COHERENCE – The Multidisciplinary Research Journal
Volume No: 17, Issue No: 2, Year: 2026 (November)
PP: 203-205
ISSN: 0976-5301
Peer Reviewed & Refereed Journal (IF: 7.85)
Journal Website www.coherencejournal.in

IMPACT OF PHYSICAL ACTIVITY ON MENTAL HEALTH AMONG COLLEGE STUDENTS

Uvika Rani

Assistant Professor, Department, Physical Education, A S College for Women Khanna

ABSTRACT

Mental health is an essential component of an individual's overall well-being. College students frequently experience psychological challenges, including academic pressure, examination stress, anxiety, depression, social expectations, and major lifestyle transitions. Physical activity plays a critical role in sustaining both physical and psychological health. Regular participation in activities such as walking, running, yoga, aerobics, cycling, swimming, and competitive sports can significantly improve mood, alleviate stress and anxiety, boost self-confidence, and enhance emotional resilience.

This paper examines the impact of physical activity on the mental health of college students through a synthesis of existing literature. It explores the relationship between physical activity and key indicators of psychological well-being, specifically stress management, anxiety reduction, mood regulation, self-esteem, and sleep quality. The literature demonstrates that structured physical activity serves as an effective, non-pharmacological strategy for mental health promotion in higher education. Finally, the study highlights the necessity of embedding comprehensive physical activity and sports programs into university curricula.

Keywords: Physical Activity, Mental Health, College Students, Psychological Well-being, Stress, Anxiety, Depression, Physical Education.

1. INTRODUCTION

Physical activity is an indispensable element of a healthy lifestyle, defined as any bodily movement produced by skeletal muscles that requires energy expenditure. In modern society, promoting physical activity has become increasingly urgent due to growing sedentary habits, screen-time dominance, and reduced engagement in outdoor activities.

College life represents a crucial stage in personal and professional development. During this transitional phase, students encounter diverse challenges related to academic performance, career planning, interpersonal relationships, financial management, and social adaptation. Unmanaged stress from these demands often manifests as anxiety, depressive symptoms, emotional instability, and burnout.

Mental health extends beyond the mere absence of illness; it encompasses emotional, psychological, and social well-being. A mentally healthy student is better equipped to process daily stress, form positive social connections, make sound decisions, and achieve academic goals.

Engaging in regular physical exercise provides immediate and long-term psychological benefits. Beyond physical fitness, exercise stimulates neurochemical processes—such as the release of endorphins, dopamine, and serotonin—that naturally elevate mood, improve sleep architecture, and reduce stress levels. Furthermore, participating in sports fosters teamwork, social integration, and emotional expression.

REVIEW OF LITERATURE

Extensive research highlights the positive correlation between regular physical exercise and enhanced mental health outcomes.

Huang et al. (2024) conducted a systematic review and meta-analysis of 59 studies on undergraduate students, demonstrating that structured physical activity interventions led to significant reductions in symptoms of anxiety, depression, and psychological stress. However, the study also pointed to variations in intervention dosage, duration, and methodological consistency across existing studies.

Research examining exercise intensity indicates that moderate-to-vigorous physical activity yields notable improvements in self-esteem, cognitive focus, and stress recovery among university populations. Furthermore, psychological frameworks such as *Self-Determination Theory* (Deci & Ryan) suggest that physical activities fulfill core psychological needs—autonomy, competence, and relatedness—thereby enhancing overall psychological well-being.

ISSN: 0976-5301
Peer Reviewed & Refereed Journal (IF: 7.85)
Journal Website www.coherencejournal.in

OBJECTIVES OF THE STUDY

1. To analyze the impact of physical activity on the mental health and psychological resilience of college students.
2. To investigate the relationship between exercise participation and psychological well-being.
3. To evaluate the role of regular physical activity in mitigating stress and anxiety.
4. To examine how physical exercise influences self-confidence and self-esteem.
5. To emphasize the role of sports and physical education programs within higher education institutions.
6. To propose practical recommendations for integrating physical activity into university life.

CONCEPTUAL HYPOTHESES

H1: Regular physical activity is positively associated with the psychological well-being of college students.

- **H2:** Consistent participation in physical exercise significantly reduces levels of psychological stress and anxiety.
- **H3:** Students who engage in regular sports or structured exercise exhibit higher emotional stability and self-esteem than sedentary peers.
- **H4:** Group-based physical activities enhance social connectivity and reduce feelings of isolation among college students.

RESEARCH METHODOLOGY

This study employs a descriptive and analytical research design based on a qualitative synthesis of secondary data sources.

1. **Research Design:** Descriptive and Analytical Review.
2. **Data Sources:** Peer-reviewed academic journals, systematic reviews, research reports, books, and publications from global health organizations (e.g., WHO, ACSM).
3. **Target Population:** College and university students.
4. **Key Variables Studied:** Independent (Physical Activity: Type, frequency, duration, intensity); Dependent (Mental Health: Stress, anxiety, depressive symptoms, self-esteem, sleep quality).

IMPACT OF PHYSICAL ACTIVITY ON MENTAL HEALTH

Reduction in Stress

Academic deadlines, exams, and career uncertainty are major stressors for university students. Physical activities like walking, running, cycling, and yoga help lower cortisol levels while promoting physical and mental relaxation.

Reduction in Anxiety

Anxiety often manifests through chronic worry and restlessness. Regular physical activity helps regulate the autonomic nervous system, promoting calm and increasing a sense of self-control.

Prevention and Management of Depressive Symptoms

Exercise stimulates neuroplasticity and neurotransmitter synthesis (serotonin and endorphins) that elevate mood. *Note: Physical activity serves as a supportive wellness measure alongside professional clinical treatment.*

Improvement in Self-Esteem & Sleep Quality

Setting and achieving fitness goals enhances body image and self-efficacy. Physical exertion also promotes deeper, more restorative sleep cycles essential for memory and emotional regulation.

ROLE OF DIFFERENT PHYSICAL ACTIVITIES

Activity Type	Primary Mental Health Benefit
Yoga & Mindfulness	Reduces anxiety, improves focus, promotes emotional balance.
Walking & Jogging	Low-barrier stress relief, improves mood and cardiovascular health.
Aerobic & Cardio Exercise	Stimulates endorphin release, lowers depressive symptoms.

ISSN: 0976-5301
Peer Reviewed & Refereed Journal (IF: 7.85)
Journal Website www.coherencejournal.in

Team Sports	Enhances social integration, teamwork, and sense of belonging.
Strength Training	Builds physical self-efficacy, resilience, and self-confidence.

ROLE OF COLLEGES AND UNIVERSITIES

1. Integrating physical education modules into undergraduate degree structures.
2. Organizing regular intra-college and inter-college sports events.
3. Upgrading campus sports facilities, gyms, and outdoor recreation areas.
4. Offering free yoga, meditation, and stress-management workshops.
5. Creating inclusive sports programs specifically designed to encourage female participation.

PRACTICAL SUGGESTIONS & CONCLUSION

Students should aim for at least 30 minutes of moderate physical activity 4 to 5 days a week and take active breaks during long study sessions. Higher education institutions must recognize physical activity as a foundational strategy for student mental health alongside academic performance.

REFERENCES

1. Huang, K., et al. (2024). Effectiveness of physical activity interventions on undergraduate students' mental health:
2. Systematic review and meta-analysis. Health Promotion International, 39(3), daae054.
3. World Health Organization. (2020). WHO Guidelines on Physical Activity and Sedentary Behaviour. WHO.
4. American College of Sports Medicine. (2021). ACSM's Guidelines for Exercise Testing and Prescription (11th ed.).
5. Wolters Kluwer.