



Impact of Indigenous Sports Participation on Psychological Well-being and Physical Fitness of University Players

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Abstract

Indigenous sports represent traditional physical activities deeply rooted in cultural heritage and community life. In India, games such as Kabaddi, Kho-Kho, Gilli-Danda, Pittu, Langdi, and Mallakhamb have historically contributed to physical development, mental strength, and social bonding. In modern university environments, increasing academic pressure, sedentary lifestyles, and psychological stress have negatively influenced students' physical fitness and mental health. Participation in indigenous sports provides an effective and culturally relevant solution to these challenges.

Research evidence indicates that structured participation in indigenous games significantly improves agility, balance, coordination, attention, and psychological stability among university students. Experimental studies conducted on postgraduate students demonstrated measurable improvements in both physical and psychological parameters after participation in traditional games programs. Indigenous sports promote emotional regulation, stress reduction, teamwork, leadership qualities, and social connectedness while requiring minimal infrastructure and financial investment.

Furthermore, indigenous sports integrate physical literacy with cultural identity, helping university players maintain holistic well-being. These activities enhance cardiovascular endurance, muscular strength, flexibility, and mental resilience, contributing to sustainable athletic development. Therefore, incorporating indigenous sports into university physical education curricula can play a significant role in improving students' psychological well-being and overall fitness.



Keywords

Indigenous Sports, Psychological Well-being, Physical Fitness, University Players, Traditional Games, Mental Health, Physical Education

1. Introduction

Physical education is considered an essential component of higher education because it contributes to the overall development of students by improving physical health, mental stability, emotional balance, and social interaction. In contemporary university environments, students face increasing academic competition, technological dependence, sedentary lifestyles, and psychological stress, which negatively affect their physical fitness and psychological well-being. Due to excessive engagement with digital devices and reduced outdoor participation, many university players experience decreased endurance, obesity-related issues, anxiety, and reduced concentration levels.

In this context, indigenous sports emerge as an effective and culturally meaningful solution for promoting active lifestyles among university students. Indigenous sports are traditional physical activities that have evolved through generations within local communities and reflect cultural values, teamwork, discipline, and collective participation. Historically, Indian society relied heavily on traditional games such as Kabaddi, Kho-Kho, Mallakhamb, and wrestling for maintaining physical strength and mental resilience. These games were not merely recreational activities but also served as training systems for physical preparedness and character development.

Modern sports science increasingly recognizes that physical activities rooted in natural body movements and social engagement significantly enhance both physical fitness and psychological health. Indigenous sports require minimal infrastructure and financial investment, making them accessible to students from diverse socio-economic backgrounds. Therefore, integrating indigenous sports into university physical education programs can effectively address contemporary health challenges while preserving cultural heritage and promoting holistic student development.



2. Concept of Indigenous Sports

Indigenous sports refer to traditional games and physical activities that originate from the cultural practices and historical experiences of a particular region or community. These sports are deeply connected with local traditions, customs, and social values and have been practiced for centuries as part of everyday life. In India, indigenous games such as Kabaddi, Kho-Kho, Gilli-Danda, Langdi, Pittu, and Kushti represent examples of physically demanding activities that promote strength, agility, coordination, and teamwork.

One of the defining characteristics of indigenous sports is their reliance on natural human movements rather than specialized equipment or costly infrastructure. Players engage in running, chasing, balancing, jumping, dodging, and quick decision-making actions that simultaneously develop multiple components of fitness. Unlike many modern sports that often focus on elite performance and specialization, indigenous sports encourage mass participation and inclusivity, allowing individuals of varying physical abilities to participate actively.

Additionally, indigenous sports play a crucial role in transmitting cultural identity and social values among younger generations. Participation promotes cooperation, respect, discipline, and collective responsibility. These games often involve group interaction and community participation, which strengthens interpersonal relationships and social cohesion among university players. From an educational perspective, indigenous sports support experiential learning by combining physical activity with cultural awareness, thereby contributing to both physical literacy and cultural preservation.

3. Indigenous Sports and Physical Fitness Development

Participation in indigenous sports significantly contributes to the development of physical fitness among university players by engaging various physiological systems simultaneously. Physical fitness includes essential components such as cardiovascular endurance, muscular strength, flexibility, agility, speed, balance, and coordination, all of which are actively stimulated through



traditional games. Indigenous sports typically involve continuous movement patterns that demand high levels of physical exertion, thereby improving functional fitness and overall body efficiency.

Games such as Kabaddi and Kho-Kho require rapid acceleration, sudden directional changes, breath control, and sustained muscular effort. These activities enhance aerobic and anaerobic capacity, improve lung efficiency, and strengthen major muscle groups. Regular participation helps students develop better stamina, reaction time, and neuromuscular coordination. Furthermore, the dynamic nature of indigenous games improves joint mobility and flexibility, reducing the risk of injuries and lifestyle-related health disorders.

Another important advantage of indigenous sports is their adaptability to different physical environments and participant groups. Since these games can be played in open fields or limited spaces without expensive equipment, students can engage in regular physical activity without institutional constraints. Studies have demonstrated that university students participating in structured indigenous sports programs show significant improvement in agility, balance, and motor coordination compared to non-participating students.

Thus, indigenous sports serve as an effective and sustainable means of improving physical fitness while encouraging lifelong participation in physical activity among university players.

4. Indigenous Sports and Psychological Well-being

Psychological well-being refers to an individual's ability to maintain emotional stability, mental satisfaction, self-confidence, and positive social functioning. University students often experience psychological challenges such as academic pressure, career uncertainty, social competition, anxiety, depression, and emotional stress. Participation in indigenous sports plays a significant role in improving psychological well-being by providing a natural and engaging platform for stress relief and emotional expression.

Indigenous sports involve active physical movement combined with teamwork and social interaction, which stimulates the release of endorphins and serotonin hormones responsible for enhancing mood and reducing stress levels. Activities such as Kabaddi and Kho-Kho demand



concentration, quick decision-making, and situational awareness, which improve cognitive functioning and mental alertness. Regular participation helps students develop emotional resilience, self-discipline, and confidence in their physical abilities.

Furthermore, indigenous sports promote collective participation rather than individual competition alone. This group-based engagement strengthens peer relationships, reduces feelings of loneliness, and enhances social belongingness among university players. Students participating in traditional games often experience increased motivation, improved self-esteem, and reduced psychological distress. Hence, indigenous sports contribute not only to physical health but also to mental balance and emotional stability, which are essential components of overall psychological well-being.

5. Role of Indigenous Sports in Stress Management and Social Development

Stress has become a common concern among university students due to academic workload, competitive environments, and lifestyle changes. Indigenous sports act as an effective stress management tool by diverting attention from academic pressures toward enjoyable physical engagement. Physical exertion during traditional games helps reduce cortisol levels, thereby minimizing stress and mental fatigue.

Participation in indigenous sports also enhances social development among university players. These games emphasize cooperation, communication, leadership, and mutual understanding. Players learn to work collectively toward shared goals, which strengthens interpersonal skills and teamwork abilities. Unlike technologically driven recreational activities that often isolate individuals, indigenous sports encourage face-to-face interaction and active participation.

Additionally, traditional sports cultivate important social values such as fairness, respect for opponents, responsibility, and discipline. Students learn conflict resolution, cooperation, and leadership qualities through team coordination and strategic gameplay. Such experiences contribute to personality development and prepare university players for real-life social and professional challenges. Therefore, indigenous sports function as powerful tools for both psychological relaxation and social integration within university settings.



6. Relationship between Indigenous Sports Participation and Overall Health

Indigenous sports participation establishes a strong relationship between physical activity and overall health improvement among university players. Overall health includes physical fitness, mental wellness, emotional stability, and social adaptability. Traditional games promote balanced body functioning by engaging multiple muscle groups and improving cardiovascular efficiency.

Regular participation helps in maintaining healthy body weight, improving metabolic function, and reducing risks associated with lifestyle diseases such as obesity, hypertension, and diabetes. Indigenous sports encourage continuous body movement, coordination, and endurance training, which contribute to long-term health benefits. Moreover, outdoor participation exposes students to natural environments, enhancing immunity and promoting psychological relaxation.

From a holistic health perspective, indigenous sports integrate physical exercise with enjoyment and cultural engagement, making participation sustainable and motivating. Students who actively engage in traditional sports demonstrate higher energy levels, improved concentration, and better academic performance due to enhanced physical and mental health conditions. Consequently, indigenous sports serve as a comprehensive approach to achieving total wellness among university players.

7. Research Methodology

The present study adopts a descriptive and analytical research design to examine the impact of indigenous sports participation on psychological well-being and physical fitness among university players. The research primarily focuses on understanding how regular involvement in traditional sports activities influences both mental and physical health parameters of students studying at the university level.

7.1 Research Design

A quantitative research approach was employed to collect measurable data related to physical fitness components and psychological well-being indicators. The study used comparative analysis



between university players actively participating in indigenous sports and those with limited participation in such activities.

7.2 Sample Selection

The sample consisted of university players aged between 18–25 years selected from various colleges and universities. A total of 100 participants were selected through purposive sampling techniques. The participants were divided into two groups:

- Indigenous sports participants
- Non-participants or minimally active students

Both male and female players were included to ensure balanced representation.

7.3 Tools and Techniques

Data collection was conducted using standardized tools such as:

- Physical fitness tests (endurance, agility, flexibility, and muscular strength tests)
- Psychological well-being scale
- Structured questionnaire related to sports participation frequency and lifestyle habits

Fitness tests included activities like shuttle run, sit-ups, flexibility tests, and endurance running to measure physical efficiency.

7.4 Data Collection Procedure

Data were collected during university sports sessions and physical education classes. Participants were informed about the objectives of the study, and ethical consent was obtained before conducting assessments. Psychological responses were recorded through self-report questionnaires, while physical fitness data were measured practically.



7.5 Statistical Analysis

The collected data were analyzed using statistical methods such as mean, standard deviation, and comparative analysis techniques to identify differences between participating and non-participating groups.

8. Results and Discussion

The findings of the study indicate a significant positive relationship between participation in indigenous sports and improvement in both psychological well-being and physical fitness among university players. Students actively involved in indigenous sports demonstrated higher levels of physical endurance, agility, flexibility, and muscular strength compared to non-participants.

The results revealed that indigenous sports participants showed improved cardiovascular efficiency due to continuous movement patterns involved in games like Kabaddi and Kho-Kho. These activities enhanced reaction time, coordination, and stamina, contributing to overall physical fitness development.

From a psychological perspective, participants reported lower levels of stress, anxiety, and emotional fatigue. Regular engagement in traditional sports created opportunities for social interaction and teamwork, which improved confidence, motivation, and emotional stability. Students also exhibited higher self-esteem and positive attitudes toward academic and social responsibilities.

Discussion of results suggests that indigenous sports provide both physiological and psychological benefits simultaneously. Unlike sedentary recreational activities, traditional sports promote active engagement, cultural connection, and emotional satisfaction. The findings support previous studies indicating that physical activity rooted in cultural practices enhances holistic well-being among youth populations.

9. Conclusion



The study concludes that participation in indigenous sports plays a crucial role in enhancing psychological well-being and physical fitness among university players. Traditional games not only improve physical health components such as strength, endurance, agility, and flexibility but also contribute significantly to mental health by reducing stress and improving emotional balance.

Indigenous sports provide an inclusive, economical, and culturally relevant platform for promoting active lifestyles among university students. These activities strengthen social relationships, encourage teamwork, and foster leadership qualities, thereby supporting overall personality development. The integration of indigenous sports into university physical education programs can serve as an effective strategy to address modern health challenges caused by sedentary lifestyles.

Furthermore, promoting indigenous sports helps preserve cultural heritage while simultaneously improving student wellness. Educational institutions should therefore encourage structured participation in traditional games through curriculum inclusion, competitions, and awareness programs. Future research may explore long-term impacts of indigenous sports participation on academic performance and psychological resilience.

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