

## Beyond Diagnosis: The Psychological Realities of Women with PCOS – A Systematic Review Aaliya Akhtar\* and Tawseefa Qadir\*\*

### Abstract

Polycystic Ovary Syndrome (PCOS) is a multifaceted endocrine disorder affecting women of reproductive age, with profound implications for physical and psychological well-being. This systematic review, conducted in accordance with PRISMA guidelines, aimed to synthesize empirical evidence on the psychological dimensions of PCOS, including depression, anxiety, coping mechanisms, ego-resiliency, and body image dissatisfaction. A total of 346 articles were initially identified through comprehensive database searches. After screening and eligibility assessment, 102 articles met the inclusion criteria. The results indicate elevated rates of depression and anxiety among PCOS populations, significant associations with maladaptive coping styles, and prevalent body dissatisfaction. Notably, ego-resiliency emerged as a potential protective factor, though under-researched. Identified gaps include limited longitudinal studies, cultural perspectives, and intervention-based research. This review emphasizes the need for integrative clinical approaches that consider both physical and psychological care in PCOS management.

Keywords: PCOS, psychological health, anxiety, depression, coping mechanisms, body image, ego-resiliency.

### Introduction

Polycystic Ovary Syndrome (PCOS) is one of the most common endocrine disorders among women of reproductive age, with global prevalence estimates ranging from 2.2% to 26.7% depending on diagnostic criteria. Characterized by hyperandrogenism, ovulatory dysfunction, and polycystic ovarian morphology, PCOS not only impairs reproductive and metabolic health but also exerts substantial psychological burdens. Although research has largely focused on its metabolic and reproductive complications—such as insulin resistance, infertility, and increased cardiovascular risks—there is growing recognition of its psychological sequelae. Elevated rates of depression, anxiety, low self-esteem, and body dissatisfaction are reported among PCOS populations. The condition's visible symptoms, societal stigma, and chronicity further compound emotional distress, affecting quality of life. The objective of this review is to systematically examine empirical literature on psychological health outcomes in women with PCOS, exploring the role of coping strategies, ego-resiliency, and body image concerns, while identifying gaps and future research directions.

### Methods

A comprehensive electronic literature search was conducted across databases including PubMed, PsycINFO, Korean Psychological Association, Taylor & Francis Online, and Wolters Kluwer/Ovid. Search terms included “Polycystic Ovary Syndrome and psychological health,” “PCOS and coping,” and “PCOS and body image dissatisfaction.” The PRISMA 2020 model guided the selection process. Inclusion criteria were: (1) peer-reviewed empirical or review articles in English, (2) studies on PCOS populations evaluating psychological outcomes, (3) use of validated psychological measures, and (4) publications from the past two decades. A total of 346 records were initially identified. After title and abstract screening, 210 full-text articles were assessed, and 102 were included in the final synthesis.

Fig.1: PRISMA Flow Diagram Depicting the Study Selection Process for the Systematic Review on the Psychological Realities of Women with PCOS

### Results and Discussion

This systematic review synthesizes findings across six key psychological domains impacted by Polycystic Ovary Syndrome (PCOS): psychological well-being, stress and coping, ego-resiliency, body dissatisfaction, gender and age differences in body image, and social support. Data were extracted from 346 screened articles, of which 102 met full inclusion criteria. The results are presented thematically with empirical prevalence data where available and followed by a table identifying research gaps per domain.

#### 1. Psychological Well-Being

Women with PCOS experience a substantially higher prevalence of common mental disorders compared to non-PCOS populations. According to Dokras et al. (2018), PCOS increases the odds of anxiety disorders by **6 times** and depressive disorders by **4 times**. A meta-analysis by Cooney et al. (2017) reported depression rates of **37%** and anxiety at **42%**, significantly higher than controls at **14.2%** and **8.5%** respectively (Veltman-Verhulst et al., 2012).

These elevated risks are attributed to the interplay of hormonal dysfunction (e.g., hyperandrogenism), metabolic disturbances (e.g., insulin resistance), and psychosocial stressors, such as infertility and stigma. Despite the volume of literature, most research is cross-sectional, limiting insights into causality and longitudinal mental health trajectories.

#### 2. Stress and Coping Mechanisms

PCOS has been associated with heightened physiological stress responses and increased hospital admissions for stress-related disorders (Kerchner et al., 2009). The burden of visible symptoms—such as hirsutism, acne, and obesity—intensifies psychological distress (Mansson et al., 2008).

Passive coping strategies, including **avoidance** and **ruminations**, are commonly reported and are significantly associated with increased levels of

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depression and anxiety (Meyer et al., 2005). In contrast, active coping mechanisms—such as **problem-solving** and **cognitive restructuring**—are linked with better emotional outcomes (Thompson et al., 2017). However, Benson et al. (2010) observed that passive coping is disproportionately prevalent in PCOS populations, suggesting the need for targeted intervention programs.

**5. Gender and Age Differences in Body Image Perception**

Gender disparities are evident, with females significantly more likely than males to perceive themselves as overweight—even **within a healthy BMI range** (Hancock, Jung & Petrella, 2012). Melching et al. (2016) further noted that **female adolescents internalize sociocultural ideals more**

**Table 1: Gap Identification Across Psychological Domains of PCOS**

Domain	Established Knowledge	Identified Research Gaps
<b>1. Psychological Well-Being</b>	High prevalence of anxiety and depression in PCOS due to hormonal, metabolic, and psychosocial stressors.	Limited culturally sensitive studies; need for longitudinal data to establish causal pathways
<b>2. Stress &amp; Coping Mechanisms</b>	PCOS patients exhibit elevated physiological and psychological stress; coping styles influence psychological outcomes.	Lack of clarity on interaction between coping style and symptom type; under-researched population subgroups.
<b>3. Ego-Resiliency</b>	Preliminary evidence links higher ego-resiliency with lower emotional distress in PCOS patients.	Scarcity of empirical studies; lack of validated resilience-specific intervention trials in PCOS populations.
<b>4. Body Dissatisfaction</b>	High body image dissatisfaction due to symptoms like hirsutism and obesity; impacts self-esteem, mood, and behavior.	Inadequate research on male comparisons, adolescent trajectories, and intervention-based improvements in body image.
<b>5. Gender and Age Differences</b>	Women and adolescent girls show higher internalization of appearance ideals and body dissatisfaction compared to males.	Sparse cross-cultural and developmental analyses of gender-based and age-specific body image perceptions in PCOS.
<b>6. Social Support</b>	Low perceived support linked to increased distress; online groups show promise in enhancing mental health.	Underexplored role of social support as a moderator/mediator; lack of data on longitudinal outcomes and sociocultural variances.

**3. Ego-Resiliency**

Although research in this domain remains sparse, ego-resiliency appears to act as a psychological buffer against PCOS-induced stress. Preliminary findings by Williams et al. (2016) suggest that individuals with higher ego-resiliency report significantly lower levels of depressive symptoms and better quality of life. Nonetheless, empirical studies quantifying ego-resiliency within PCOS populations are rare, and no large-scale interventions currently aim to enhance this trait. This highlights a critical area for future research and psychological skill-building programs.

**4. Body Dissatisfaction and Self-Esteem**

Body image disturbance is a recurring theme across studies on PCOS. Veltman-Verhulst et al. (2012) noted that **over 60%** of women with PCOS report dissatisfaction with their appearance, often related to weight gain, hirsutism, or acne.

Such dissatisfaction is associated with low self-esteem, social anxiety, depression, and suicidal ideation (Kwon & Kim, 2020; Noh & Choi, 2009). Adolescents are particularly susceptible due to developmental sensitivity to appearance and peer comparison. Additionally, studies show that body dissatisfaction correlates with engagement in **unhealthy weight control behaviors** (Ucar et al., 2010).

**intensely**, heightening vulnerability to body image concerns.

Age also plays a role. According to Yun (2020b), body dissatisfaction intensifies during adolescence, paralleling increased self-awareness and sensitivity to external feedback. However, longitudinal studies examining these trajectories in PCOS-affected populations are lacking.

**6. Social Support and Psychosocial Buffering**

Low levels of perceived social support have been identified as a significant predictor of poor psychological outcomes in PCOS populations (Cinar et al., 2011). Women reporting strong familial and peer support structures tend to show lower depression and anxiety scores and improved adherence to medical recommendations.

Despite its significance, social support remains underrepresented in PCOS mental health research. Very few studies have quantitatively assessed how different types of support (emotional, instrumental, informational) moderate psychological outcomes, representing a notable research gap.

**Conclusion**

This systematic review provides compelling evidence of the substantial psychological burden associated with Polycystic Ovary Syndrome (PCOS), highlighting consistently elevated rates of depression, anxiety, and body dissatisfaction across multiple

studies. The findings elucidate the complex interplay between biological, psychological, and social determinants that shape the mental health trajectories of women with PCOS. Notably, hormonal imbalances, visible phenotypic manifestations, and metabolic dysfunctions are compounded by negative body image, inadequate coping mechanisms, and limited perceived social support—each of which significantly contributes to adverse psychological outcomes.

The review further identifies critical gaps in the literature, particularly in domains such as ego-resiliency and structured social support systems, which remain underexplored yet appear to hold considerable potential for mitigating distress in this population. Similarly, gendered sociocultural expectations and age-specific vulnerabilities, especially among adolescents, have emerged as salient factors warranting deeper investigation.

Importantly, the cumulative evidence underscores the necessity of integrating psychological screening and interventions into standard PCOS management protocols. The transition from a purely biomedical framework to a biopsychosocial model is both timely and essential, with emphasis on resilience training, body image restructuring, stress management, and the enhancement of social support networks.

Future research should prioritize longitudinal designs, culturally contextualized interventions, and multi-level approaches that bridge endocrinological care with psychological support. Such strategies will be critical in improving health-related quality of life and ensuring comprehensive, patient-centered care for women affected by PCOS.

In sum, this review affirms that psychological morbidity in PCOS is both prevalent and multifaceted. Addressing these concerns is not peripheral but central to effective management, and requires a sustained commitment to interdisciplinary care and evidence-informed mental health integration.

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