusunun% 2,3'ü bu bozuklukla başa çıkmaktadır. Bu çalışmada sosyodemografik faktörler ve OKB gibi çevresel faktörler incelenmiştir. Sosyodemografik faktörler yaş, cinsiyet, meslek, medeni durum ve geliri içermektedir. 175 kişiden veri toplanmıştır. 72'si erkek, 103'ü kadındı. Verilerin toplanmasında sosyodemografik veri formu, Tanı DSM-V, Global OKB değerlendirmesi ve Yale-Brown ölçeği kullanılmıştır. Katılımcılara başlangıçta psikiyatrik muayene yapıldı. OKB ve sosyodemografik faktörler arasındaki ilişkileri ortaya koymak için istatistiksel analiz hesaplandı. Bulgulara göre, sosyodemografik özellikler ve bireylerin hastalık şiddeti güçlü bir ilişkinin var olduğunu doğrulamıştır

Anahtar Kelimeler: Obsessive Kompulsif Bozukluğu (OKB), Sosyodemografik Özellikler. Cinsiyet Sorunları

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1. Introduction

Obsessive-Compulsive Disorder (OCD) is a psychiatric disorder, common among the nations and society around the world (Stein, 2002; Altıntaş & Özçürümez, 2015). It is typically diagnosed in childhood or adolescence. Men are mostly diagnosed earlier compared to women (Stein, 2002; Altıntaş & Özçürümez, 2015; Mathes, Morabito & Schmidt, 2019; Goldberg et al., 2015; Abramowitz & Jacoby, 2015).

OCD consists of two major parts: Obsession and Compulsion. Obsession is defined as reoccurring and intrusive thoughts, impulses and images that lead to sad feelings such as anxiety or disgust. Individuals diagnosed with OCD approve of opinions, impulses, or images being a product of their mind's thoughts, excessive or illogical (Goldberg et al., 2015; Abramowitz & Jacoby, 2015; Ollendick, King, & Yule, 2013). However, this illness cannot be fully treated by logic or reasoning skills. Many patients often put efforts to suppress or ignore such thoughts in their minds.

Compulsion is a more compressive side of the OCD. It is also identified as coercion, repeated ritual behaviors, or mental activities. Patients often fell to be required to implement such activities to reduce the concern of obsession (Stanley, Björgvinsson, & Frueh, 2010; Kolada, Bland & Newman, 1994). These repetitive behaviors generally take place to prevent any potential physical damages. Such rituals, especially in severe situations, could last for the whole day. The most common compulsive behaviors consist of "cleansing to dispose of contaminations by disease, microbe or unpleasant substances; repetitive activities for anxiety, securing the door or shutting the heater due to fear of fire hazard or damage; mental constraints against regulation and unexpected thoughts to reduce discomfort" (Ollendick, King, & Yule, 2013). This list could be extended to further activities such as hoarding, checking, asking for reassurances, hair pulling or body injuring.

The association between OCD and sociodemographic characteristics has generally been the main focus of national and international researches (Stanley, Björgvinsson, & Frueh, 2010; Kolada, Bland & Newman, 1994; Kalenderoğlu, 2017). For instance, researchers (Stanley, Björgvinsson, & Frueh, 2010) investigated the prevalence of OCD among children and adolescents aged between 5-15 in England. They used a sample size of 10,438 individuals. They found out that 0.25-0.50% of their sample had a type and levels of the OCD, aligned with the previous research findings (Stanley, Björgvinsson, & Frueh, 2010; Kolada, Bland & Newman, 1994; Kalenderoğlu, 2017; Heyman et al., 2001; Bogetto et al., 1999; Hanna et al., 1995; Myers et al., 1984; Robins et al., 1984; Bland, Orn, &Newman, 1988). Studies (Robins et al., 1984; Bland, Orn, &Newman, 1988) also suggested that the frequency of OCD increases with aging. The children diagnosed with OCD were found to have a family with low socioeconomic status (Heyman et al., 2001; Demet et al., 2005).

Bogetto, Venturello, and Albert (1999) revealed that clinical variations of OCD patients exist based on gender. They collected data from 166 outpatients with a semi-structured interview form. As a result of the data analysis, the symptoms typically occur at younger ages and among females. Acute OCD is also more common for females than males. Anxiety disorder is sometimes followed by the onset of OCD. Also, any hypomanic attack could be higher for the males, but eating disorders might be higher for the females.

In additional studies, the sociodemographic relationships with OCD in children and adults aged 12-16 years were examined in different ways. Researchers (Stanley, Björgvinsson, & Frueh, 2010; Monaghan et al., 2015) evaluated the sociodemographic and clinical features of 125 children and adolescents. Most of the patients (71%) had psychiatric problems such as anxiety and affective disorder. The most common obsessions were body damaging to him-herself or close people and obsessions of cleanliness. Common compulsions were discovered as washing and cleaning.

Scrupulosity, also known as religious OCD, roots from the early 1600s in the Catholic church. It is related to an individual's constant engagement with excessive prayers for healing psychological problems. In a related study, the relationship between OCD and religious obsessions was examined involving 45 patients (Wu et al., 2016). According to their findings, 42% of them showed religiously obsessed behaviors. In other words, it is safe to state that religious incitement is related to OCD. However, no statistically significant difference existed between them except for a low correlation. They also indicated that some obsessions might be caused by overwhelming religious views, attitudes, and behaviors.

In the light of earlier studies, we aimed to explore some of the deficiencies in the field and contribute to the field from a different perspective. In this perspective, sociodemographic characteristics such as age, gender, marital status, number of children and income level were studied in the context. Accordingly, distinctive categories of obsessions and compulsions for the participants were analyzed.

According to the previous research findings and scientific facts, we could propose some expected findings as a priory hypothesis. We expected the patients who had more children would show higher levels of obsessive and compulsive behaviors. Also, it was expected that females would have higher levels of obsessive and compulsive behaviors. We also expect marital status influence obsessive and compulsive behaviors and their severity. The family tree is also another factor that positively affects the chance of having obsessive and compulsive behaviors. The occupation of the participants is considered as another critical factor.

2. Material and Method

2.1. The Participants

The participants were classified as 1- Child, 2- Young adult, 3- Middle age, and 4- Older age. Net incomes are shown in local currency. The demographic characteristics of the participants are summarized in Table 1.

Of 175 participants, 72 (41.1%) were male and 103 (58.9%) were female. The age range was found between 7 and 73-year-old, with an average of 31.9- year-old. Regarding their marital status, 91 (52%) of them were married with kids and 84 (48%) were single, widow or divorced. In terms of the number of children, 28 (16%) had no children, 52 (29.7%) had only one child, 59 (33.7%) with two children and 36 (20.6%) with three or more children. Only 60 of them (34.3) had a professional job and the rest were housewives, students, or unemployed at the time of data collection. The majority of the participants (66.9%) had an income of 3,000 (Turkish Liras (TL)/month) with an average of 1,782 TL of monthly income, below the average income (4,350 TL) for the previous year.

2.2. Data Collection and Data Analysis

The data collection process was conducted with the purposeful sampling method. The patients diagnosed with OCD were purposely selected. Data collection tools included four different inventories; the sociodemographic form, Diagnosis DSM-V Scale, Global Assessment Scale (GAS), and Yale-Brown Obsession Compulsion Scale (Y-BOCS). It took place during the summer of 2018 in Kayseri in Turkey.

Sociodemographic Data Form was prepared by the researchers involving age, gender, marital status, number of children, professional job status and income level.

Table 1. Demographic Information of the Study Group.

Variables	**Category**	**N**	**%**	**Ave.**	**SD**
Gender	Male	72	41.1	-	
	Female	103	58.9		
Marital Status	Married	91	52	-	
	Single	75	42.9		
	Widow/Divorced	9	5.1		
Number of Children	No child	28	16.0	-	
	1	52	29.7		
	2	59	33.7		
	3+	36	20.6		
Occupation	Housewife	35	20.0	-	
	Students	45	25.7		
	Officer	60	34.3		
	Unemployed	12	6.9		
	Other	23	13.1		
Age	7-20 (Child)	18	10.3	31.9	11.1
	21-30 (Young adult)	57	32.6		
	31-40 (Middle Age)	66	37.7		
	41+ (Middle Age)	34	19.4		
Income (Month)	0-3.000	117	66.9	1,782	2,324
	3.000+	11	6.3		
	NA	47	26.9		

Diagnosis DSM-V Scale is an inventory to diagnose OCD [19]. In the APA book, the information about how to perform OCD diagnosis is explained in a separate section. Diagnostic criteria are divided into two parts: obsession and compulsion [20]. Obsession, forcing the mind, anxiety-generating repetitive thoughts, and factors related to their suppression have been specified. Compulsion is described as rigorous ritualistic behaviors or mental actions aimed at reducing anxiety against it. To be able to diagnose OCD, as described in the book, is required.

The second data collection tool (GAS) is an inventory assessing mental health in terms of psychological, social and occupational functioning of hypothetical continuity. According to the analysis of the collected data, the participants were classified among 11 interval categories that range between 0-100. The last inventory (Y-BOCS) was developed to measure the OCD severity and symptoms. It consists of a 19 five-point Likert- scale. The sub-dimensions of Y-BOCS included self-harm, contamination, uncleanness, religious, sexual, retention, symmetry, somatic, and cleansing.

3. Results

The results obtained from the study were compared and analyzed with sociodemographic features. Disease patterns, obsessions, and compulsions of the participants were examined in details and the findings were investigated by comparing them with sociodemographic characteristics.

3.1. Statistical Evaluation

A chi-square test was utilized for categorical comparisons obtained in the study. Also, ANOVA was applied to obtain a t-test comparison. Pearson correlation analysis was performed to determine the relationships between the categories and correlation coefficients (r). All analyses were evaluated in the range of $p < 0.05$.

Data analysis resulted in the participants suffering from OCD at various levels. The majority had recurrent and remaining had low or chronic levels. The related results are illustrated in Figure 1. It shows that the participants were mostly (60%) suffering from the recurrent levels. In general, more female patients (63%) had obsessive-compulsive disease compared to the number of male patients (58%).

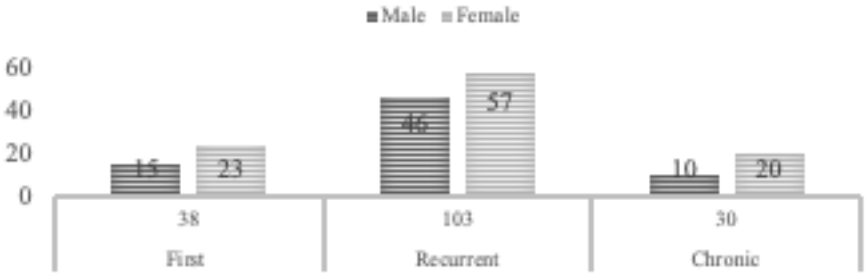

Figure 1. Obsessive-compulsive disease courses among the gender

3.2. The Discourse of OCD and Related Disorder Among the Participants

Several obsessive categories were found as many as 15, but only nine of them were considered to be significant and therefore they were taken into account in this study. Table 2 presented the categories based on the data analysis. Types and levels of obsession were specified below in addition to the gender distribution.

Table 2. *Obsessive Types of the Participants*

	Male		**Female**		**Total**	
	N	**%**	**N**	**%**	**N**	**%**
Suspicion	38	35.9	51	29.1	89	50.9
Contamination	14	13.2	37	21.1	48	27.4
Religious	12	11.3	12	6.9	24	13.7
Order	9	8.5	15	8.6	24	13.7
Harm	7	6.6	17	6.9	24	13.7
Sexual	10	9.4	9	5.1	19	10.9
Somatic	7	6.6	12	6.9	19	10.9
Symmetry	6	5.7	11	6.3	17	9.7
Hoarding	1	1.0	5	2.9	6	3.4
Other/NA	3	2.8	6	3.4	9	5.1

According to the information illustrated in the above table, the most common types of obsessive behaviors included suspicion (50.9%), contamination (27.4%), religious (13.7%), order (13.7%), and harm (13.7%), respectively. The least observed obsessions were sexual (10.9%), somatic (10.9%), symmetry (9.7%), and hoarding (3.4%). In terms of gender, female patients had a higher number of obsessions based on the number of participants compared to males. Specifically, the number of males suffering from sexual obsession is higher than in females. However, females mostly suffer from suspicion, contamination, order, harm, somatic, symmetry and hoarding. The percentage of patients who had a religious obsession (Scrupulosity) was the same for both genders.

The obsession types of the participants were also categorized as physical and mental in terms of their compulsion levels. The predominant compulsive behaviors were listed from the most common to the least common in Figure 2.

Figure 2. Compulsion Categories and Sub-types

According to the above figure, washing, cleaning, and arranging were the top three physical compulsive behaviors for the subjects. Similarly, hoarding, controlling, and counting were the most common compulsive mental behaviors. Although classified as two different compulsions, some compulsive behaviors were found to be both mental and physical such as avoidance, questioning, counting, and praying behaviors.

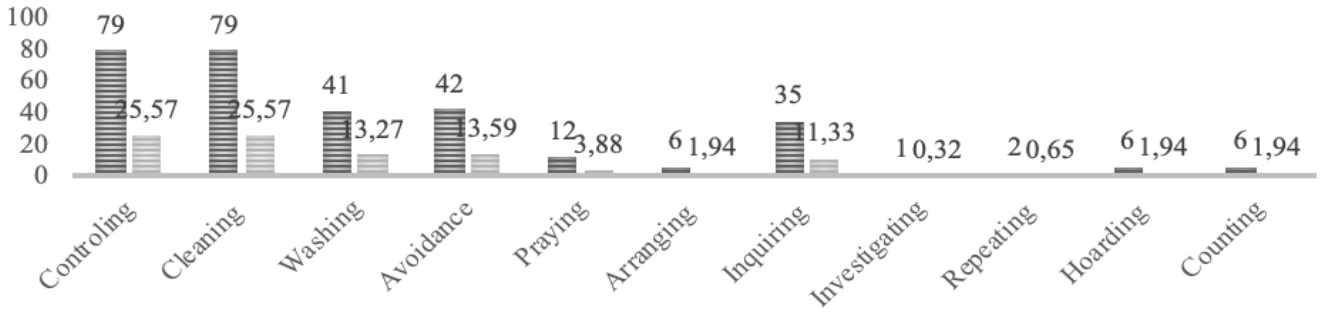

Figure 3. Frequencies Obtained from Compulsion Types

In Figure 3, the frequencies and percentages of the general compulsion behaviors resulting from data analysis were illustrated in detail. Accordingly, the most common compulsions among the participants were as follows: 'controlling (25.57%), cleaning (25.57%), avoidance (13.59), washing (13.27%) and asking questions (inquiring) (11.33%)'. Investigating, repeating, arranging were the least common compulsive behaviors.

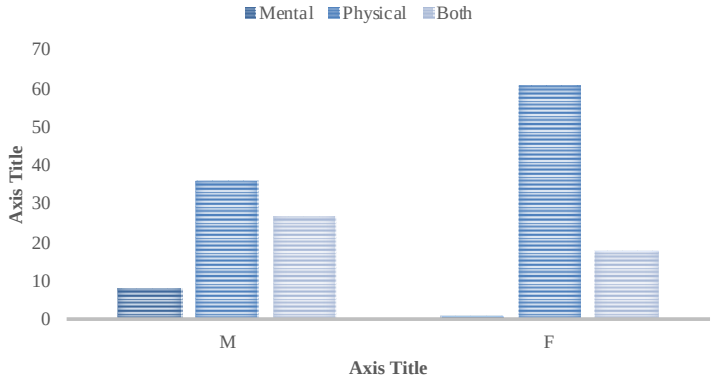

Figure 4. Types of Compulsion

We also investigated further with the compulsive behaviors in terms of gender (Figure 4). Many physical compulsive behaviors (61 of 97) were found higher for females and mental behaviors (8 out of 9) for males. The above figure also shows that participants had more physical or physical than mental compulsive behaviors. The patients showing mental compulsive behaviors were higher than physical compulsive behaviors.

Sociodemographic characteristics were one of the main objectives of the study and data regarding the relationship between OCD findings were examined. According to the data given in Table 3, no statistical difference existed between the obsessive-compulsive and gender characteristics. For example, a very low negative correlation (–0.16) was found for both genders. Besides, no correlation coefficients were significant in terms of sociodemographic factors except for the number of children and age variables as they were smaller the cutoff level (0.20) for the correlation coefficient. A very small positive correlation relationship (0.20) was found between the subjects with the young adults (20-30) and older adults (40+). Also, a medium negative relationship (r = –0.53) was calculated between the subjects who had only one kid and the ones with two or more kids.

Table 3. Relationship Between Sociodemographic Characteristics and OCD Discourse

Sociodemographic Characteristics	**Correlation Coeff (Min, Max)**	**p-value (Min, Max)**
Gender	–0.16	0.15
Marital Status	0.03	0.80
Number of Children	–0.14 (–0.53 , – 0.09)	0.43 (0.01, 0.84)
Occupation	0.002 (–0.06, 0.07)	0.27 (0.07, 0.42)
Age	–0.01 (–0.18, 0.20)	0.42 (0.06, 0.67)
Income	–0.07	0.46

Lastly, p-values were calculated as less than ‘0.26’, which showed that no statistical differences existed for any sociodemographic characteristics. In terms of gender, no significant difference was found in the study. Not finding a statistical significance for gender or marital status did not support our hypothesis. According to p-values, there existed a statistically significant difference between the patients who had no child and two children. This finding supported our hypothesis as having more children's negative effects on suffering from obsessive and compulsive behaviors. Also, two borderline statistically significant variables existed; between young and older adults as well as housewives and students. For these reasons, the hypothesis regarding the occupation was borderline supported by the findings.

4. Conclusion

This study was designed to investigate the obsessive and compulsive behaviors in terms of sociodemographic characteristics for a group of patients. In conclusion, typical compulsions were classified according to three distinct behaviors: physically, mental or both. The most common compulsive behaviors seen in patients included controlling, cleaning washing, avoidance, and questioning.

When sociodemographic features were compared, a low positive correlation existed between income and discourse of the OCD, similar to the previous findings (Demirok, Unal & Pehlivanturk, 2001). A moderate negative correlation was calculated between the number of children, especially with 3+ children, and OCD types. Furthermore, no statistically significant differences (p-value < 0.05) existed between age and obsessive-compulsive behaviors, aligned with the previous findings (Stanley, Björgvinsson, & Frueh, 2010). A low positive correlation (0.20) existed in terms of ages and OCD levels, especially, among younger and older adult groups. This finding was somehow different from the previous studies (Monaghan et al., 2015; Demirok, Unal & Pehlivanturk, 2001).

OCD severity showed a tendency to decrease as patients' ages increase as obtained in the previous researches (Demirok, Unal & Pehlivanturk, 2001; Tek & Ulug, 2001). No significant correlation was found among gender, marital status, occupation, and OCD. Given that previous research findings, this was not an extraordinary consequence.

In terms of gender, unlike recent studies (Gıynaş et al., 1988; Karno et al., 2016; Mathis et al., 2011; Yoldascan et al., 2011; Goodman et al., 1999), gender issues had no influence ($p = 0.15$) in terms of the OCD discourse. It might be due to differences in participants' sociodemographic varieties. To explore sociodemographic factors and OCD in rich content, in-depth studies should be conducted to further analyze sociodemographic issues. In conclusion, most of the participants included in this study were found to possess recurrent OCD. Obsessive types of obsessions were related to suspicion and transmission. Such results were seen as obsessive thoughts against sexual, religious obsessions or self-harm.

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