

Research Paper

Coping Mechanism and Psychological Well-Being among Women with PCOS

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ABSTRACT

Background: Polycystic ovary syndrome (PCOS) is a hormonal disorder common among women of reproductive age. PCOS can have significant psychological effects on individuals affected by the condition. In this study, women with polycystic ovarian syndrome (PCOS) are examined for the relationships between their coping mechanisms and psychological wellbeing. **Materials and Methods:** The study recruited eighty-eight PCOS individuals of ages 18 to 35, purposively from Lucknow, Uttar Pradesh. Psychological Well-Being and Brief COPE were administered on sample. Descriptive statistics and correlation were used to fulfil the objective of the study. **Results:** The Pearson correlation study showed a strong relationship between coping mechanisms and well-being. Positive but low correlations were found between problem-focused coping and domains of psychological well-being e.g. environmental mastery, positive relation, purpose in life, self-acceptance total scores of psychological well-being. Emotion-focused coping displayed positive but weaker correlation with personal growth, positive relation, purpose in life, self-acceptance total scores of psychological well-being. No significant result was reported between avoidance – focused coping strategies and domains of psychological well-being. **Conclusion:** This study emphasizes how important coping mechanisms are for women with PCOS in terms of their psychological health and quality of life. Tailoring therapies to address coping mechanisms, specifically problem-focused coping, may improve the overall well-being of women with PCOS.

Keywords: PCOS Patients, Coping Mechanisms, Psychological Well-Being

Polycystic ovary syndrome (PCOS) stands as the most prevalent endocrine disorder among women of reproductive age in Western society, impacting approximately 20% of this demographic (Balen and Michelmore, 2002; Michelmore et al., 1999; Balen et al., 2006a). Women with PCOS may have infrequent or prolonged menstrual periods or excess male hormone (androgen) levels. The ovaries may develop small collections of fluid (follicles) and fail to regularly release eggs. The exact cause of PCOS is unknown, but factors such as genetics, insulin resistance, and inflammation play a role. Symptoms can vary widely but may include: Irregular periods, excess androgen and polycystic ovaries. Other symptoms may include weight gain, difficulty losing weight, fatigue, mood swings,

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and infertility. PCOS is associated with an increased risk of developing conditions such as type 2 diabetes, high blood pressure, high cholesterol, sleep apnoea, and endometrial cancer. Women with PCOS may experience feelings of frustration, sadness, anxiety, or depression due to the challenges of managing their condition and its impact on their daily lives.

Patients with PCOS have significantly lower quality of life scores than patients without PCOS (Jones, 2008). Obesity, hyperandrogenism, PCOS-related complications and depression seem to have a negative impact on the quality of life of these patients, although they are not systematically managed (Sidra, Tariq, Farrukh and Mohsin, 2019). Patients with PCOS appear to have more concerns about their weight and less appreciation and evaluation of their appearance and health (Deeks, Gibson-Helm, Paul, Teede, 2011). These factors are predictive of a higher risk of depression and higher anxiety scores. Patients with PCOS have significantly more depressive disorders and anxiety disorders (Dokras, 2012; Dokras et al, 2018; Veltman-Verhulst et al 2012; Cooney et al 2017; Hung et al 2014). Indeed, these patients have three times more depressive symptoms and five times more anxiety disorders than patients without PCOS (Cooney et al 2017). Obesity and body image dissatisfaction are known risk factors for eating disorders (Hudson, 2007).

Lazarus and Folkman's (1984) stress coping theory suggest that coping strategies play a vital role in regulating emotions and navigating stressors. Coping strategies encompass a range of cognitive and behavioural efforts utilized to interpret and address stressful situations (Kheirabadi, 2010). These strategies are dynamic and ongoing processes, typically categorized into two main types: problem-solving and emotional coping strategies. Problem-solving coping strategies involve individuals' proactive and constructive actions aimed at addressing stressful situations. These actions are focused on initiating changes or reducing the impact of the stressor, with the goal of either eliminating or altering the source of stress itself. By engaging in problem-solving approaches, individuals strive to actively manage and mitigate the challenges they encounter, thereby enhancing their ability to cope effectively with stress (Talepasand S, Mahfar, 2018). Emotion-focused coping strategy comes into play when the individual perceives the situation or event as unchangeable, or when they believe it to be so. In such cases, the focus shifts from attempting to alter the external circumstances to managing the emotional consequences of the stressful event. This strategy involves efforts to regulate one's emotional responses and maintain emotional balance by controlling the emotions elicited by the stressful situation. By employing emotion-focused coping strategies, individuals aim to cope with the distressing aspects of the situation and navigate through the emotional challenges they encounter. Effective coping involves adopting adaptive and problem-focused approaches, which are instrumental in addressing stressors. Conversely, maladaptive coping styles, like avoidance and suppression of expression, tend to be less effective and are associated with adverse emotional outcomes. Benson et al.'s (2010) research underscores how women with Polycystic Ovary Syndrome (PCOS) frequently employ maladaptive coping mechanisms, such as heightened avoidance and suppression of expression. These behaviors may intensify their psychological distress, indicating the significance of tailored interventions to assist individuals in managing stressors, especially those dealing with chronic health conditions like PCOS.

The research findings highlight the critical role of coping strategies in influencing the well-being of women with PCOS. Specifically, studies have revealed substantial associations between problem-solving coping strategies and mental health outcomes. Utilizing problem-oriented coping styles has been identified as a means to effectively navigate the demands and limitations imposed by the environment, ultimately enhancing the overall well-being of

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individuals affected by PCOS. Recognizing effective coping mechanisms as a mediating variable in the context of disease-related stress is of paramount importance. By understanding and promoting adaptive coping strategies, healthcare professionals can better support individuals with PCOS in managing their condition and improving their well-being. This underscores the significance of integrating coping skills training and psychological support into comprehensive treatment approaches for PCOS.

Therefore, present study seeks to determine the relationships between coping mechanisms and psychological well-being among women with polycystic ovary syndrome (PCOS).

METHODS

Participants

In this study, eighty-eight Lucknow, Uttar Pradesh, individuals with PCOS diagnosis between the ages of 18 and 35 took part. The purposive sampling was used to collect the sample.

Inclusive Criteria: Participants need a confirmed diagnosis of Polycystic Ovary Syndrome (PCOS) documented by a qualified healthcare provider. This ensures the study concentrates solely on individuals with the condition. Participants aged between 18-35 years old will be recruited. This study includes only women participants.

Exclusive Criteria: Individuals without a confirmed PCOS diagnosis will be excluded to maintain sample homogeneity and relevance to the target population. Participants outside the 18-35 age range are excluded to uphold sample consistency and align with the age group most affected by PCOS.

Tools

Following tools were applied for this research:

- **Information schedule:** Questions about the subject's age, sex, education, employment, socioeconomic status, kind of family, and birth order were included in this sheet.
- **Brief-COPE:** This is a 28-item survey that evaluates how well-coping mechanisms work when faced with stressful situations. The 60-item COPE scale that Carver et al. (1989) produced, which drew from a variety of coping methods, was the source of this reduced version. Problem-focused coping, emotion-focused coping, and avoidant coping were the three main components identified by Dias et al. (2012) after their examination of the measure.
- **Psychological Well-being:** Psychologists Carol D. Ryff created the 42-item Psychological Wellbeing (PWB) Scale, which assesses six aspects of well-being and satisfaction: self-acceptance, positive relationships with others, environmental mastery, personal growth, and autonomy (Ryff et al., 2007; based on Ryff, 1989). High internal consistencies, which ranged from .87 to .96 and indicated strong reliability across the six subscales, were used to illustrate the dependability of Ryff's Scales of Psychological Well-Being.

Procedure

The researcher collected data from a wide range of individuals including friends, relatives, and college students who have been officially diagnosed with PCOS. An orientation session was given to the participant by the researcher. This session was to impart information

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regarding the purpose of the study and for seeking their informed consent. They were told that study will ensure that their information will remain confidential. Informed consent form was given to the participants who fulfilled the inclusion criteria. After obtaining consent from the participants, the researcher gave the questionnaires to the participants. Clear instructions were provided to the participants, ensuring they understood how to complete the questionnaires effectively. After the completion the questionnaire was collected and further analysis was done.

Statistical Analysis

Descriptive statistics and correlation was calculated.

Research Design

Present study employed correlational research design to follow the objectives of the study.

RESULTS

To check the outliers the researcher applied the boxplot. A boxplot or diagram (otherwise known as a boxplot), is a graph summarising a set of data. Thirteen outliers were identified, so the analysis was carried out after the exclusion of data. Table 1 provides the demographic information of eighty- seven participants who were included after the data cleaning.

Table 1: Demographic Characteristics of Patients

VARIABLES		FREQUENCY	PERCENTAGE
SEX	Female	87	100
MARITAL STATUS	Married	10	11.36
	Unmarried	78	88.63
EDUCATION	Undergraduate	52	59.09
	Postgraduate	36	40.90
LOCALITY	Urban	77	87.5
	Semiurban	11	12.5
SOCIO- ECONOMIC STATUS	High	7	7.95
	Middle	75	85.22
	Business	6	6.81
OCCUPATION	Unemployed	76	86.36
	Job	7	7.95
	Business	3	3.40
	Gov/Private	2	2.27
FAMILY TYPE	Nuclear	61	69.3
	Joint	27	30.6
BIRTH- ORDER	Middle	22	25
	Youngest	38	43.18
	Eldest	24	27.27
	Single	4	4.54

Table 2 explains the value of descriptive statistics (Mean and SD) on psychological well-being and Brief COPE measure.

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Table 2: Mean and SD values of measures of Brief- COPE and psychological Well- being

Measures and their Domains		Mean	SD
Brief- COPE	Problem- focused coping	20.21	4.86
	Emotion- focused coping	27.89	4.51
	Avoidant coping	15.02	3.53
Psychological Well- being	Autonomy	25.97	4.68
	Environmental Mastery	25.85	4.84
	Personal Growth	24.99	4.51
	Positive Relation	26.99	4.12
	Purpose In Life	23.94	3.51
	Self- Acceptance	24.29	3.57
	Total score	152.02	17.45

Table 3 explain the value of correlation coefficient between psychological well- being and coping mechanism.

Table 3: Correlation between coping mechanism and Psychological Well-being (N=87)

PSYCHOLOGICAL WELL-BEING	COPING MECHANISM		
	Problem- Focused	Emotion- Focused	Avoidant- Focused
Autonomy	.076	-.158	-.067
Environmental Mastery	.282**	.015	-.087
Personal Growth	.078	.330**	.112
Positive Relation	.375**	.274*	-.013
Purpose In Life	.333**	.478**	.177
Self- Acceptance	.231*	.299**	.069
Total	.321**	.269*	.033

In table 2 Pearson correlation study shows a strong relationship between coping mechanisms and well- being. Positive but low correlations were found between problem-focused coping and domains of psychological well- being e.g. environmental mastery, positive relation, purpose in life, self- acceptance total scores of psychological well-being. Emotion-focused coping the displayed positive but weaker correlation with personal growth, positive relation, purpose in life, self- acceptance total scores of psychological well-being. No significant result was reported between avoidance – focused coping strategies and domains of psychological well- being.

DISCUSSION

For women with Polycystic Ovary Syndrome (PCOS), the tables show correlations between psychological well-being and coping strategies. These correlations provide important insights into the intricate interactions between these variables. Significant positive correlations have been shown between problem-focused coping and a number of psychological well-being constructs, which implies that women who utilize problem-focused coping techniques often have better psychological well-being in all of these areas. When it comes to psychological well-being, emotion-focused coping, on the other hand, shows fewer positive relationships, while avoidant coping strategies show no significant correlations, suggesting potentially harmful consequences on mental health. Morshedi, Salehi, Farzad, Hassani and Shakibazadeh (2021) found a relationship between emotional coping strategy and problem- solving coping strategy with quality of life. Kolahi, Asemi,

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Mirzaei, Adibi, Beiraghdar, and Mehr (2015) also reported a significant relationship between the quality of life and coping strategies e.g. problem solving, cognitive, emotional and social support and quality of life has the highest correlation with emotional strategies. Women with PCOS often feel less satisfied with their appearance and exhibit higher levels of social anxiety and fear. This increased anxiety can lead to social isolation, resulting in heightened interpersonal sensitivity and difficulty conforming to social norms (Kafaei-Atrian et al., 2019; Tehrani, 2017; Açmaz, 2013). Research has shown that emotional issues, such as anxiety and depression, are more common in women with PCOS than in those without the condition (Scaruffi, 2014). The clinical symptoms of PCOS are closely linked to psychological distress and due to the greater emotional challenges faced by women with PCOS (Açmaz, 2013), they are more likely to rely on underdeveloped defence mechanisms dealing with life's problem and stress (Benson, 2010).

Limitations

The major limitation of the present study was the small sample size.

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Conflict of Interest

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