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Gender difference in developing loneliness and obsession compulsion symptoms during COVID-19 pandemic

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ABSTRACT

The purpose of current study was to identify the gender difference in developing loneliness and obsession compulsions symptoms during Covid-19 pandemic. Participants (N=120) including males (n=60) and females (n=60) were selected from Faisalabad city of Punjab, using purposive sampling technique. UCLA Loneliness scale version 3 (Russel, 1996) and Y-BOCS (Goodman et al., 1989 a,b) were used to measure the loneliness and obsession compulsion symptoms. For analytic purpose, independent t- sample test was applied, using Statal Package for Social Science version 26. Findings of analysis indicated that females are more prone to develop loneliness, which is indicated by $t = -3.404$ at $p = .001 < .001$. Also, females developed more obsession compulsion symptoms as compared to males, which was indicated by $t = -3.022$ at $p = .003 < .001$.

Keywords: Loneliness, Obsession Compulsion, Gender difference, Covid-19, Pandemic.

1. INTRODUCTION

COVID-19 pandemic situation made the governments around the world to close schools, force social distancing as well as self-quarantine which made people especially children and youngsters living in hostels to experience isolation from their friends, family and social circle. Situations like never-ending quarantine, lack of basic necessities, fear of getting infected, lack of enough financial resources and enough information regarding virus, dull and restricted lifestyle caused many negative impacts on individual's mental health causing psychological problems (Brooks et al., 2020).

Out of many other psychological issues caused by pandemic situation of COVID-19, medical health worker faced worsening of Obsessive-compulsive symptoms (Fineberg, 2020). Obsessive Compulsive disorder commonly known as OCD, is a psychological disorder with recurrent thoughts, images and fantasies along with behaviors to act on these thoughts to cope with anxiety regarding that thoughts and fantasies (Bandhari, 2020). Current situation of pandemic seems to be more challenging for the OCD patients especially with hygienic obsessions and compulsions, as OCD patients are dealing with their own anxieties and what seem easy to follow for normal people, is difficult to follow for OCD patients (Cordeiro, 2015).

Although prevalence rate of OCD is higher for women as compared to man i.e., prevalence rate for woman is 1.5% and for man is 1.0% (Fawcett, Power & Fawcett, 2020; Ruscio, 2010). Whereas overall OCD prevalence rate in US is 2.3% (Ruscio, 2010). In Pakistan, prevalence rate of OCD is 46% among 480 participants, where hand-washing and cleanliness (26%) was the most found obsession regardless of gender difference (Akhtar et al., 2017). Now, Shedding light on other explanation of OCD prevalence, mostly prevalence rate of OCD is considered for full-fledged state of OCD without taking in account the bit part of Subsyndromal or Obsessive compulsive symptoms (OCS) (Ruscio, 2010).

Moreover, lockdown situation and social isolation has increased the feeling of loneliness in children as well as in adolescent as their social contacts are restricted (Loades, 2020). As, Loneliness is an unpleasant experience when a person has less or lack of

social relationship as compared to his desires (Psychology Today, 2021). During COVID-19 pandemic, individual who are 18-24 years feel lonely (Mental Health Foundation, 2020). Also, in this social isolation situation, situational loneliness is expected to be high which is also proved fact due to general anxiety found in people regarding social isolation's consequences on mental health (Holmes, 2020; Cowan, 2020).

2. LITRATURE REVIEW

Due to stressful life events, such COVID-19 which was most stressful condition in past years for almost every person around the world, worsening of mental health issues and symptoms is common. Most expectingly, obsession and compulsion symptoms were affected due to long term situation of COVID-19 (Loosen, Skvortsova & Hauser, 2021). People experiencing stressful conditions were more susceptible to develop OC symptoms as compared to other people who haven't experienced stressful condition (Real et al., 2011).

Mathes reported that Obsession compulsion symptoms in childhood were more common in boys while in adolescent and adulthood women reported more symptoms of obsessions and compulsions than males (Mathes, Morabito & Schmidt, 2019). In addition, research conducted to find out the gender difference in indecisiveness, it was reported that female participants were more indecisive and they continued to check and repeat a single act (Rassin & Muris, 2005).

Moreover, some previous researches reported that male were dominant in developing obsession and compulsion symptoms during their childhood and adolescent (Thomsen & Mikkelsen, 1991; Scahill et al., 2003; Mancebo et al., 2008). Whereas there were some studies that reported an opposite finding which reported that males and female were equally affected and both developed symptoms equally (Riddle et al., 1990).

Also, it was reported that symptomatically obsession related to somatic and contamination were mostly seen in males, and in females, sexual obsession was high (Tanidir et al., 2015). Whereas there were some studies conducted in Turkey (Tukel et al, 2004) and in India (Cherian et al., 2014), which reported exactly opposite results of above-mentioned studies. According to these two studies contaminations were more significantly present in female whereas, males had higher level of sexual obsession.

Furthermore, Mataix-Cols reported that boys showed higher level of sexual obsession during research procedure (Mataix-Cols et al., 2008); while according to Fernandez both males and females had same level of sexual obsession and there was no gender difference (Fernandez de la Cruz et al., 2013).

Another study conducted on 229 participants revealed that females were more likely to develop obsession and compulsion symptoms with the presence of other mental health issues as compared to males; it was also reported that female group of participants showed higher level of Obsession-Compulsion Symptoms such as washing and cleaning as compared to male participants (Benatti et al., 2020).

By implying social distancing as a way of stopping the spread of COVID-19, people around the world were separated. They were unable to meet their friends and even family members. They had to stay alone at their residents. This whole situation has increased the people suffering and almost 36% US residents complained about loneliness (Harvard University, 2021).

According to a research, both male and female reported same level of loneliness and no gender difference exist in them (Mahon, Yarcheski, & Yarcheski, 1994). Whereas it was also reported that females with low income and who were living alone during the heightening duration of COVID-19 cases showed higher level of loneliness and other mental health issues as compared to males with same age and income (McQuaid et al., 2021).

Another study conducted in Singapore revealed that in COVID-19 condition, women who had good relationship with her friends and neighborhoods, reported loneliness more than males; whereas male who were living with their friend or a person other than his spouse or living with a child reported higher level of loneliness than females (Takagi, Saito & Chan, 2020).

Hence a review conducted revealed that gender difference existed in experiencing loneliness whereas it was also reported in that review that females complained more about loneliness than they were actually experiencing (Rokach, 2018; Victor & Yang, 2012). According to Borys and Perlman (1985) men complained less about loneliness due to their social image and due to stigmas of the society.

Whereas when loneliness was examined in both genders, it was identified that men experienced more loneliness than females (Aartsen & Jylhä, 2011). But due to social image and stigma, men avoided to accept being lonely. Buetel et al. (2017) revealed that women who lived alone and without any child, used mostly the word lonely. Another explanation was given by Ang (2016), who reported that women experienced or complained more about loneliness as their preference is socialization and relationships whereas males mostly prioritized power over relationship and thus women had more close relationships as compared to males.

The purpose of current study is to find out the impact of COVID-19 pandemic and Lockdown condition with respect to gender difference in vulnerability to develop loneliness and obsession-compulsion symptoms. Previous studies have explained that stressful life events such as COVID-19 pandemic or social isolation and living alone has great influence on developing loneliness and OC symptoms. This pandemic situation is an alarming situation for whole world and is affecting people's mental health.

3. METHODOLOGY

Aim

The aim of the study was to assess the impact of Covid-19 on development of loneliness and obsession compulsion, by taking gender differences into account. The study strives to find out the gender difference in developing loneliness and OC symptoms due to covid-19 situations such as social isolation, worldwide lockdown, unable to meet friends and family. These situation works as stressful events that, in turn, has increased mental health issues in both male and female.

Population

The population of the study was general population of Faisalabad (Pakistan) residing in age range 18 to 60 years old. Sample of the study was consisted of (N= 120) participants including both males (n= 60) and females (n= 60) with average age of 27 ± 6 years old.

Sampling technique

Purposive sampling technique was used to select the sample. The sample of the study was selected by taking demographics and aim of the study. They were selected by researcher and could be considered as the representative of the population.

Research Design

The in-hand study was a 'Cross-sectional survey research design'.

Inclusion Criteria

Inclusion criteria means those characteristics that described that an individual should be included in the research. The inclusion criteria of the study were:

1. General Population was included.
2. Aged 18-60 years.

Exclusion Criteria

Exclusion criteria are those characteristics that eliminated individuals from being included. The exclusion criteria of the study were:

1. Individual aged below 18 and over 60 years were excluded.
2. OCD diagnosed patients.

Operational Definition

Variable 1: Loneliness

Loneliness is a psychological experience of an individual that emerges when the individual experienced inconsistency between his/her perceived social interaction and his/her expected social interactions and social relationships (Fitts, Sebbly & Zlokovich, 2009)

Variable 2: Obsessive-Compulsive Symptoms

Obsessive Compulsive symptoms may include different symptoms about which a person persistently think (obsession); and sometimes also act on those thoughts(compulsions). Its symptoms may include repeatedly checking, fear of getting dirty, washing hands, order of symmetry (lining up things in an order); these thoughts could also be violent, sexual and disturbing (Bhandari, 2020).

Hypothesis

1. There would be no significant difference in developing loneliness and obsession compulsion symptoms among male and female during Covid-19 pandemic.
2. There would be a significant difference in developing loneliness and obsession compulsion symptoms among male and female during Covid-19 pandemic.

Data Collection

For data collection, surveys were conducted using demographic form, UCLA loneliness scale-3 (Russel, 1996), and Y-BOCS (Goodman et al., 1989 a,b).

Instruments

UCLA Loneliness Scale-3: UCLA loneliness scale-3 was developed by Russel in 1996, and is comprised of 20 self-report items. These items quantify internal feelings of an individual regarding loneliness. Items are rated on 4-point Scale range from 1 (indicates 'never') to 4 (indicates 'always'). Among all items, 7 items are reversely scored. Higher total indicates higher level of loneliness. UCLA loneliness scale bear high internal consistency ($\alpha = .96$), it also had $r = .73$ test-retest correlation. Further research had authenticated adequate level concurrent as well as convergent validity of this scale.

Yales-brown Obsessive Compulsive symptoms Scale (Y-BOCS): Y-BOCS is a self-report semi-structured interview form. This scale comprised of 10 items, which are graded from 0 (absence of symptoms) to 4 (severe presence of symptoms). Y-BOCS is highly vulnerable to change in symptoms of OCD and, is used to compare the presence of different types of OCD symptoms. Total scores ranged from 0-35, where 0-13 scores specify mild severity, 14-25 specify moderate severity, 26-34 denote moderate-severity and 35-40 denote extreme severity of symptoms. Y-BOCS covered 5 different dimensions of obsessions and compulsions i.e. control, degree of discomfort, trespassing with personal relationships, resistance and time spent on symptoms. It showed high level of internal consistency (Cronbach $\alpha = 0.83$) (Goodman et al., 1989a,b).

Procedure

In attending study, UCLA loneliness scale-3 by Russel (1996) and Y-BOCS by (Goodman et al., 1989a,b) was used to evaluate the differentiation between genders in developing loneliness and obsession compulsion symptoms. With objective of data scraping together employees of different working places were reached out. Formerly, institutional accrediting was considered, confirming APA ethical standards. Then participants were approached and also, they were apprised of grounds of the attending study. Later on,

their consent was taken about their participation in the study. Moving forward, UCLA loneliness scale-3 and Y-BOCS was imparted to the participant. They were also verbally instructed about how to provide responses on the scales along with demographic interview form. Participants who were clinically diagnosed were excluded. After achieving each step of data collection procedure, data was interpreted according to manual.

Statistics

Statistical Package for Social Sciences (26.0 Version) for Windows was used to run the analysis on the collected data. For the purpose of gender discrimination in evolving loneliness and obsession compulsion symptoms, an independent t-sample test was used.

4. RESULTS

The in-hand research concentrated on evaluating significant difference between genders in developing loneliness and obsession compulsion symptoms. Sample of 120 individuals was selected from different working organizations of Faisalabad, Pakistan. UCLA loneliness scale-3 (Russel, 1996) and Y-BOCS (Goodman et al., 1989a,b) were used as evaluating instruments, in order to measure loneliness and obsession compulsion symptoms. Independent t-sample test was used as a statistical instrument to check the hypothesis. Established results are reported in Tables.

Table 1: Demographic characteristics (N=120)

Variables		f	%
Age	18 to 32 years	104	86.7
	33 to 46 years	13	10.9
	47 to 60 years	03	2.4
Gender	Male	60	50
	Female	60	50
Education	Matric	6	5
	Inter	20	16.7
	Graduation	64	53.3
	Masters	27	22.5
	More	3	2.5
Marital Status	Single	66	55
	Married	54	45
Family System	Joint	53	44.2
	Nuclear	67	55.8
Socio-economic Status	Low	2	1.7
	Middle	115	95.8
	High	3	2.5
Exposed with Covid-19	Yes	20	16.6
	No	100	83.3
Remain in Quarantine	Yes	27	22.5
	No	93	77.5
Social avoidance	Yes	92	76.7
	No	28	23.3
Covid-19 situation	Mild	74	61.7
	Moderate	43	35.8
	Severe	3	2.5

Table 1 revealed demographic Characteristics of study in which N=120 participants included 60(50%) males and 60(50%) females with mean age $M=27.06 \pm 6.615$ years. For Covid-19 related characteristics, 16.6% participants were exposed with covid-19 while 83.3% were not affected. 22.5% participants were quarantined while 77.5% did not quarantine. 76.7% people followed and 23.3% did not follow social avoidance. 61.7% reported mild while 35.8% reported moderate and 2.5% reported severe covid-19 situation in their respective area.

Table 2: Mean, Std. Deviation, t and p values of men (n=60) and women (n=60) on Loneliness and Obsession Compulsion symptoms.

Variables	Gender	N	M	SD	Df	T	P
Loneliness	Men	60	44.98	8.146	59	-3.404	.001
	Women	60	51.98	12.071	59		
Obsession Compulsion	Men	60	13.52	8.938	59	-3.022	.003
	Women	60	18.73	9.947	59		

Table 2 showed differentiation using t-independent sample test, which reported that significant gender difference existed on both loneliness and Obsessive-Compulsive symptoms $p < .001$. Female participants were more prone in developing both loneliness and obsessive-compulsive symptoms.

5. DISCUSSION

Results that indicate that females are more vulnerable to develop loneliness as compared to males, is confirmed by a previous finding i.e. female encounter much more loneliness during covid-19 pandemic and lockdown situation than males (Philpot et al., 2021). Whereas current finding are contrary to Literature, which reported that men has higher level of loneliness than females (Barreto et al., 2021). Another study conducted in Covid-19 lockdown reported that young adult men were at high risk of suffering from loneliness (Wickens et al., 2021). Moreover, researches conducted in Covid-19 lockdown situation revealed that age in men is negatively linked with loneliness, which means younger males are at high level of risk of developing mental health issues i.e. depression, anxiety, loneliness as well as OCD (Ahmed et al., 2020; Bu et al., 2020; Qiu et al., 2020).

Results in Table 2 also reported that females develop Obsession Compulsion symptoms surpassing males. Which is supported by research findings that OCD symptoms is more pervasive among females with 1.5% risk chances of getting obsessive compulsion symptoms as compared to males with 1.0% risk chances. (Fawcett, Power & Fawcett, 2020). Another study advocates the in-hand results stating women show more cleaning, eating and impulse control symptoms as compared to males (Mathis et al., 2011). As attested by meta-analysis, conducted on data gathered from PsychINFO and PubMed, females manifest 1.6% more Obsessions and compulsions than males (Gramingna, 2020). Another study reported that female participants show higher level of obsession compulsion symptoms of washing and cleaning as compared to the males (Benatti et al., 2020). Whereas there are some researches which are opposed to current findings and reported that males develop OCD symptoms anteriorly in their life span than males (Rasmussen & Eisen, 1992, Castle, Deale & Marks, 1995; Lensi et al., 1996; Noshirvani et al., 1991)

6. CONCLUSIONS

The current study focused on gender difference in development of loneliness and OC symptoms. The results clearly indicates that during Covid-19 pandemic the loneliness and OC symptoms were highly observable in female as compared to male. So, there is high need of mental health workers to work more towards the female mental health along with male.

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