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INVESTIGATE AND COMPARE GENDER-SPECIFIC DIFFERENCES IN COPING MECHANISMS AMONG PATIENTS DIAGNOSED WITH OBSESSIVE-COMPULSIVE DISORDER USING THE MEANING-CENTERED COPING SCALE SCORES

Abstract. Introduction: Investigate and compare gender-specific differences in coping mechanisms among patients diagnosed with Obsessive Compulsive Disorder using the Meaning-Centered Coping Scale scores. Background: Obsessive-Compulsive Disorder affects 2-3% of the world's population. Evidence suggests significant gender-based differences in presentation and management. Currently, gender-specific differences in coping mechanisms have been seen as an important area of research. Their impact on treatment outcomes and quality of life remains understudied.

Objective: Our study aimed to investigate and compare gender-specific differences in coping mechanisms among patients diagnosed with OCD using Mean-Centered Coping Scale (MCCS) scores.

Methods: This is a cross-sectional comparative study that was conducted at SKIMS Medical College and HospitalBemina's outpatient psychiatry department. Ethical clearance was taken. Confidentiality and privacy were taken care of. Fifty-five patients (38 females, 17 males) with confirmed OCD diagnoses were recruited and evaluated using the MINI 7.0.2 for diagnosis and MCCS, a 9-item scale measuring various coping strategies. Participants were recruited through consecutive sampling, and data were analyzed using descriptive and inferential statistics.

Results and Discussion: In our study, males had significantly higher overall coping scores (M=28.3, SD=7.4) compared to females (M=25.9, SD=8.1; t=2.34, p=0.023) with a modest effect size (Cohen's d=0.31). A significant interaction between gender and education (F=2.76, p=0.038) was observed. Males demonstrated higher utilization of religious coping, problem-solving approaches, and social support networks compared to females. The mean age of 27.4 years (SD=8.2), with 74.5% from rural areas, was documented.

Conclusion: Our study saw significant gender-based variations in coping strategies among OCD patients, with males showing higher adaptive coping scores. Educational level moderated the relationship between gender and coping mechanisms. Findings emphasize the importance of developing individualized, gender-sensitive approaches in OCD treatment.

Key words : MCCS, MINI7.0.2, Coping score, Sociodemographics of OCD,

Introduction

Obsessive-Compulsive Disorder (OCD) is a significant mental health challenge in modern times affecting at least 2-3% of the population around the world, evidence suggests significant differences in its presentationgenders[1]Gender-specific differ- ences in coping mechanisms have emerged as an important area of research, as these differences can significantly effect treatment outcomes and over- all quality of life for patients with OCD[2].Men and women differ in their approaches tomanaging mental health challenges. Women predominantly demonstrate emotion-focused coping strategies,and seek social support, while men often use problem-focused and action-oriented coping strategies[3,4]. Believed to be an interplay of biological, social, and cultural factors that shape gender-specific responses to psychological distress [5].The Meaning-Centered Coping Scale (MCCS), is a validated instrument that provides a comprehensive framework for assessing various coping strategies employed by individuals withOCD[6]. Many Studieshave revealed import- ant insights into how patients manage their OCD semeiology, yet research specifically examining gender differences in coping strategy selection and

effectiveness remains limited[7] Studiesare evident about distinct patterns of OCD symptom presentation among genders. Women more often report contamination, fears, and cleaning compulsions, while men have checking behaviors and symmetry-related compulsions [8]. The relationship between symptomatic differences and the selection of coping strategies requires further research.The interaction between demographicsand coping mechanisms remains understudied[9].The present study aims to address these knowledge gaps by investigating gender differences in OCD coping mechanisms through analysis of Mean-Centered Coping Scale scores. This research seeks to contribute to the develop- ment of gender-sensitive treatment approaches that better address the specific needs and tendencies of both male and female OCD patients. Understanding these differences could lead to more personalized and effective therapeutic interventions, potentially improving treatment outcomes and patient well-being [10].

AIMS

This study aimed to investigate and compare gender-specific differences in coping mechanisms among patients diagnosed with OCD using Mean-Centered Coping Scale scores.

Objectives:

To compare the overall Mean-Centered Coping Scale scores between male and female OCD patients

To analyze gender-specific patterns in individual coping strategy components

To examine how gender differences in coping mechanisms interact with other demographic variables.

Methodology

This study was a cross-sectional, compara- tive study designed to examine gender differenc- es in coping mechanisms among individuals with Obsessive-Compulsive Disorder (OCD) using the Mean-Centered Coping Scale (MCCS). The 9-item scale measures various coping strategies. Each item is scored on a 7-point Likert scale, with Total scores ranging from 9 to 63, in which higher scores indicate more adaptive coping mechanisms[11]. The study was conducted in the outpatient department of psychiatry at SKIMS MCH Bemina. The Institutional Ethics Committee approved the research protocol. The study was conducted between July 2024 to December2024.written informed consent was taken before participation, and the right to withdraw from the study at any point in time. Participants were recruited using consecutive sampling from the outpatient psychiatric department.55 patients were recruited for the current study. The minimum required sam- ple size was calculated using G*Power analysis with an effect size of 0.5, α error probability of 0.05, and power of 0.80.MINI.7.0.2 was used to evaluate the patient for diagnosis[12]. Sociodemographic information was collected through structured interviews, the Meaning-Centered Coping Scale was administered in a quiet, private setting, and participants were given adequate time to complete the assessment. All questionnaires were checked for completeness. Data analysis was performed using SPSS version 24.0. Descriptive, inferential, and subgroup analysis was performed.

Inclusion Criteria:

Confirmed diagnosis of OCD according to DSM-5 criteria.

Age 18 years and above.

Ability to comprehend and complete the assessment tools.

Willing to provide informed consent

Exclusion Criteria:

Presence of severe psychiatric comorbidities and medical comorbidities.

Acute suicidal ideation.

Cognitive impairment affects the ability to complete assessments.

Current substance use disorder.

Table 1 –Socodemographic variables

Variable	Mean	S.D
Age		
Overall mean age	27.4	8.2
Females	26.8 years	7.9
Males	28.6 years	8.7

Continuation of the table

Variable	N	%
Residence		
Rural	41	74.5
Urban	14	25.5
Marital status		
Married	23	41.8
Unmarried	30	54.5
Divorced	2	3.7
Gender		
Female	38	69.1
Male	17	30.9
Educational Status:		
Illiterate	8	14.5
Primary	12	21.8
Secondary	15	27.3
Graduate	14	25.5
Postgraduate	6	10.9
Duration Categories:		
< 6 months	8	14.5%
6-12 months	12	21.8%
13-24 month	15	27.3%
2-5 years	14	25.5%
5 years	6	10.9%

Table 1 indicates that the overall mean age is 27.4 years (SD = 8.2), Females are slightly younger with a mean age of 26.8 years (SD = 7.9), Males have a higher mean age at 28.6 years (SD = 8.7), Majority lives in rural areas (74.5%, n=41), Only a quarter of participants are from urban areas (25.5%, n=14), Most participants are unmarried (54.5%, n=30). A substantial portion is married (41.8%, n=23), and a small fraction is divorced (3.7%, n=2). Secondary education is the most common (27.3%, n=15), Graduate level follows closely (25.5%, n=14), Primary education (21.8%, n=12), Illiteracy rate is notable (14.5%, n=8), Postgraduate education is the least common (10.9%, n=6), The distribution mirrors exactly the educational status percentages, Mid-range durations (13-24 months) are most com- mon (27.3%, n=15),2-5 years and 6-12 months cate- gories show moderate representation, Both shortest (<6 months) and longest (>5 years) durations are less frequent.

Table 2 – Inferential analysis(Gender differences in total MCCS Score)

Gender	Mean	S.D	T-Test	P value	Cohens d
Males	28.3	7.4	2.34	0.023	0.31
Females	25.9	8.1			

Table 2 above indicates that males had a mean score of 28.3, indicating their average level of coping strategies. Females had a mean score of 25.9, slightly lower than males. S.D. = 7.4 in males showing the spread of scores around their mean, and in females with S.D. = 8.1, indicating slightly more variability in scores compared to males. A T-Test value of 2.34 indicates males scored higher than females. p-value of 0.023 Indicates that the difference between male and female scores is unlikely to have occurred by chance.0.31 represents a small to medium effect size, the difference is statistically significant, the practical difference between male and female coping strategies is modest.

Table 3 – Annova analysis

Source of variation	F value	P value
Gender Education Gender and education	4.82 2.84 2.76	0.333 0.035 0.038
Gender Marital status Gender and marital	4.59 3.06 3.12	0.03 0.55 0.083
Gender Residence Gender and residence	4.73 3.67 2.80	0.034 0.061 0.100

Table3 shows Gender effects are significant (F=4.82, p=0.033),Education has a significant effect (F=2.84, p=0.035),Residence shows marginal significance (F=3.67, p=0.061),Marital status effect is not significant (F=3.06, p=0.055),the interaction effects between gender and other factors are mostly non-significant (p>0.05), except for gender-education interaction (p=0.038).

Table 4 – Analysis of MCCS Scoring

Variable	Average score	S.D
Gender Female Male	 24.41 35.09	 8.97 9.88
Religious Coping Males Females	 5.0 2.27	 2.19 1.56
Problem-solving Males Females	 4.27 2.37	 2.34 2.16
Social Support Males Females	 4.09 2.37	 2.47 1.91
Thought Suppression Males Females	 3.82 2.44	 2.59 1.89
Seeking Reassurance Males Females	 3.81 2.71	 1.90 1.64

Table 4 explains Males showed higher total MCCS scores (M = 35.09, SD = 9.88), Females showed lower total MCCS scores (M = 24.41, SD = 8.97),In Religious Coping Males reported significantly higher use of religious coping strategies(Males: M = 5.09, SD = 2.19)Males showed a stronger tendency toward problem-solving approaches(Males: M = 4.27, SD = 2.34). Moderate Differences were seen in Social Support, Males reported higher utilization of social support networks((Males: M = 4.09, SD = 2.47). Thought Suppression showed Males used greater thought suppression strategies: (M = 3.82, SD = 2.59). The smallestdifference was seen in Seeking Reassur- ance (Q1) which is Males: M = 3.18, SD = 1.90 and females: M = 2.71, SD = 1.64.

Discussion

Our study resulted in a mean age of 27.4 years, a dominance of females, and a majority of the population was rural, unmarried having a secondary level of education. The majority of the patient population had a duration of symptoms greater than one year,the findings of the sociodemographic profile were consistent with the study by Beatrice et al[13].Our study evaluated gender-specific differences in coping mechanisms among patients diagnosed with OCD using Meaning-Centered Coping Scale (MCCS) scores.Our studyfindingsrevealed significant gender-based variations in coping strategies, with several noteworthy patterns emerging from the analysis. The study found that male participants demonstrated significantly higher coping scores (Mean = 28.3, SD = 7.4) compared to females (Mean = 25.9, SD = 8.1; t = 2.34, p = 0.023). This aligns with previous research by Mathis et al[14].Effect size (Cohen's d = 0.31) suggests amodest practical difference between genders, consistent with the findings of the study[13].Sociodemographic Influences on Gender-Based Coping A significant interaction between gender and education (F = 2.76, p = 0.038) emerged as a crucial finding. This interaction suggests that educational attainment moderates the relationship between gender and coping mechanisms, supporting literature by Mckay andAbramowitch[15,16] who emphasized the role of education in shaping coping strategies among OCD patients. The predominantly rural sample (74.5%) adds a unique contextual dimension to these findings, particularly given the marginally significant effect of residence (F = 3.67, p = 0.061).The reasonis the location of our multispecialityhospital in a rural area. The distribution of educational status in our sample revealed interesting patterns, with secondary education being most common (27.3%) followed by graduate level (25.5%). This educational level may influence the observed gender differences in coping strategies echoed by a study by Perez et al [17]. The age distribution analysis revealed that males (Mean = 28.6 years) were slightly older than females (Mean = 26.8 years). This age difference, though minor , may contribute to the observed variations in coping strategies, consistent withstudies by Rosa et al[18]showing age-related evolution in OCD coping mechanisms.

Implications

The findings have several important clinical implications. First, the gender differences in coping scores suggest the need for gender-sensitive therapeutic approaches. Second, the significant interaction between gender and education indicates that therapeutic interventions should consider both factors when designing treatment plans.

Limitations

The uneven gender sample (69.1% female) may affect the generalizability.

The predominantly rural setting might limit the applicability of results to urban populations.

Sample from a single tertiary care hospital.

Future Research Directions :

To assess longitudinal changes in gender-specific coping mechanisms

To investigate the role of cultural factors in shaping gender differences in OCD coping strategies

Evaluate the interaction between gender, education, and treatment outcomes

Conclusion

Our study documented evidence for significant gender differences in coping mechanisms among OCD patients, a moderate effect of educational status, and potential influence by residential settings. Our findings emphasize the need for individualized, gender-sensitive approaches in OCD treatment while considering educational and demographic factors.

Abbreviations:

MCCS: Meaning-Centered Coping Scale.

MINI: Mini International Neuropsychiatric Interview.

OCD: Obsessive-compulsive disorder

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