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The Relationship Between Habitual Emotional Regulation Strategies And The Severity Of Premenstrual Syndrome (PMS).

Ishita malhotra, Richa Dwivedi
Student, Professor
Department of Psychology
Sushant University, Gurgaon, Haryana, India

ABSTRACT

INTRODUCTION

Premenstrual syndrome is the group of symptoms a woman experiences a week before their period. Emotions play a vital role in the human experience. During this, a woman experiences a lot of emotional changes and how women deal with the world around her. But the emotions are heightened during this period which makes it difficult for the women to cope with the environmental distress a woman faces in daily life. Women's emotional regulation strategies play a significant role in their mental and emotional health. Some strategies are healthy and some are deteriorating health like suppressing emotions to a large extent.

OBJECTIVE

The study's objective is to find the relationship between habitual emotional regulation strategies and the severity of premenstrual syndrome(PMS) and which emotional regulation strategy is highly used among women who have severe PMS symptoms.

DATA

The data is collected from college students of the age group 18-25.

HYPOTHESIS

H_{01} - There would be no relationship between the severity of PMS and Expressive suppression
H_{02} - There would be no relationship between the severity of PMS and cognitive reappraisal

RESULTS

Women with severe PMS are associated with expressive suppression and not with Cognitive reappraisal. Women with Moderate and Mild PMS showed no relationship between the variables.

1. INTRODUCTION

Premenstrual syndrome, also called PMS, is the group of symptoms that occur in women before their period. Every Woman experiences a variety of different symptoms. Headaches, breast tenderness, edema, back pain, abdominal pain and bloating, weight gain, swelling of the extremities, water retention, nausea, muscle, and joint pain are some of the physical symptoms that some women may encounter. Emotional symptoms like Irritability, anger, depression, crying, tearfulness, anxiety, tension, mood swings, lack of concentration, confusion, forgetfulness, restlessness, loneliness, decreased self-esteem, tension, and behavioral symptoms such as fatigue, insomnia, dizziness, changes in sexual interest, food cravings, or overeating are examples of psychological symptoms.[1][2[3]. According to the retrospective community surveys, almost 90% of women have had at least one premenstrual syndrome (PMS) as specified by ICD-10 criteria. [4]. Premenstrual dysmorphic disorder (PMDD) is a severe form of PMS symptoms that needs medical attention. PMDD symptoms are similar to PMS symptoms, but women with PMDD may have more dysphoric (depressive) symptoms and more severe symptoms. Premenstrual dysphoric disorder (PMDD), a severe dysphoric type of PMS, requires at least five different symptoms in the DSM-IV, although the ICD-10 just requires one disturbing symptom for a diagnosis of PMS[5].

PMS appears to be caused by a sensitivity to the normal rising and falling levels of the hormones estrogen and progesterone, which may influence brain chemicals such as serotonin, a mood-regulating substance. It is unclear why some women develop PMS or PMDD while others do not, but researchers believe that some women are more sensitive to hormonal changes than others. so, the exact cause of PMS is yet not clear or there may be more than one factor that leads to PMS.

"Emotion regulation" refers to a person's ability to control and respond to an emotional experience effectively. Emotions are a common occurrence in our daily life. Feeling these emotions, on the other hand, might be overwhelming for some, like riding an out-of-control roller coaster. People use emotion control tactics to cope with unpleasant experiences regularly throughout the day. To adapt to the demands of our environment, most of us use a spectrum of emotion control strategies that we can apply to different situations. Some strategies are healthy, while others are not. Gross J.J and John, O.P gave two strategies:-

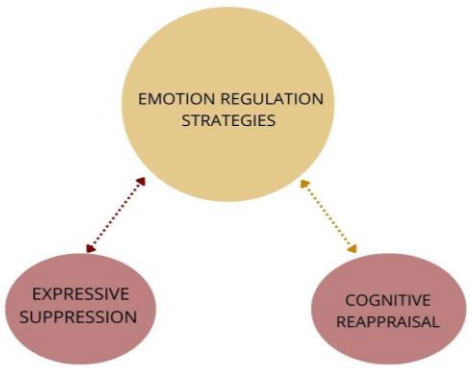


Fig.1.1 Emotion regulation strategies by Gross, J.J., & John, O.P

EXPRESSIVE SUPPRESSION- *Expressive suppression* is defined as the attempt to hide, inhibit or reduce ongoing emotion-expressive behavior (Gross and Levenson, 1993; Gross and john 2003). Expressive suppression is an emotion regulation strategy that focuses on the response. The act of masking one's facial expression to conceal an underlying emotional response. A study conducted on emotion regulation strategies suggests that expressive suppression may amplify the negative effects, specifically leading to feelings of self-disgust and even depressive symptoms.[6].Suppression has a detrimental consequence, as it reduces pleasant emotion experiences while leaving subjective negative emotion experiences unaffected, as well as aggravating physiological activation.[7][8][9][10]

COGNITIVE REAPPRAISAL - *Cognitive reappraisal* is defined as the attempt to reinterpret an emotion-eliciting situation in a way that alters its meaning and changes its emotional impact (Lazarus and Alfret, 1964; Gross and john 2003). Cognitive appraisal is an individual's subjective interpretation of environmental stimuli. It is a component of stress, mental health, coping, and emotion theories. Cognitive appraisal is how we frame negative thought patterns without changing them objectively. A study conducted showed that Cognitive reappraisal does have a positive emotional effect on reducing negative emotional experiences and negative emotional behavioral expression without increasing physiological activation.[7][8][9][10]

OBJECTIVE 1.1 The study's objective is to find the relationship between habitual emotional regulation strategies and the severity of premenstrual syndrome(PMS) and which emotional regulation strategy is highly used among women who have severe PMS symptoms.

RATIONALE 1.2 This research highlights the importance of finding methods of coping with suppressed or repressed emotions in women during PMS which will reduce the risk of developing disorders triggered by PMS. These findings could lead to develop more personalized treatment protocols aimed at improving emotional regulation skills.

2. LITERATURE REVIEW

1. MengyingWu, Ying Liang, QingguoWang, Yan Zhao & Renlai Zhou conducted research in China with 250 participants. The study aimed to test whether women with PMS have difficulties in emotional regulation. It was an experimental study and the tool which was used in this study was the Premenstrual scale. This was divided into three studies from which the third study showed no significant difference between participants with PMS and Non-PMS. The current study focuses on emotional regulation strategies used by women during PMS and also on the relationship between the severity.

2. Lisa Eggert, Michael Withhoft, Wolfgang Hiller & Maria Klienstauber conducted Research on the topic Emotion Regulation in Women with Premenstrual Syndrome (PMS): Explicit and Implicit Assessments. The study comprised 54 women with PMS and 52 women who did not have PMS. The affect misattribution procedure (AMP), and the Cognitive Emotion Regulation Questionnaire (CERQ) were used in the study. The findings imply that PMS is linked to changes in emotion control systems, as measured on both an explicit and implicit level. The current study is done by using different tools which are the Emotional regulation questionnaire (ERQ) and the Premenstrual symptom screening tool (PSST). Also, this study talks about explicit and implicit assessment which is not taken into account in this current study.

3. Nicole Peterson, Edythe D London & Rachel Gerards conducted the Research in London with 36 participants. The topic of the study was " Emotional regulation in women with premenstrual dysmorphic disorder" and the aim was to study emotional regulation in women with premenstrual dysmorphic disorder. The results showed that Women with PMDD had considerably higher levels of behavioral impulsivity and challenges with emotion regulation and socioemotional Functioning. This study focuses more on Premenstrual dysmorphic disorder (PMDD) but the current study focuses on Premenstrual disorder.

4. Inbal Reuvni, Rotem Dan, Ronen Segman, & Gadi Goelman conducted a study on Israeli students with 648 females and the topic of the study was "Emotion regulation difficulties and Premenstrual symptoms in Israeli students". PMDD questionnaire and PSST were used in the study. The result was found that Women with PMDD had considerably higher levels of behavioral impulsivity, as well as challenges with emotion regulation and socioemotional functioning. This study focuses on emotion regulation but not on the different strategies.

5. Farsad Nasiri, Shokofeh Sharifi, Ali Mashaddi & Rebecca Sharp conducted the study on the topic "Premenstrual Syndrome: The Role of Emotion Regulation Strategies and Trait Meta-Mood". It was conducted on 252 females. The Emotion Regulation Questionnaire (ERQ) and Trait Meta-Mood Scale (TMMS) were used in this study. The result shows that Women with PMS had difficulty regulating their emotions and did not use trait meta-mood strategies adaptively. The current study does not study the Trait meta method and also this questionnaire was not used in the study.

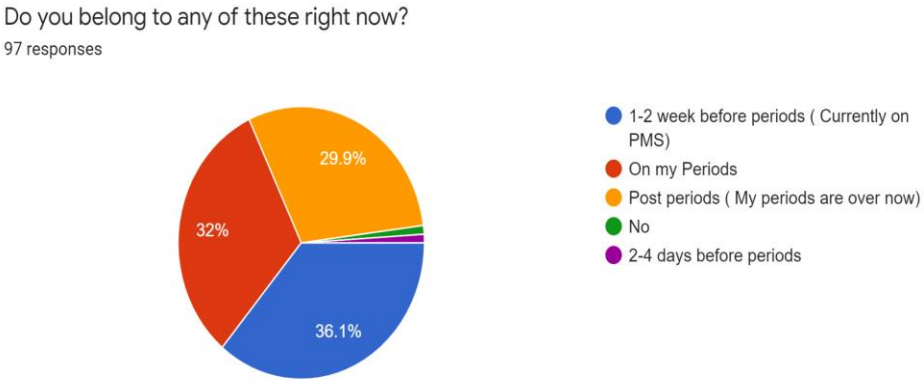
6. Department of Psychology, University "Sapienza" conducted research in Italy on the topic "Cognitive reappraisal and expressive suppression strategies role in the emotion regulation: an overview on their modulatory effects and neural correlates".The Emotion Regulation Questionnaire (ERQ) was used in this study. Experimental studies reveal that cognitive reappraisal has a better short-term affective, cognitive, and social profile than expressive suppression. This study focuses only on emotional regulation strategies but the current study focuses on the severity of PMS and emotion regulation strategies.

3. METHODOLOGY

3.1 SAMPLE:-

The sample was collected from the age group of 18-25 The total number of participants was 100. The only qualification to partake in this survey is to be above the age of 18 and only females can take part in this study. The data was collected through snowball sampling. Through the use of social media, the questionnaire could be shared via WhatsApp status and via Google forms with college students which provided a larger sample size. The participants were completely voluntary and no incentive was given to participate in the study.

- The sample was taken from the women who belong to this category. Of these 36 % of women were currently on PMS as they were having some of the PMS symptoms. 32 % of the women were on their periods. Women who were in their post periods were 30%.



3.2 RESEARCH DESIGN:-

The research design quantitative correlational study. Snowball sampling was used to get a large sample size.

3.3 TOOLS USED:-

The tools which are used in this study are the Emotional regulation questionnaire (ERQ) and the Premenstrual symptoms screening tool (PSST).

Emotional regulation questionnaire (ERQ)

The Emotional Regulation Questionnaire (ERQ) is a 10-item questionnaire that assesses the habitual use of two commonly used methods to regulate emotion: cognitive reappraisal and expressive suppression. It's a seven-point Likert scale that goes from 1 (strongly disagree) to 7 (strongly disagree). The scoring is taken as the average of all the scores in each subscale of cognitive reappraisal and expressive suppression. The higher the score, the more frequently that emotion regulation approach is used; conversely, the lower the score, the less frequently that emotion regulation approach is used.
RELIABILITY - 0.82

The premenstrual symptoms screening tool (PSST)

The Premenstrual Symptoms Screening Tool (PSST) is a validated, easy-to-use tool for identifying women with Severe Premenstrual Syndrome (PMS) or Premenstrual Dysphoric Disorder (PMDD). The test consists of 19 questions about how symptoms affect relationships and everyday activities to accurately determine whether a woman has PMS or PMDD. PSST is a 4-points Likert scale that consists of the options Not at all, Mild, Moderate, and severe. The PSST (Premenstrual Symptoms Screening Tool) is a screening tool that incorporates all premenstrual symptoms as well as a measure of impairment according to DSM-IV-TR criteria. It also converts DSM-IV-TR categorical criteria into a dimensional rating scale to determine severity.

RELIABILITY - 0.91

3.4 PROCEDURE

The participants were given an online survey. ERQ and PSST questionnaires were used in this study, and participants were given both for data collection. Respondents were informed that their data would be kept confidential and that their participation in this study was entirely voluntary. It was only administered with the participants' permission. To take part in this survey, you must be at least 18 years old, and only females are eligible to participate. The questionnaire was shared with college students via WhatsApp status and Google forms, which produced a higher sample size, v.i.a social media. The questionnaire was also distributed privately, inviting college friends to participate and share it with their friends. There was no way to modify the environment because the survey was conducted online. Participants can complete the survey using their laptops or phones at home and from any location. After that, the responses were gathered and scored.

4. HYPOTHESIS

H_{01} - There would be no relationship between the severity of PMS and Expressive suppression
H_{02} - There would be no relationship between the severity of PMS and cognitive reappraisal

5. RESULT AND DISCUSSION

1. Descriptive statistics

Individual scoring of both factors was done in Excel, and statistics were evaluated using IBM SPSS. The total number of participants was calculated as 100.

- Participants with severe Premenstrual symptoms were **20**. The minimum score to obtain was 43 and the maximum was 56.
- Participants with Moderate Premenstrual symptoms were **56**. The minimum score to obtain was 29 and the maximum was 42.
- Participants with Mild Premenstrual symptoms were **23**. The minimum score to obtain was 14 and the maximum was 28.

	N	Minimum	Maximum	Mean	Std. Deviation
Severe PMS	20	43	56	47.75	3.982
Moderate PMS	57	29	42	36.50	3.903
Mild PMS	24	14	28	22.83	3.881
N	20				

TABLE 1.1 Mean and Std. deviation

PMS AND EXPRESSIVE SUPPRESSION		
Correlation coefficient	**Sig (2- tailed)**	**N**
.340	0.036	20

TABLE1.2 Severity of PMS and Expressive suppression correlation ***P<0.05***

PMS AND COGNITIVE REAPPRAISAL		
Correlation coefficient	**Sig (2- tailed)**	**N**
.102	0.670	20

TABLE 1.3 Severity of PMS and Cognitive reappraisal ***P>0.05***

MODERATE -SEVERE PMS AND EXPRESSIVE SUPPRESSION		
Correlation coefficient	**Sig (2 -tailed)**	**N**
.128	.348	56

TABLE1.4 Moderate PMS and Expressive suppression spearman's correlation

MODERATE -SEVERE PMS AND COGNITIVE REAPPRAISAL		
Correlation coefficient	**Sig (2 -tailed)**	**N**
.020	.884	57

TABLE1.5 Moderate PMS and cognitive reappraisal spearman's correlation

MILD PMS AND EXPRESSIVE SUPPRESSION		
Correlation coefficient	**Sig (2 -tailed)**	**N**
.155	.481	23

TABLE1.6 Mild PMS and Expressive suppression spearman's correlation

MILD PMS AND COGNITIVE REAPPRAISAL		
Correlation coefficient	**Sig (2 -tailed)**	**N**
-.204	.351	23

TABLE1.7 Mild PMS and Cognitive reappraisal spearman's correlation

- Table 1.2 shows **p< 0.05** which shows that severity of Premenstrual syndrome and Suppression have a statistically significant relationship.
- Table 1.3 shows **p>0.05** which shows that the severity of Premenstrual syndrome and cognitive reappraisal is not considered statically significant.
- Table 1.4 shows P>0.05 which shows that women with moderate PMS and expressive suppression are not considered statistically significant

- Table 1.5 shows P >0.05 which shows that women with moderate PMS are not considered statistically significant
- Table 1.6 shows P >0.05 which shows that women with mild PMS are not considered statistically significant.
- Table 1.7 shows **P>0.05**which shows women with mild PMS are not considered statistically significant.

DISCUSSION

Here, we found that the Expressive suppression strategy is used by women who have severity in symptoms of Premenstrual syndrome. Suppression can lead to other disorders triggered by PMS. Thus it is necessary to find more Emotion regulation strategies that are more beneficial for the individual in the long run. Cognitive reappraisal is found to be a more healthy way of coping with stressors. As the severity of symptoms or the intensity is not much high it can be helpful for those women to use Expressive suppression. It was even tested by Gross and John [11]about the association between Habitual emotion Regulation strategy and its effect. They found that Cognitive reappraisal is associated with Positive emotions which have a greater impact on interpersonal functioning and well-being. On the other hand, it was tested that Expressive suppression is associated with negative emotions which can hinder one's ability to function well.

6. CONCLUSION

Women with severe PMS are associated with expressive suppression and not with Cognitive reappraisal. Women with Moderate and Mild PMS showed no relationship between the variables.

7. LIMITATIONS

- The survey was taken via. online media that impacted the study because the environmental setting is not controlled can influence the participant's answers.
- After taking the sample few of the women show severity in their symptoms. so, the sample size was also a concern for this study.
  The sample size is limited. That's why it cannot be generalized.
- Participants were from different socio-cultural backgrounds which influenced participants to answer the survey's questions.

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