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Premenstrual Syndrome, Mood Swings, and Social Connectivity among College Students

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Abstract

The present study explores the relationship between Premenstrual Syndrome (PMS), mood swings, and social connectivity among college students. A total of 200 students were selected from Al-Noor College and Islamia College using purposive sampling. A correlational research design was applied to examine the interactions between these variables. Premenstrual syndrome, mood swings, and social connectivity were assessed using three standardized assessment tools: that are PHQ-9 Mood Swing Scale by Kroenke, Spitzer, & Williams (1999), the Social Connectedness Scale by Cornwell (2009), and the Premenstrual Symptoms Screening Tool (PSST) by Steiner et al., (2011). Informed consent was obtained from all participants and demographic information was also collected. The results of current study supported the hypothesis, revealing a strong positive relationship between PMS and mood swings. In contrast, a negative relationship was found between mood swings and social connectivity, as well as a negative relationship was found between premenstrual syndrome and social connectivity. These findings highlight the complex association between PMS, mood swings, and social connectivity, underscoring the need for further research to understand the broader implications of this condition on women's daily lives and well-being.

Keywords: *Premenstrual Syndrome, Mood Swings, Social connectivity, Students, Menstrual Symptoms.*

Introduction

In the early 1900s, Premenstrual Syndrome (PMS) was often dismissed as a psychological or imagined disorder. Women experiencing these symptoms were frequently told that their issues were "in their heads" and were discouraged from discussing such matters publicly or even with their families. However, over time, PMS has been recognized globally as a legitimate medical condition. A landmark moment in this recognition occurred in 1931 when Robert T. Frank presented a paper titled "Hormonal Causes of Premenstrual Tension" to the New York Academy of Medicine, which helped bring attention to the hormonal basis of PMS (Frank, 1931).

PMS and its more severe form, Premenstrual Dysphoric Disorder (PMDD), are common conditions affecting women worldwide, including in Pakistan. Studies indicate that approximately 30 to 40 percent of Pakistani women experience symptoms such as irritability, mood swings, fatigue, and other behavioral changes in the days leading up to their menstrual cycle. According to the Journal of Pakistan Medical Association, 33 to 40 percent of women in Pakistan report experiencing symptoms of PMS at varying levels of severity, with 3 to 8 percent suffering from PMDD (Khaskheli, Baloch, & Sheeba, 2011). Further statistical analysis reveals that out of 250 women surveyed, 174 experienced more than two symptoms of PMS at some point in their lives (Yesildere & Sağlam, 2023).

Premenstrual syndrome (PMS) is a recurring condition characterized by a cluster of physical, emotional, and behavioral symptoms that emerge in the days leading up to menstruation, typically within a week or two before the onset of menstrual cycle. These symptoms mostly occur once menstrual cycle starts. The experience of PMS varies widely among women, with each individual facing unique combination of symptoms. Common manifestations of PMS include breast tenderness, bloating, headaches, mood swings, depression, anxiety, anger, and irritation (Steiner & Born, 2000). To be considered PMS, these symptoms must significantly impact daily life and be consistently present over at least two menstrual cycles. It is important to note that these symptoms are not unique to PMS and can occur in women without the condition. Usually, PMS symptoms last around six to seven days, and their pattern may shift over time affecting the daily life for quite few days (Rapkin & Winer, 2018).

PMS is basically manifested by a term called “mood swings” which is caused by the fluctuations in serotonin hormone. Mood swings are instant changes in mood among female. Most of the time you know what thing is causing happiness and depressed mood but you can’t really describe how you feel about something. Life's natural ups and downs can cause your emotions to shift unpredictably, much like a playground swing’s unpredictable motion. While it’s normal to experience all girls, such as mood swings, their unpredictability can be unsettling. It is essential to recognize that everyone experiences emotional fluctuations, but if they occur frequently before the start of menstrual cycle in women, they should consult a professional health physician so that wellbeing of female would be promoted (Steiner & Born 2000).

What is social connection? Social connection begins with the interactions between an individual and the people around them—such as family, friends, peers, and even distant acquaintances. These connections form a vital support network, making life more meaningful and manageable. However, for women experiencing Premenstrual Syndrome (PMS), social connectivity can be significantly limited during their menstrual cycle.

One study, titled "Prevalence of Premenstrual Syndrome in College Students", focused on individuals aged 16 to 24 and found that 59.1% of college students experienced PMS. The research also indicated that PMS was more prevalent among students who smoked, consumed alcohol, ate high-fat and calorie-dense foods, had a poor perception of their economic situation, or suffered from long-term health conditions like anemia. Furthermore, PMS was found to be more common in students who were at a higher risk for depression (American College of Obstetricians and Gynecologists, 2018).

Another study, titled "Structural and Functional Connectivity in the Amygdala of Women with Premenstrual Syndrome", examined women aged 19 to 30 using an experimental design and standardized assessment tools. The study concluded that women with PMS had significantly larger bilateral amygdala volumes compared to those without the condition. However, the limitation of this study was its small sample size, which means the results may not be generalizable to the broader population (Freeman, 2018).

Another research was conducted to examine the prevalence and impact of Premenstrual Syndrome (PMS) on women's quality of life. Research consistently shows that PMS is a widespread condition, with estimates suggesting that up to 81% of women experience some form of PMS symptoms. The most commonly reported symptoms include back pain, fatigue, weight gain, and mood swings—each of which can

significantly affect daily activities and overall productivity. These findings underscore the importance of effective management and support for women experiencing PMS, as it can have a profound impact on their well-being and day-to-day functioning (Rapkin, 2018).

Research suggests that women with strong social support tend to experience fewer symptoms of Premenstrual Syndrome (PMS). Socially connected women are often more comfortable expressing their emotions, in contrast to those who prefer isolation. Isolation, in particular, can hinder effective mood regulation. Social connections play a significant role in influencing hormonal balances, including serotonin and oxytocin levels, both of which are closely linked to mood. However, mood swings associated with PMS can create tension and lead to conflicts with friends and family, which may weaken these social bonds. In some cases, others may become intolerant of a woman's mood fluctuations, leading to the spread of negative rumors and further disrupting her social life (Biggs & Demuth, 2018).

Theoretical Framework

The theoretical framework for understanding the relationship between Premenstrual Syndrome (PMS), mood swings, and social disconnectedness among college students draws on multiple perspectives, including physiological (mood fluctuations and behavior), psychological, and sociological theories. These frameworks collectively explain how PMS impacts women's physical and emotional well-being, as well as their social interactions. Several models help describe this relationship, such as:

Hormonal Fluctuations Model

This model explains PMS in terms of hormonal changes that influence both physical and behavioral symptoms. The primary hormones involved are estrogen and progesterone. The fluctuations in these hormones—especially before ovulation—can lead to irritability and mood changes. Additionally, serotonin, a neurotransmitter, plays a key role in mood regulation, and its fluctuations during the menstrual cycle can contribute to symptoms like depression, irritability, and unusual anger, all of which are common in PMS (Rapkin & Micaiah, 2020).

Bio-Psychosocial Model

The Bio-Psychosocial Model posits that health and well-being are influenced by biological, psychological, and social factors. In this context, the menstrual cycle is crucial for women's health, but when PMS occurs, it links these biological changes to mood swings and social connectivity. The model divides the contributing factors into three main areas:

- **Biological factors:** Hormonal fluctuations, particularly in estrogen and progesterone, contribute to the onset of PMS.
- **Psychological factors:** PMS affects mood and mental state, often leading to mood swings, irritability, and emotional distress.
- **Social factors:** Social support and connectivity are critical for women with PMS. Higher levels of social connection can help women cope with mood changes and mitigate the negative impact on their emotional well-being (Engel, 1977).

The relationship between PMS, mood swings, and social connectedness is multi-dimensional and complex. Biological, psychological, and social factors interact in diverse ways, affecting an individual's behavior and social life. Women with PMS often experience mood swings, which can lead to social disconnection, both in family settings and among peers. This ongoing research seeks to explore the impact of these variables on one another, using tools such as the Premenstrual Syndrome Screening Scale (PSST), Mood Swings Scale, and Social Disconnection Scale, to better understand the complex dynamics at play.

Literature Reviews

A study was conducted to assess the prevalence of Premenstrual Syndrome (PMS) and Premenstrual Dysphoric Disorder (PMDD) among a sample of students and nursing staff aged 18 to 40 years. The study measured the frequency and intensity of depression symptoms, along with the clinical and socio-demographic correlations related to PMS and PMDD. The results revealed that 67% of the participants experienced PMS symptoms, while 10% were diagnosed with PMDD. Additionally, 28% of the sample reported depression symptoms, and 46.4% of those with severe depressive symptoms were found to have a significant correlation with PMS and PMDD. The study highlighted the fact that PMS and PMDD in isolated areas are often overlooked, despite affecting a substantial portion of the population (Padhy et al., 2015).

The literature review provided an overview of current research on the relationship between PMS and factors such as nutrient profiles, food choices, and dining habits. PMS is recognized as both a gynecological and psychiatric disorder, influencing cognitive patterns, emotional sensitivity, and motor functions, ranging from mild to severe symptoms. The most severe form of this disorder is Premenstrual Dysphoric Disorder (PMDD), which is often classified as a depressive disorder. The review also emphasized the role of diet and nutrition in managing PMS, suggesting that dietary choices can help reduce the severity of PMS symptoms and may offer preventive benefits (Oboza et al., 2024).

A study investigated the association between premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD) among medical students, aiming to assess potential risk factors. A total of 200 participants, aged 18 to 40, completed a questionnaire, with PMS and PMDD criteria established by ACOG and DSM-5-TR guidelines. Results from the Carolina Premenstrual Evaluation Network indicated that 37 out of 303 students were diagnosed with PMS or PMDD. Notably, students with negative blood types who consumed caffeine more than three times a week exhibited moderate depressive symptoms (Dinh Trieu Ngo et al., 2023).

Another study conducted in Tehran Province, Iran, focused on PMS among healthcare staff, aged 23 to 49, working in a teaching hospital. PMS negatively impacted the daily lives of nurses, whose demanding work environments added to stress levels. Using simple random sampling, data were collected through questionnaires and data sheets. Chi-Square and t-tests revealed PMS severity as mild (42.5%), moderate (30%), and severe (27.5%). Results also indicated that excessive caffeine consumption and lack of fiber disrupted menstrual cycles (Ranjbaran et al., 2017).

Research on brain activation in PMS examined the relationship between serum levels of neurosteroid-derived progesterone in women aged 18 to 45. Excessive use of steroid hormones, antidepressants, and alcohol was shown to exacerbate PMS symptoms. Serum analysis of allopregnanolone (ALLO) and isopregnanolone (ISO) was conducted by Lablitica in Uppsala, Sweden, highlighting biochemical markers of PMS (Stiernman et al., 2023).

Tolossa and Bekele (2014) explored the link between PMS severity and psychiatric symptoms among 390 university students aged 19-25, revealing that two-thirds experienced PMS. Using the SCL-90-R and daily symptom ratings, the study found that PMS severity varied across participants, indicating a significant impact on mental health in young adults.

A study by Ojezele et al. (2022) examined mood swings during menstruation, using BDI-II and the Perceived Stress Scale. Among 328 women, aged 15-35, the research showed a high prevalence of PMS (67.4%) and PMDD (25.6%), with mood swings overlapping with stress, bodily symptoms, and behavioral changes. Contributing factors included stress, gynecological conditions, and sleep disturbances.
Research in Bhavnagar, Gujarat, Pakistan, surveyed 527 college students, finding an 18.4% PMS prevalence rate and 3.7% for PMDD. Common symptoms—such as fatigue and irritability—significantly

impacted students' daily lives and academic performance (Raval et al., 2016). At Khyber Medical College, Pakistan, another study involving 384 young women (18-25 years old) found a high PMS prevalence, with 55% meeting ICD-10 and 18.2% meeting DSM-IV criteria for PMDD. Symptoms included general discomfort, anxiety, and fatigue, underscoring the need for targeted support for young women (Tabassum et al., 2005).

In Turkey, a study on PMS and anger involved 728 women (15-45 years), finding a strong correlation between PMS and higher anger levels. Cross-sectional analysis showed that women with PMS exhibited elevated anger scores, highlighting the need for emotional management in PMS treatment plans (Saglam & Basar, 2019).

Akın and Erbil (2024) examined coping behaviors for PMS among university students at Sakkara University, Turkey. The study found PMS significantly impacted students' physical, emotional, and social well-being. Interestingly, those with healthier body weight reported fewer PMS symptoms, suggesting weight management as a possible mitigator for PMS. The findings underscore the importance of PMS awareness and support programs in academic settings to enhance students' quality of life.

Operational Definitions of variable

Premenstrual syndrome

The operational definition of PMS specifies the criteria and methods used to identify and measure this condition. PMS encompasses a range of physical, emotional, and behavioral symptoms that occur during the post-ovulatory phase of the menstrual cycle and typically subside shortly after menstruation begins (Yonkers, O'Brien, & Eriksson, 2008).

Timing and Duration: Symptoms must appear in the post-ovulation phase (approximately two weeks before menstruation) and resolve within a few days after menstruation starts. Symptoms should be observed across at least two consecutive menstrual cycles.

Diagnostic Criteria: Symptoms are categorized as physical (e.g., bloating, breast tenderness, headaches), emotional (e.g., mood swings, irritability, depression), and behavioral (e.g., changes in sleep or appetite). These symptoms must significantly disrupt daily activities.

Severity and Impact: The severity of symptoms can be assessed using scales or questionnaires such as the Premenstrual Symptoms Screening Tool (PSST) and the Daily Record of Severity of Problems (DRSP). Symptoms must be severe enough to impact work, social functioning, or close relationships.

Mood Swings

Mood swings are defined as rapid and extreme fluctuations in a person's emotional state, ranging from high (euphoric or manic) to low (depressed or sad) within a short period (Sadock, Sadock, & Ruiz, 2014).

Social Connectivity

The operational definition of social connectivity outlines the criteria and methods to measure the degree of social relationships and interactions among individuals or groups (Berkman & Glass, 2000).

Rationale

PMS affects millions of women worldwide, leading to behavioral, physical, and emotional disturbances that disrupt daily life and affect overall mood stability. Women with PMS often experience mood swings

that can lead to feelings of social disconnection. Symptoms like irritability, anxiety, and mood instability can impair mental well-being and quality of life, creating a cycle of isolation and heightened distress.

Research Problem

Premenstrual Syndrome (PMS) is a common condition that significantly affects women's lives, especially regarding social connectivity and behavior. Women with PMS often experience feelings of loneliness and isolation, which can lead to withdrawal from social interactions. The relationship between PMS, mood swings, and social connectivity is crucial as these factors impact not only individual well-being but also interpersonal dynamics and support systems.

Research Question

What is the relationship between premenstrual syndrome, mood swings, and social connectedness among college students?

Aims and Objectives

- To analyze how PMS contributes to feelings of isolation and withdrawal from social interactions.
- To identify the relationships among PMS, mood swings, and social connectivity in college students.

Hypotheses

- There is a positive relationship between PMS and mood swings among college students.
- There is a negative relationship between PMS and social connectivity among college students.
- There is a significant negative relationship between mood swings and social connectivity in college students experiencing PMS.

Methodology

The goal of current research was to assess the relationships between Premenstrual Syndrome (PMS), Social Connectedness, and Mood Swings among college students in Lahore, Pakistan. A correlational research design was used to examine the relationships between study variables. A total of 200 students were chosen from Al-Noor College and Islamia College via purposive sampling with the age range of 16 to 24 years students (girls).

Inclusion Criteria

- Age 16 to 24 years old college students were included in this study.
- Symptoms last for at least two or three menstrual cycles (Pearlstein et al., 2005).

Exclusion Criteria

- Other severe medical conditions, such as thyroid disorders, adrenal disorders, fatigue syndrome, sleep disorders, etc.
- Mental health conditions include major depressive disorders, anxiety disorders, schizophrenia, or PTSD.
- The definition should ensure that symptoms are not better explained by other medical or psychological conditions, such as depressive disorder or anxiety disorder, in short mood disorder.

Demographic Questionnaire:

A customized demographic questionnaire gathered information about participants' menstrual cycles, including age, menstrual reaction, cycle duration, and mood disturbances during menstruation.

Premenstrual Symptoms Screening Tool (PSST):

The PSST is a widely used instrument designed to assess the severity and impact of Premenstrual Syndrome (PMS) symptoms. Comprising 16 statements, the tool is divided into three sections that evaluate emotional symptoms, physical symptoms, and impairment in daily activities:

Emotional Symptoms: This section assesses symptoms like mood fluctuations, anxiety, and irritability.

Physical Symptoms: This section includes physical symptoms such as breast tenderness, bloating, and cramps.

Impairment in Daily Activities: This section evaluates the impact of PMS symptoms on daily activities, social interactions, and overall quality of life.

Mood Swings Scale

The Mood Swings Scale is used to measure behavioral changes, specifically in women experiencing PMS, to quantify fluctuations in mood over a specified period. It is also applied to research on other mood disorders, such as depression and bipolar disorder, and is widely used in studies exploring mood fluctuations over time (Altman, Hedeker, Peterson, & Davis, 1997).

Social Connectedness Scale

Developed by Seon-Young Lee and Robbins S.B., the Social Connectedness Scale consists of 8 items, each with 6 response options. The purpose of this scale is to measure the level of social connectivity, reflecting participants' engagement and connection with their social networks.

Procedure

This study employed a survey method to collect data. Participants were asked to complete a questionnaire comprising the PSST, the Mood Swings Scale, and the Social Connectivity Scale, which took approximately 15 minutes to complete. They were provided with detailed information about the study, and informed consent was obtained prior to the survey.

Ethical Considerations

Participants were informed of the study's purpose and assured that their information would be kept confidential and used solely for research purposes. They were given the institution's address and clinic contact number for counseling if needed. Participants were informed of their right to withdraw from the study at any time and were assured that they could skip any question they did not wish to answer. Each participant received the same instructions, and all ethical standards were upheld to ensure voluntary and honest participation.

Results

This study was designed to examine the relationships between Premenstrual Syndrome (PMS), Mood Swings, and Social Connectedness, among college students. The results are explained in detail in this chapter. In the initial step of data analysis involved and total scores for each subscale were computed, along with the total scores for Premenstrual Syndrome, Mood Swings, and Social Connectedness Scales.

In the next step, reliability and descriptive analyses were conducted for the three scales used in the study: PSST (Premenstrual Symptoms Screening Tool), Mood Swings Scales (MSS), and SCS (Social Connectedness Scale). Data were analyzed using both descriptive and inferential statistics. Pearson's Product-Moment Correlation was applied to measure the relationships between study variables.

Table No 1: Description of Demographic Variables (N=200)

Demographic Variables	M	F	S.D	%
Age				
16 to 18		63		31.5%
19 to 21		121		60.5%
22 to 24		16		8.0%
Family System				
Joint		151		75.5%
Nuclear		49		24.4%
College				
Al Noor College		40		20.2%
Islamia College		159		79.5%
Father Occupation				
Government servant		34		17.0%
Private sector		35		17.5%
Business man		127		63.5%
Others		04		2.0%
Overall mood disturbs in days of menses				
Normal		63		21.0
Abnormal		137		79.0
Mother Occupation				
House wife		186		93.0%
Job Holder		14		7.0%
Numbers of siblings	4.1250		1.62251	
Birth order	2.5100		1.424801	

Note: M=Mean, S. D=Standard Deviation, F=Frequency, %=Percentile

Table no one explain the main characteristics of demographic variables, such as on the basis of age mostly participant in 1st category (16 to 18) the frequency 63 and (31.5%), and 2nd category (19 to 21) participant and frequency are 121 and (60.5%), and 3rd category (22 to 24) the frequency was16 and (8.0%). Mostly participants belong to a joint family system 151 and (75.5%) whereas, 49 participants belong to a nuclear family system (24.5%). Data was selected from two colleges Al-Noor College 40 (20.2%) and Islamia College 159 (79.5%). On the basis of father's occupation, the government servant was 34 and (17.0%), Private sector was 35 and (17.5%), business man was 127 and (63.5%), and others occupation was 04 and (2.0%). Total 137 participants and (79.0%) reported overall mood abnormal in the days of menses and 63 and (21.0%) 35 standard deviations of the university students. On the basis of mothers' occupation total house wife were 186 and (93.0%), job holder was 14 and (7.0%). The mean and standard deviation of numbers of siblings was 4.1250 and 1.62251 consecutively. The mean of birth order was 2.5100 and standard deviation was1.424801.

Reliability Analysis of Measurement Tools

The reliability Analysis for all assessment tools were computed (Premenstrual Syndrome Scale, Mood Swings Scale, and Social Connectedness Scale measured through Cronbach's Alpha.

Table No. 2: Psychometric property of Premenstrual Syndrome Scale, Psychological Distress Scale, Self-Control Scale and Social Disconnectedness Scale

Variable	No. of items	α
Premenstrual Syndrome Screening Tool	19	.816
Mood swings Scale	10	.725
Social connectivity Scale	8	.794

Note: α= Cronbach Alpha

Table 2 shows the psychometric property of the assessment tools, comprising premenstrual syndrome screening scale has 19 items and it was found very good reliable as showed (.82). The second measurement tool was mood swings scale consisting 10 items which shows good reliability (.73). The third questionnaire was Social Connectivity scale that has 8 items and it has also a very good reliability (.80).

Correlation Matrix

Table No 3: Pearson Correlation, Mean and Standard Deviation on Premenstrual Syndrome, mood swings, and Social Connectivity (N = 200)

Variables	1.	2.	3.
1. PSST	-----	-----	-----
2. MS	.57**	-----	------
3. SCS	-.22**	-.23**	-----
M	27.9250	11.4000	29.2550
S. D	10.10296	5.74062	9.91522

Note: PSST=Premenstrual Syndrome Screening Tool, MS= Mood Scale, SCS= Social Connectedness Scale

Table 3 indicate that there is a strong positive correlation between Premenstrual syndrome screening tool (PSST) and Mood swings (MS) which indicate that during the Premenstrual syndrome period the mood swings of an individual increases. The result also indicates that there is a negative correlation between Premenstrual syndrome screening tool (PSST) and social connectivity scale (SCS) that is (-.22) which means that if premenstrual syndrome increases the social connectivity of female decreases. It was also revealed that there is negative relationship between premenstrual syndrome screening tool (PSST) and mood swings (MS) that is (-.23) which indicate that when PSST increases among female the MS decreases. Overall, the results support the study hypothesis.

Discussion

The present study aimed to investigate the relationship between Premenstrual Syndrome (PMS), mood swings, and social connectivity among university students. The results supported the main hypothesis, confirming a strong correlation between these variables.

It was hypothesized that female students experiencing higher levels of PMS would also report more frequent mood swings. The findings of the current study suggest that PMS and mood swings are strongly positively correlated. This aligns with the research conducted by Abazari et al. (2020), which showed that women's attitudes toward menstruation and their susceptibility to menstrual discomfort are significant predictors of pain intensity and psychological issues. The present study's findings reinforce this notion,

indicating that PMS and psychological distress have a bidirectional influence on each other (Abazari et al., 2020).

Another hypothesis posited a significant negative relationship between PMS and social connectivity. The results of the current study confirmed this hypothesis, revealing a negative association between these two variables. This finding is consistent with previous research by Nguyen and Meirmanov (2019), which explored the prevalence of depression, its correlation with acculturative stress, and social connectivity among university students. Their study found a significant positive correlation between depression and acculturative stress, alongside a negative relationship with social connectedness. In line with this, the present study found that women with higher levels of PMS tend to have stronger social network connections (Nguyen, Le, & Meirmanov, 2019).

Conclusion

The results of this study reveal a positive relationship between PMS and mood swings, and a negative relationship between PMS and social connectivity, as well as between mood swings and social connectivity among university students. Premenstrual syndrome was found to be a significant predictor of mood swings and social connectivity.

Suggestions and Implications

The current research emphasizes the importance of promoting regular exercise, stress management, and a healthy diet among students to help manage Premenstrual Syndrome (PMS). Additionally, alternative remedies such as herbal teas, aromatherapy, warm compresses, and the intake of calcium and vitamin D may help alleviate the severity of PMS symptoms.

Many young females miss school, college, or university due to the severity of mood swings associated with PMS. The findings of this study suggest that educational institutions should implement management plans to support female students who experience difficulties during their menstrual cycles.

Furthermore, the results highlight the need for governments to offer facilities for students suffering from severe PMS. These students should be referred to counseling centers for assistance in managing mood swings and other PMS-related challenges.

This study also has several important implications. It provides evidence that improvements in the Premenstrual Syndrome Screening Tool (PSST), Mood Swings (MS), and Social Connectivity Scale (SCS) could significantly benefit students. Educational programs that provide information on PMS, healthy lifestyle management, and professional guidance can improve students' overall well-being. Raising awareness about PMS through research and educational campaigns can help students better manage their symptoms, maintain social connections, and improve their daily lives.

Limitations

There are several limitations to this study:

- PMS can significantly affect daily routines, relationships, and the overall well-being of individuals, particularly students.
- The timeframe for conducting the research was limited, which may have impacted the depth of the study.
- The study was based on data collected from only two institutions—Islamia College and Al-Noor College—limiting the generalizability of the findings.

- The reluctance of college students to share personal information regarding their menstrual cycles posed challenges in data collection for PMS-related research.

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