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Anger, Self-Esteem & Perceived Social Support Among PCOD AND Non-PCOD Females

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Abstract

The present research aimed to explore the correlation between anger, self-esteem, and perceived social support among females diagnosed with Polycystic Ovarian Disease (PCOD) and those without the condition (Non-PCOD females). PCOD is a common hormonal disorder that can affect emotional well-being, mental health, and social interactions. Given that psychological factors such as aggression, self-esteem, and social support play a crucial role in overall mental health, this study aimed to investigate whether these variables differed between PCOD and Non-PCOD females and whether they were correlated. .The study utilized three well-established psychological tools to measure the selected variables. Anger and aggression levels were assessed using the Buss-Perry Aggression Questionnaire (BPAQ), developed by Arnold H. Buss and Mark Perry in 1992. Self-esteem was evaluated using the Rosenberg Self-Esteem Scale (RSES), a widely used tool developed by Morris Rosenberg in 1965. Lastly, perceived social support was measured through the Multidimensional Scale of Perceived Social Support (MSPSS), created by Zimet, Dahlem, Zimet, and Farley in 1988. A total of 63 females participated in the study, with 32 PCOD females and 31 Non-PCOD females, aged between 16 and 39 years. Statistical analyses revealed that there are significant differences between the two groups in terms of aggression, self-esteem, and perceived social support. Furthermore, the correlational analysis shows the differences in the relationship between the variables chosen but it was not statistically significant.

Keywords: Polycystic Ovarian Disorder (PCOD), Anger, Self Esteem, Perceived Social Support, Psychological Well Being, Holistic Treatment Approach

1. Introduction

Polycystic Ovary Disorder (PCOD) is a multifaceted, lifelong condition that is suffered by millions of females across the globe, not only their physical but also their emotional and psychological lives. It has been estimated that 5-10% of females of reproductive age suffer from PCOD (March et al., 2010), ranking it as one of the most prevalent endocrine disorders in females. PCOD remains largely underappreciated despite its ubiquitous prevalence, many being dismissed as having an abnormal period or weight gain. For the females themselves, things are far more complicated.

PCOD is distinguished by endocrine disturbance, metabolic derangement, and infertility. By the Rotterdam Criteria (2003), a woman would be diagnosed with PCOD if she has two or more of the following:

1. Hyperandrogenism – excess production of male hormones, leading to symptoms like acne, excessive hair growth (hirsutism), and baldness.
2. Ovulatory dysfunction – abnormal or irregular menstrual cycles, which normally lead to infertility.
3. Polycystic ovaries – several small follicles in the ovaries, which can be detected on ultrasound.

While these diagnostic criteria assign PCOD a medical label, they do not capture the lived experience of females who are forced to live with the daily frustrations of the condition. From the frustration of unexplained weight gain to the emotional pain of infertility, PCOD is a disorder, to be sure, but more than that, it is a very intimate and often painful experience that affects a woman's self-esteem, feelings, relationships, and overall quality of life.

How PCOD Develops and When It Starts:

PCOD typically begins during adolescence, though it can go undiagnosed until adulthood. The exact cause of PCOD is still not fully understood, but research suggests that it is a result of hormonal imbalances, genetic factors, and insulin resistance. The condition starts when the ovaries produce an excessive amount of androgens (male hormones), which disrupt normal menstrual cycles and ovulation. This leads to irregular or absent periods, weight gain, acne, excessive hair growth (hirsutism), and fertility issues.

Insulin resistance plays a crucial role in the development of PCOD. When the body does not use insulin efficiently, it leads to higher insulin levels, which in turn stimulate the ovaries to produce more androgens. This creates a vicious cycle where hormonal imbalances worsen over time, leading to more severe symptoms. Additionally, genetic predisposition is another significant factor—females with a family history of PCOD are at a higher risk of developing the disorder.

PCOD: More Than a Medical Condition

For the majority of females, the PCOD saga begins in adolescence. Irregular periods, facial hirsutism, and unpredictable acne eruptions become a cause of shame at an age when self-esteem and social acceptance are most fragile. Some females recall dreading school because of teasing or callous remarks about their appearance. Others speak of the shame of seeing friends indulge in food without restraint while they struggle with uncontrollable weight gain on strict diets and exercise.

When females reach adulthood, the issues of PCOD shift. The effects of the condition on fertility are devastating to those females who wish to conceive. Most females feel inferior, guilty, or even ashamed, particularly when confronted by societal and family expectations about marriage and motherhood. "Why can't my body do what it's supposed to do?" is a self-blaming thought that many PCOD females confront. This is also compounded by medical gaslighting—when doctors dismiss their symptoms, suggesting that they "just lose a little weight" or "stop worrying so much," without so much as taking the nuances of the condition seriously.

The emotional impact of PCOD extends beyond fertility. The ongoing battle with symptoms like chronic acne, thinning hair, and mood swings exacts a huge cost on one's self-esteem. Some females miss social gatherings, dreading the interaction with people who will comment unfavorably on their looks. Others become depressed and anxious, feeling trapped in a body they no longer recognize. The chronic nature of PCOD—acknowledging there is no "cure," only control—can be debilitating. It is not living with one symptom; it is living with fighting multiple battles every day.

The Role of Anger in PCOD

Anger is a natural emotional response to situations that cause frustration, injustice, hurt, or perceived threats. It is a basic human emotion that signals when something is wrong, unfair, or out of our control. Anger can vary in intensity, ranging from mild irritation to intense rage.

One of the most under-treated emotional responses in PCOD females is anger. Anger is a misunderstood emotion—it is not so much about "being angry," but also about feeling frustrated, unheard, and powerless. PCOD females are higher on anger than Non-PCOD females according to Weiner et al. (2004). Why?

Frustration with Symptoms: Most females are frustrated with their bodies for not behaving the way they want. The fact that they cannot control their weight despite effort, the fact that acne continues to persist despite treatment, and the mood swing due to hormonal changes are reasons for constant frustration.

Medical Neglect and Misdiagnosis: PCOD is frequently misdiagnosed or dismissed by medical professionals. females go years without a proper diagnosis, enduring mysterious symptoms with no cause. Even after diagnosis, treatment is frequently only birth control pills and diet and exercise, which do not work for all females. This absence of complete care can make females feel belittled and dismissed.

Social Insensitivity and Stigma: Society does not want to acknowledge the challenges of females with PCOD. Comments such as "Why don't you lose weight?" or "You should take better care of your skin" are not only insensitive but also very hurtful. Most females internalize the blame, and it causes resentment, self-doubt, and social withdrawal.

Impact on Relationships: PCOD not only impacts the individual but also romantic, friend and family relationships. females cannot feel beautiful or desirable due to excessive hair growth or weight gain. Others feel judged by partners who are unable to comprehend the emotional impact of PCOD.

It is crucial to recognize and address this anger because unresolved frustration may lead to more emotional suffering and illness, strained relationships, and even physical ill health. PCOD females need to be validated, supported, and given proper mental health intervention to facilitate them in understanding and dealing with these feelings.

PCOD and Self-Esteem

Self-esteem refers to a person's overall sense of self-worth, confidence, and value. It is how females perceive and feel about themselves, including their abilities, appearance, and overall identity. Self-esteem influences thoughts, emotions, and behaviors, playing a crucial role in personal development, relationships, and mental health.

Self-esteem is also directly associated with PCOD. The disease strikes at a woman's self-esteem in many ways, making her feel inferior, insecure, and frustrated. Studies have proven that females suffering from PCOD are of lower self-esteem compared to females who do not suffer from the condition (McCook et al., 2005). The decline in self-esteem is due to many factors:

Physical Appearance Problems: Excess facial and body hair, acne, and excess weight make females feel self-conscious and ugly. The majority of females develop body image issues, avoiding mirrors, social events, and even romantic relationships in fear of judgment.

Fertility Issues: females who desire children might feel that the uncertainty of fertility is emotionally draining. Seeing others have easy pregnancies while having a hard time with it might make them feel worthless and miserable.

Emotional and Psychological Issues: PCOD females suffer from mood swings, depression, and anxiety, which also impact their self-concept. females feel they are "too much" to handle in their relationships due to their mood swings.

The Role of Social Support

Social support refers to the emotional, practical, and psychological assistance that females receive from their relationships with family, friends, peers, and communities. It plays a crucial role in mental and emotional well-being, helping people cope with stress, challenges, and difficult life situations. One of the most potent predictors of whether females with PCOD survive their ordeal is social support. Research has shown that females with PCOD have lower perceived social support compared to females without PCOD (Hollinrake et al., 2007). This is due to: Lack of Awareness: Most females are unaware of the entire extent of PCOD and think it's just about getting irregular periods. This leaves females unsupported or dismissed by the people they love. .Fear of Judgement: Some females don't want to discuss their problems as they feel embarrassed or ashamed. Acne, weight gain, and infertility stigmatize females. Medical Gaslighting: Even in medicine, females are not supported. Doctors will treat the weight loss but not the emotional and hormonal aspects of the disorder.

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2.Objective of the study

- To determine the relationship between anger, self-esteem, and perceived social support among PCOD and Non-PCOD females.
- To assess the anger levels of females with and without PCOD.
- To examine the self-esteem of females with and without PCOD.
- To compare the perceived social support of females with and without PCOD.
- To evaluate whether perceived social support influences anger and self-esteem in females with PCOD.

3. Methodology

This study will employ a quantitative correlational research design to examine the relationships among aggression, self-esteem, and perceived social support in both PCOD and Non-PCOD females. The study will also use a comparative approach to assess differences between the two groups.

4. Litterature Review

A Review of Literature is a comprehensive summary and analysis of existing research, theories, concepts, and findings on a particular topic or research question. It serves as a critical evaluation of scholarly work related to the subject matter, identifying trends, gaps, methodologies, and key debates in the field.

A comparative study by Alizadeh, Mirmohammadi, and Nouri (2021) focused on comparing the psychological wellbeing of females with and without PCOD. The researchers administered a range of

psychological scales, including the Beck Depression Inventory, State-Trait Anger Expression Inventory, and Rosenberg Self-Esteem Scale, to 100 females diagnosed with PCOD and 100 control females without PCOD. The results showed that females with PCOD had significantly lower self-esteem, higher levels of anger, and greater psychological distress compared to the control group. Furthermore, perceived social support was also found to be lower among PCOD females, suggesting that interventions aimed at enhancing social support could help alleviate the emotional strain linked to PCOD.

Studies Related to Psychological Distress Light, Chilcot and McBride (2021) conducted a study to examine the relationship between psychological distress and illness perception in females living with PCOD it's popping n the UK. The used a cross-sectional survey to assess psychological distress .Results indicated that more symptoms showed higher perceived consequences , lower personal control , and lower illness coherence were significantly associated with higher psychological distress.

A study by Hamed, Fathi, and Salehi (2020) examined the relationship between perceived social support and psychological distress in females with PCOD. In this Iranian study, females diagnosed with PCOD reported on their levels of perceived social support using the Multidimensional Scale of Perceived Social Support (MSPSS). The study found that higher levels of perceived social support were associated with lower levels of psychological distress, suggesting that social support might act as a protective factor against the mental health challenges faced by females with PCOD.

Sadeghi, Mirmohammadi, and Ghasemi (2019) explained the role of anger in females with PCOD and its association with psychological distress. Their study, conducted in Iran, used standardized anger scales and psychological distress inventories. The results showed that females with PCOD exhibited higher levels of trait anger, which was positively correlated with anxiety and depressive symptoms. The study concluded that anger may be an important emotional factor in managing psychological distress in PCOD patients.

Tay, Teede, Hill, Loxton and Joham (2019) conducted a study on the prevalence of eating disorders in females with polycystic ovarian disease(PCOD) compared with females without PCOD and examined the relationship between PCOD, body mass index, self-esteem, and psychological distress score. Compared with females not reporting PCOD, females reporting PCOD had higher prevalence of eating disorders, low self-esteem, and psychological distress.

In a study by Nazari, Golestan, and Khademian (2017), the relationship between self-esteem and psychological distress in females with PCOD was investigated. The sample consisted of 150 females diagnosed with PCOD in Tehran, and the researchers used the Rosenberg Self-Esteem Scale and the Depression Anxiety Stress Scale (DASS). The findings revealed that lower self-esteem was significantly associated with higher levels of depression, anxiety, and stress among females with PCOD. The study emphasized the need for psychological interventions that target self-esteem in PCOD treatment plans.

Leone et.al (2018) conducted a study to investigate the association between polycystic ovarian disease (PCOD) and psychological distress, anger and quality of life.This case–control study included 30 PCOD patients and 30 non-PCOD females referring to Reproductive Medicine Unit for infertility. Compared with control females, females with PCOD reported significantly higher scores on somatization, anxiety, hostility, psychoticism, overall psychological distress and a number of symptoms.

A research by Karami, Ahmadi, and Nasiri (2015) looked at the role of anger and self-esteem in shaping the emotional wellbeing of females with PCOD. The study involved 120 females with a PCOD diagnosis and found that increased levels of anger were linked with significantly lower self-esteem. These emotional states were further associated with heightened feelings of hopelessness and distress.

The study indicated that anger management and self-esteem enhancement strategies could be critical components of therapy for females with PCOD.

Kumar, Arvind Kumar, Mittal, Sumuna, Bahadur and Miata (2013) conducted a study psychological distress measurement among infertile Indian females undergoing in-vitro fertilization. The study comprised 125 infertile females undergoing IVF cycle. The results revealed that Higher educa infertile females can better cope with stressful situation as compared to less educated infertile females. Psychological distress appears almost at par in case of conceived and non-conceived females. However, sexual dissatisfaction among infertile females on higher side.

Zangeneh et.al. (2012) conducted a study on assessment of psychological distress in females with polycystic ovary syndrome from Tehran. In this descriptive-analytical study, 81 patients with PCOD were recruited from Vali-e-Asr. Stress symptoms were assessed using the Understanding Yourself questionnaire. Results showed that 8 participants did not have any signs of stress, 32 had neurotic stress, 29 had high and 12 had extremely high levels of stress. This study showed that clinical signs of PCOD were most closely associated with psychological distress which has important implications in the diagnosis and treatment of disorders.

Table1.

Difference for aggression among PCOD and Non PCOD Females.

	Variables	n	Mean	SD	df	t-value
Aggression	**PCOD**	32	91.47	19.35	61	2.070*
	Non PCOD					

P<0.05*

Table 1 shows the comparison of aggression among PCOD and Non-PCOD females and their sample size, mean, SD and t-value. The sample size of PCOD and Non-PCOD females are 32 and 31, with mean values 91.47 and 82.33 respectively. The t-value was 2.070 at significance of 0.05. There is significant difference among PCOD and Non-PCOD females in aggression. **Hjelm et al. (2011):** In a study comparing psychological distress and aggression between women with and without PCOD, the results showed slight variations in aggression levels, but these differences were not statistically significant when analyzed using a t-test. This indicated that while PCOD might contribute to emotional distress, it does not necessarily result in a significant difference in aggressive behavior compared to non-PCOD women.

Table2.

Differences for self-esteem among PCOD and Non PCOD Females.

	Variables	n	Mean	SD	df	t-value
Self-esteem	**PCOD**	32	25.8	5.96	61	1.355
	Non PCOD	31	23.9	5.20		

P<0.05*

Table 1 shows the comparison of self-esteem among PCOD and Non-PCOD females and their sample size, mean, SD and t-value. The sample size of PCOD and Non-PCOD females are 32 and 31, with mean values 25.8 and 23.9 respectively. The t-value was 1.355 at significance of 0.05. Even though we identify a mean difference in self-esteem, the t-value indicates that there is no significant difference (t = 1.355, P<0.05**).**

Nazari et al. (2018): In a study investigating the relationship between body image, self-esteem, and PCOD, while the results indicated some differences in self-esteem between women with PCOD and those without, these differences were not statistically significant when analyzed using the t-test. The study concluded that although women with PCOD may experience body image concerns, these did not translate into significant differences in self-esteem when compared to women without PCOD.

Sadeghi et al. (2015): A study explored the psychological well-being of women with PCOD, including anxiety, depression, and self-esteem. Although there were differences in anxiety and depression levels between the groups, these differences were not statistically significant when analyzed using a t-test. The authors suggested that while there are psychological impacts of PCOD, these effects may not be as profound or significant when compared to Non-PCOD individuals in this 24 particular sample.

Table3.

Differences for perceived social support among PCOD and Non PCOD Females.

	Variables	n	Mean	SD	df	t-value
MSPSS	**PCOD**	32	5.13	1.04	61	0.910
	Non PCOD	31	4.88	120		

P<0.05

Table 1 shows the comparison of MSPSS among PCOD and Non-PCOD females and their sample size, mean, SD and t-value. The sample size of PCOD and Non-PCOD females are 32 and 31, with mean values 5.13 and 4.88 respectively. The t-value was 0.910 at significance of 0.05. Even though we identify the mean differences in MSPSS, the t-value indicates that there is no significant difference (t = 0.910, P<0.05)

Table4.

	1	2	3
Aggression	1		
Self-esteem	.407	1	
MSPSS	-.126	-.381	1

Correlation

Table 3.4 indicates the correlation between the study variables, that is, aggression, self-esteem and perceived social support. The positive correlation between aggression and self-esteem suggests that as one's aggression levels increase, their self-esteem also tends to increase. It can be due to the possibility that females with higher self-esteem may feel more confident in expressing aggression when they feel their needs are threatened or ignored. Otherwise, those with higher aggression might engage in behaviours that enhance their self-esteem, such as standing up for themselves. This finding coincides

with studies suggesting that females with higher self-esteem may feel more confident in expressing aggression, especially when they perceive that their needs or boundaries are threatened (Bettencourt & Miller, 1996). Also, those with higher aggression might engage in behaviours that enhance their self-esteem, such as standing up for themselves or asserting dominance in social situations (Bushman & Baumeister, 1998).

The negative correlation between self-esteem and perceived social support implies that as perception of social support increases, self-esteem tends to decrease. This could indicate that females who feel that they have higher support networks may rely less on their self-worth and independence, eventually leading to a decreased sense of self-esteem. They may feel less competent or less confident about their ability to handle challenges independently, thereby lowering their self-esteem. Furthermore, this corresponds with research indicating that females who excessively depend on others for validation might develop lower self-esteem as they struggle to assert their own identity or abilities without external assistance (Decib& Ryan, 2000). To illustrate, studies have mentioned that while perceived social support can buffer against stress, excessive reliance on others may limit one's own sense of autonomy, ultimately lowering self-esteem (Rosenberg, 1965).

The negative correlation between aggression and perceived social support suggests that as aggression levels increase, the perception of social support decreases. Similarly, females with higher aggression might feel that their social support is lower, or that they are less supported by others. Higher aggression could alienate others or create conflict in relationships, leading females to feel more isolated or unsupported. Research studies suggest that aggressive behaviours in the workplace were strongly linked to perceptions of lower social support, as aggressive females often experienced interpersonal conflicts and strained social ties (Fix and Spector, 1999). Likewise, high aggression may contribute to interpersonal rejection, leading to a reduced sense of social support (Dodge & Coie, 1987)

5. Summary And Conclusion

The primary aim of this project was to compare aggression, self-esteem, and perceived social support between females with Polycystic Ovarian Disease (PCOD) and those without the condition (Non-PCOD). The findings from this study indicate that while there are variations in aggression, self-esteem, and perceived social support levels within the two groups, these differences were not statistically significant when analyzed using the t-test. This suggests that, at least in this sample, the presence of PCOD does not have a strong impact on these psychological factors when compared to Non-PCOD females.

Additionally, demographic variables such as age, marital status (married vs. unmarried), and whether or not the females had children were included in the study. However, no significant differences were found between married and unmarried females or between those with children and without children, primarily due to unequal population sizes in these categories.

Given these limitations, it is recommended that future studies consider larger and more balanced samples, particularly when examining the impact of social demographic factors on aggression, self-esteem, and social support.

Further research with a more focused exploration of these variables could provide more detailed and specific insights into the psychological well-being of women with PCOD, and how these factors interact with their broader social and demographic context.

6. IMPLICATION

Clinical and Psychological Interventions

- If your study finds that females with PCOD experience higher anger levels and lower 29 self-esteem, mental health professionals can develop targeted interventions (e.g., cognitive-behavioral therapy, mindfulness techniques).
- Highlight the need for counseling and psychological support specifically tailored for PCOD patients to improve emotional well-being.

Medical and Holistic Health Approaches

- If perceived social support impacts emotional regulation in PCOD, healthcare providers can integrate psycho-social support programs into PCOD treatment plans.
- Stress management and self-esteem enhancement techniques should be incorporated into routine medical care for PCOD patients.

Social and Community Support

- The role of family, friends, and community in mitigating emotional distress should be emphasized. Awareness campaigns can help educate people about the psychological burden of PCOD.
- Encouraging support groups for women with PCOD to improve their perceived social support and coping strategies.

Educational and Workplace Implications

- Institutions should offer mental health resources to young women diagnosed with PCOD to help them manage emotional difficulties and boost self-esteem.
- Workplace policies should acknowledge the psychological challenges faced by women with PCOD and provide support mechanisms, such as flexible work arrangements.

Future Research Directions

- Encourage further research on intervention strategies that can help PCOD patients improve their emotional well-being.
- Suggest longitudinal studies to explore how anger, self-esteem, and social support change over time in PCOD patients.

Limitation

- Self-Reported Data – The study relied on psychological scales such as the Buss-Perry Aggression Questionnaire (BPAQ), Rosenberg Self-Esteem Scale (RSES), and the Multidimensional Scale of Perceived Social Support (MSPSS). Since these are self-report measures, participants may have provided socially desirable or biased responses.
- Small Sample Size – The study included only 63 participants (32 PCOD and 31 Non-PCOD females), which may not be representative of the larger population. A small sample size can reduce the generalizability of the findings.

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