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Research Article

"The Impact Of The Menstrual Cycle On Female Athletes' Performance"

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ABSTRACT

The menstrual cycle is a natural biological process that influences various physiological and psychological functions in women. In female athletes, these changes may affect mood, motivation, concentration, and overall sports performance. The present study aimed to analyse and compare psychological changes during the four phases of the menstrual cycle—Menstrual, Follicular, Ovulatory, and Luteal—among female athletes. A total of fifteen female athletes aged 18–25 years, with 5–8 years of sports experience, were selected as subjects. Psychological variables such as mood fluctuations, anxiety, motivation, and concentration were assessed using a standardized questionnaire. The findings revealed significant variations in psychological responses across different phases of the menstrual cycle, with better mood and motivation observed during the follicular and ovulatory phases, while higher anxiety and mood disturbances were reported during the menstrual and luteal phases. The study highlights the importance of understanding menstrual cycle phases to optimize training and performance in female athletes.

KEYWORDS:- Menstrual Cycle, Female Athletes, Psychological Changes, Sports Performance

Introduction:-

Women athletes experience regular hormonal fluctuations due to the menstrual cycle, which typically lasts between 21 to 35 days. These hormonal changes are associated not only with physical symptoms but also with psychological variations such as mood swings, irritability, anxiety, and changes in motivation levels. In sports, psychological factors play a crucial role in determining performance outcomes. Lack of concentration, reduced confidence, or increased stress may negatively influence athletic performance. Despite the increasing participation of women in competitive sports, menstrual health and its psychological impact on athletes are often overlooked. Understanding how different phases of the menstrual cycle affect psychological well-being can help coaches and athletes plan training schedules more effectively. Therefore, the present study was conducted to examine psychological changes during various phases of the menstrual cycle among female athletes. Objectives of the Study To assess psychological changes during different phases of the menstrual cycle among female athletes. To compare mood, anxiety, motivation, and concentration across menstrual, follicular, ovulatory, and luteal phases. To identify the phase most favorable for psychological readiness in sports performance.

Hypothesis:-

There will be significant differences in psychological variables during different phases of the menstrual cycle among female athletes.

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Methodology:-

Selection of Subjects The study sample consisted of fifteen female athletes aged between 18 and 25 years. All participants had 5–8 years of competitive sports experience and regular menstrual cycles.

Variables:-

Independent Variable: Phases of the menstrual cycle (Menstrual, Follicular, Ovulatory, Luteal)
2. Dependent Variables: Mood, anxiety, motivation, and concentration Tools Used:-
A standardized psychological questionnaire was used to assess psychological variables. The questionnaire measured mood state, anxiety level, motivation, and concentration ability during each phase of the menstrual cycle.

Procedure:-

Participants were informed about the purpose of the study and consent was obtained. Data were collected by administering the questionnaire during different phases of the menstrual cycle over a complete cycle.

Statistical Technique:-

Descriptive statistics (Mean and Standard Deviation) were used to analyze the data. Comparative analysis was conducted to observe differences across menstrual cycle phases.

Results:-

The analysis of data revealed noticeable differences in psychological variables across the four phases of the menstrual cycle. Female athletes reported higher levels of motivation, positive mood, and concentration during the follicular and ovulatory phases. In contrast, increased anxiety, irritability, and reduced concentration were commonly reported during the menstrual and luteal phases. These findings indicate that psychological readiness fluctuates with hormonal change throughout the menstrual cycle.

Discussion:-

The results of the study support previous research suggesting that hormonal variations during the menstrual cycle influence psychological functioning in female athletes. The follicular and ovulatory phases are often associated with higher estrogen levels, which may contribute to improved mood and confidence. On the other hand, the menstrual and luteal phases may be linked with discomfort and emotional disturbances, leading to reduced psychological efficiency. Understanding these patterns can help coaches modify training intensity and competition schedules. Psychological support and individualized training programs can also assist athletes in managing negative effects during less favorable phases.

Conclusion:-

The study concludes that psychological changes significantly vary across different phases of the menstrual cycle in female athletes. The follicular and ovulatory phases appear to be more favorable for psychological performance, while the menstrual and luteal phases may require additional psychological and emotional support. Awareness of these changes can contribute to better training management and enhanced athletic performance.

References:-

1. Brooks-Gunn, J., & Warren, M. P. (1989). Biological and psychological correlates of athletic performance in women. Sports Medicine, 7(2), 95–110. Constantini, N. W., & Hackney, A. C. (2013). Endocrinology of physical activity and sport in women. Hormone Research, 80(2), 103–114. Reilly, T., & Franks, A. (2003). Hormonal influences on performance in female athletes. Journal of Sports Sciences, 21(6), 419–429

Statistical Analysis:-

The collected data were analyzed using appropriate statistical techniques to examine variations in psychological and performance-related variables across the four phases of the menstrual cycle (Menstrual, Follicular, Ovulatory, and Luteal). Descriptive statistics including mean and standard deviation were calculated for all measured variables. To compare differences among the four menstrual phases, a one-way repeated measures Analysis of Variance (ANOVA) was applied, as the same participants were assessed across all phases. Where

significant differences were observed, post-hoc comparisons were conducted to identify specific phase-wise variations. The level of statistical significance was set at $p < 0.05$. All statistical analyses were performed using standard statistical software.