

The Mediating Role of Anxiety in the Relationship Between Physical Activity and Premenstrual Syndrome in Female Students




Pardis. Rahimi¹, Hassan. Abdi^{2*}, Malake. Nasery³

¹ Master's degree, Department of Clinical Psychology, Sha.C., Islamic Azad University, Shahrood, Iran

² Assistant Professor, Department of Physical Education and Sport Sciences, Sha.C., Islamic Azad University, Shahrood, Iran

³ Department of Psychology, Da.C., Islamic Azad University, Damghan, Iran

* Corresponding author email address: ha.abdi@iau.ac.ir

E d i t o r	R e v i e w e r s
Anela Hasanagic  Full Professor, Department of Psychology, Faculty of Islamic Education, University of Zenica, Bosnia and Herzegovina anela.hasanagic@unze.ba	Reviewer 1: Mahdi Khanjani  Associate Professor, Department of Psychology, Allameh Tabataba'i University, Tehran, Iran. Email: khanjani_m@atu.ac.ir Reviewer 2: Sara Nejatifar  Department of Psychology and Education of People with Special Needs, Faculty of Educational Sciences and Psychology, University of Isfahan, Isfahan, Iran. Email: s.nejatifar@edu.ui.ac.ir

1. Round 1

1.1. Reviewer 1

Reviewer:

In paragraph 1, the sentence “Estimates suggest that up to 75% of women of reproductive age experience at least some PMS-related symptoms...” could benefit from specifying whether these estimates are global or region-specific. Adding cross-cultural prevalence comparisons would strengthen the epidemiological framing.

The paragraph beginning “Among non-pharmacological strategies, physical activity has garnered substantial research attention” could be strengthened by explicitly distinguishing between different forms of physical activity (aerobic, resistance training, yoga) and their relative effects.

In the sentence “Some scholars argue that anxiety is not merely a comorbidity but a central mechanism linking psychosocial stressors and PMS symptom expression,” the argument is strong, but it would be improved by citing at least one meta-analysis or systematic review specifically on anxiety as a mediator.

The discussion highlights Iranian context but could be enriched by comparing results with international populations (e.g., Asian, Western samples) to situate the findings globally and enhance generalizability.

Authors uploaded the revised manuscript.

1.2. Reviewer 2

Reviewer:

Paragraph 2 states: “Cultural attitudes toward menstruation, mental health stigma, and limited access to tailored health interventions exacerbate the burden of PMS in Middle Eastern contexts.”

This is insightful, but requires additional citations to support claims about cultural attitudes and stigma in Iran or the Middle East specifically.

The biological mechanisms section refers to “interactions of estrogen and progesterone with serotonergic and GABAergic systems.” Please expand this with references to recent neuroendocrine research (2021–2024) to ensure updated literature coverage.

In the section on reliability: “According to the results in Table 5, the instruments used in this study demonstrated acceptable reliability.”

This restates results but lacks theoretical contribution. Please explicitly state how your findings advance existing psychosomatic or biopsychosocial models of PMS.

Authors uploaded the revised manuscript.

2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.