



Impact of Sports Participation on Self-Confidence Among College Students

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Abstract

Sports participation plays an important role in the physical, psychological, and social development of college students. Along with improving physical fitness, regular involvement in sports may influence self-confidence, self-esteem, emotional well-being, and interpersonal relationships. This review examines the relationship between sports participation and self-confidence among college students, with particular attention to the Indian higher education context. Published research on sports involvement, self-efficacy, self-esteem, physical self-perception, and psychological well-being is examined to understand the potential contribution of sporting activities to personality development. Existing evidence indicates that participation in sports is generally associated with positive self-perception, perceived competence, and psychological well-being. Team sports may provide opportunities for communication, leadership, cooperation, and social acceptance, while individual sports can encourage personal responsibility, goal setting, and independent achievement. However, the development of self-confidence depends on several factors, including training experience, individual ability, coaching support, competitive pressure, and the sporting environment. The relationship may also be bidirectional, as students with greater initial confidence may be more willing to participate in sports. The review highlights the importance of inclusive sports programmes in colleges and universities and identifies the need for further research examining the long-term effects of sports participation on self-confidence among Indian college students.

Keywords: Sports Participation, Self-Confidence, College Students, Self-Esteem, Self-Efficacy, Personality Development, Psychological Well-being.

1. Introduction

Sports participation is an important component of college education and contributes to the physical, psychological, and social development of students. In addition to improving fitness, regular participation in sports provides opportunities to develop personal skills, establish social relationships, and experience individual and team achievements. These experiences may influence how students perceive their abilities and respond to challenging situations.

Self-confidence refers to an individual's belief in their ability to perform tasks, face challenges, and achieve desired outcomes. It is particularly important during college life, when students encounter academic responsibilities, social expectations, career-related decisions, and changes



in personal identity. Confidence may influence participation in classroom activities, leadership opportunities, competitions, and social interactions.

Sports activities create situations in which students learn new skills, set goals, overcome difficulties, and evaluate their performance. Success in training and competition can strengthen perceived competence, while constructive responses to setbacks may support emotional development. However, the relationship between sports and confidence is not necessarily positive in every situation. Excessive performance pressure, negative coaching experiences, injuries, and social exclusion may adversely affect an individual's confidence.

Self-confidence is closely related to psychological concepts such as self-esteem and self-efficacy, although these terms have different meanings. Self-esteem concerns a person's overall evaluation of personal worth, whereas self-efficacy refers to confidence in performing particular tasks. Research by Ouyang et al. [1] identified positive associations among sports participation, self-esteem, self-efficacy, and body image in college students.

In India, sports activities form part of physical education and extracurricular programmes in many colleges and universities. Students participate in activities such as cricket, football, volleyball, badminton, athletics, kabaddi, and other individual and team sports. These activities can provide opportunities for personal achievement, social interaction, and leadership development.

Indian research has also examined differences in self-confidence between students participating in sports and those who do not. Yadav [2] reported higher self-confidence among sports participants than non-participants in a college-based comparison. Although such findings are encouraging, differences between groups do not independently establish that sports participation caused the observed changes.

Recent systematic reviews have provided further evidence regarding the relationship between physical activity and students' psychological development. Improvements in physical self-perception, perceived competence, and self-esteem have been reported following structured exercise interventions [3].

Understanding the influence of sports participation on self-confidence is important for designing effective college sports programmes. This review examines published findings concerning the relationship between sports involvement, self-confidence, self-esteem, and self-efficacy and discusses their practical implications for college students in India.

2. Review Methodology

A narrative review approach was used to examine published evidence concerning sports participation and self-confidence among college students. Relevant peer-reviewed research articles, observational studies, intervention studies, and systematic reviews were considered.

The review focused on sports participation, general self-confidence, self-esteem, self-efficacy, physical self-perception, and psychological well-being. Research involving undergraduate and



university students was given priority, while evidence from broader physically active populations was considered when relevant.

Particular attention was given to research discussing the Indian educational context. International studies were also examined to understand the broader psychological relationships associated with participation in sports and physical activities.

The findings were organized into major themes, including personal confidence, perceived competence, self-esteem, social interaction, leadership, and the influence of sporting environments.

The available evidence was interpreted qualitatively. Since the studies differed in research design, sample characteristics, measures, and types of sporting activities, no independent statistical meta-analysis was performed.

3. Review of Related Literature

Research examining the psychological effects of sports participation has identified several relationships involving self-confidence, self-esteem, perceived competence, and social development.

Ouyang et al. [1] investigated the relationship between sports participation, body image, self-efficacy, and self-esteem among undergraduate students in China. Their findings indicated significant positive associations among these psychological variables and sports participation. The study also identified the importance of self-efficacy and self-esteem in explaining how body image relates to participation in sports activities. However, the observational design did not establish that sports participation directly caused improvements in these characteristics.

Yadav [2] examined the relationship between participation in sports tournaments and self-confidence among students in Maharashtra, India. The study compared 80 sports participants with 80 non-participants using a self-confidence inventory. The findings indicated higher self-confidence among students participating in sports. Although the results support a positive association, the study design does not establish the direction of the relationship.

A systematic review and meta-analysis of physical activity interventions among college students [3] examined 40 studies involving 4,955 participants. The analysis reported beneficial effects on physical self-worth, perceived sports competence, physical strength, physical condition, and body attractiveness. These findings suggest that structured physical activities may contribute to positive physical self-perception, an important component of confidence in physical settings.

Arey and Levental [4] investigated sports involvement and self-perception among college students through qualitative interviews. Their study included 26 undergraduate students with different levels of sports participation. Participants described benefits related to perceived abilities, social relationships, institutional belonging, and personal development. The findings



suggested that even recreational sports participation may provide meaningful psychological and social experiences.

Liu [5] examined the relationship between sports participation and feelings of inferiority among college students, considering the roles of self-esteem and general self-efficacy. The study highlighted the relevance of these psychological characteristics in understanding the relationship between sports involvement and students' self-perception.

Li and Huang [6] conducted a systematic review examining physical activity and mental well-being among college students. The review considered 28 studies and discussed outcomes including self-esteem, psychological well-being, and depression. The findings supported the potential psychological benefits of physical activity while highlighting differences among study populations and research approaches.

Wang et al. [7] conducted a systematic review and meta-analysis of exercise interventions and physical self-esteem among Chinese college students. The analysis included 12 randomized controlled trials involving 2,128 participants. Exercise interventions were associated with improvements in physical self-esteem and related dimensions, including perceived sports competence. However, substantial differences among studies and limitations in evidence quality required cautious interpretation.

Together, these studies indicate that sports participation and structured physical activities are related to several psychological characteristics associated with self-confidence. However, direct research measuring changes in general self-confidence among Indian college students remains comparatively limited.

Table 1. Summary of Selected Previous Studies

Author and Year	Research Focus	Major Findings
Ouyang et al. (2020) [1]	Sports participation, self-esteem, and self-efficacy	Positive associations among participation and psychological characteristics
Yadav (2019) [2]	Sports participation and self-confidence in India	Sports participants reported higher self-confidence
Physical self-perception review (2024) [3]	Physical activity interventions among college students	Improvements in perceived sports competence and physical self-worth
Arey and Levental (2024) [4]	Sports involvement and student self-perception	Positive experiences involving confidence-related perceptions and belonging
Liu (2022) [5]	Sports participation, self-esteem, and self-efficacy	Psychological characteristics were associated with sports involvement



Li and Huang (2025) [6]	Physical activity and mental well-being	Evidence of psychological benefits, including self-esteem-related outcomes
Wang et al. (2026) [7]	Exercise intervention and physical self-esteem	Improvements in physical self-esteem, with important evidence limitations

4. Impact of Sports Participation on Self-Confidence

4.1 Development of Personal Confidence

Personal confidence influences the willingness of individuals to participate in unfamiliar activities, accept challenges, and pursue personal goals. Sports provide opportunities to develop skills through regular practice, feedback, and experience.

Students who begin participating in sports may initially experience difficulty mastering technical skills or performing under competitive conditions. With consistent practice, they may improve their performance and develop greater confidence in their abilities.

Successful completion of challenging activities can strengthen perceived competence. For example, learning a new badminton technique, improving running performance, or contributing to a team victory may encourage students to believe in their capacity for improvement.

However, confidence development depends on how these experiences are interpreted. Positive feedback, achievable goals, and supportive coaching may help students recognize progress, whereas repeated criticism or unrealistic expectations may produce discouragement.

Research involving college students has identified positive relationships between sports participation and self-efficacy, suggesting that perceived competence is an important psychological factor associated with sporting activities [1], [5].

4.2 Influence on Self-Esteem and Self-Efficacy

Self-esteem represents an individual's overall evaluation of personal worth, while self-efficacy concerns the belief that specific tasks can be completed successfully. Although both concepts are related to confidence, they should be evaluated separately.

Sports participation can provide experiences that support the development of these characteristics. Improvement in physical abilities may strengthen students' perceptions of competence, while social recognition and personal achievement may contribute to positive self-evaluation.

Ouyang et al. [1] reported significant associations among sports participation, self-efficacy, and self-esteem. Similarly, intervention-based evidence indicates that structured physical activity can improve physical self-worth and perceived sports competence [3].



Wang et al. [7] also identified improvements in physical self-esteem following exercise interventions. However, these findings primarily concern confidence and self-evaluation in physical domains rather than every aspect of general self-confidence.

The distinction is important because confidence gained through sport may not automatically transfer to academic performance, public speaking, or other unrelated activities.

4.3 Team Sports and Social Confidence

Team sports provide opportunities for cooperation, communication, decision-making, and shared responsibility. Activities such as football, cricket, volleyball, basketball, and kabaddi require players to coordinate their actions and respond to changing situations.

Participation in such activities may help students become more comfortable interacting with others. Team members often learn to communicate during practice, discuss strategies, accept feedback, and resolve disagreements.

These experiences can contribute to social confidence, particularly when the sporting environment encourages mutual respect and equal participation.

Arey and Levental [4] reported that college students associated sports involvement with positive social experiences and a stronger sense of institutional belonging.

Nevertheless, team participation does not always produce positive outcomes. Exclusion from important decisions, unequal playing opportunities, or negative peer behaviour may reduce enjoyment and undermine confidence.

Therefore, the quality of the team environment is an important factor in determining the psychological benefits of participation.

4.4 Individual Sports and Independent Confidence

Individual sports such as athletics, badminton singles, swimming, gymnastics, and certain track-and-field events require athletes to take greater responsibility for their own performance.

Participants often establish personal goals, monitor progress, and evaluate their abilities through individual achievements. Such experiences may encourage independence, discipline, and confidence in managing challenges.

For example, a student preparing for a running competition may gradually improve endurance, technique, and performance through regular practice. Achieving a personal target may strengthen confidence in the ability to work toward a specific goal.

However, individual sports can also create substantial performance pressure because responsibility for results is less widely shared.

Both team and individual sports can provide beneficial psychological experiences. Their effects depend on personal preferences, competition level, coaching practices, and the opportunities available to participants.



4.5 Sports Participation and Leadership Development

Leadership involves the ability to communicate, make decisions, accept responsibility, and coordinate activities toward shared goals.

Sports can create practical opportunities for students to develop these abilities. Team captains may organize players, communicate strategies, encourage teammates, and respond to competitive challenges.

Other participants may also develop leadership skills through organizing sporting events, supporting new players, or participating in student sports committees.

These responsibilities may help students become more comfortable making decisions and expressing their opinions.

However, participation in sports does not automatically create leadership ability. Opportunities for responsibility, constructive feedback, and supportive institutional environments are necessary for meaningful personal development.

4.6 Emotional Resilience and Competitive Experience

Competitive sports involve both success and disappointment. Students may experience victories, defeats, selection decisions, performance anxiety, and physical challenges.

Learning to respond constructively to these experiences may support emotional resilience and confidence in managing difficult situations.

A supportive sports environment can encourage students to view setbacks as opportunities for learning rather than evidence of personal failure.

Regular training also requires patience and consistency. Gradual improvement may help students recognize the importance of effort and long-term commitment.

However, excessive competitive pressure, injury, humiliation, or repeated negative feedback can contribute to psychological distress.

Consequently, confidence development should be considered a potential outcome of positive sporting experiences rather than an inevitable result of participation.

5. Factors Influencing Self-Confidence Through Sports

The psychological effects of sports participation vary according to individual characteristics and environmental conditions.

One important factor is the frequency and consistency of participation. Students who participate regularly have more opportunities to practice skills, experience progress, and establish social relationships. However, the ideal level of involvement differs according to individual interests and available time.

Coaching behaviour is another important consideration. Supportive coaches who provide constructive feedback, encourage effort, and recognize individual progress can contribute to a positive sporting experience. In contrast, overly critical or discriminatory coaching practices may negatively affect confidence.

The availability of sporting facilities and opportunities also influences participation. Students may feel more willing to join sports activities when equipment, training spaces, and supervision are accessible.

Gender-related expectations and social attitudes can further influence sporting experiences. Some students may face restrictions, stereotypes, or unequal opportunities that reduce participation and confidence.

Previous sporting experience is also relevant. Students with greater initial confidence may be more likely to participate in sports, while students with limited experience may hesitate to join competitive activities.

This creates a potentially bidirectional relationship between sports participation and confidence. Participation may support confidence development, but existing confidence can also influence the decision to participate.

Table 2. Factors Influencing Self-Confidence in Sports Participation

Factor	Potential Positive Influence	Possible Limitation
Regular participation	Skill improvement and familiarity	Excessive training may cause fatigue
Supportive coaching	Encouragement and perceived competence	Negative feedback may reduce confidence
Team environment	Social acceptance and communication	Exclusion or conflict may undermine confidence
Competitive experience	Goal achievement and personal development	Performance pressure may increase anxiety
Individual achievement	Greater perceived competence	Unrealistic expectations may cause disappointment
Leadership opportunities	Decision-making and responsibility	Unequal opportunities may restrict development
Institutional support	Greater access and participation	Limited resources may discourage involvement



6. Discussion

The available evidence suggests that sports participation is positively related to several psychological characteristics associated with self-confidence among college students. Research has identified favourable relationships involving self-esteem, self-efficacy, physical self-perception, and perceived competence.

Studies examining physical activity interventions provide evidence that exercise can improve confidence-related perceptions of physical ability. However, findings concerning physical self-esteem should not be treated as direct proof of improvements in general self-confidence.

An important distinction is that sports participation may influence confidence through several pathways. Skill development and personal achievement can strengthen perceived competence, while team participation may provide opportunities for communication, social acceptance, and leadership.

The nature of the sporting environment also affects these outcomes. Supportive coaching, inclusive participation, and achievable goals may create favourable conditions for psychological development. Conversely, excessive competition, discrimination, injuries, and negative social experiences may have unfavourable effects.

The findings are relevant to college students in India, where sports can provide opportunities for physical activity and personal development. Institutions may encourage participation through intercollege competitions, recreational programmes, sports clubs, and accessible training facilities.

However, the relationship between sports participation and self-confidence must be interpreted carefully. Some students may already possess greater confidence before entering sports programmes. Observational studies cannot adequately separate the influence of sports participation from these pre-existing characteristics.

There are also limitations in the available research. Studies frequently measure self-esteem, physical self-perception, or self-efficacy rather than general self-confidence. Differences in psychological scales, sporting activities, sample characteristics, and research methods make direct comparisons difficult.

International findings may not fully represent the educational and social circumstances of Indian college students. Differences in sports infrastructure, family expectations, financial resources, and participation opportunities could influence outcomes.

The Indian comparative evidence considered in this review is encouraging but insufficient to establish a causal relationship. Additional longitudinal and controlled studies are necessary to determine whether sustained sports participation produces measurable improvements in confidence over time.



Future research should compare sports participants and non-participants using validated measures of self-confidence. Studies should also examine team and individual sports separately, consider gender and previous experience, and assess changes over extended periods.

Greater attention to inclusive sporting environments may help educational institutions support students who are interested in physical activity but lack previous experience or confidence.

7. Conclusion

Sports participation can contribute to the psychological and social development of college students by providing opportunities for skill development, personal achievement, teamwork, and social interaction.

The reviewed evidence indicates positive relationships between sports involvement and several confidence-related characteristics, particularly self-esteem, self-efficacy, and perceived physical competence.

However, the available research does not establish that participation in sports always produces higher general self-confidence. Psychological outcomes depend on individual characteristics, previous experience, coaching practices, and the quality of the sporting environment.

In Indian colleges, inclusive sports programmes may help students develop physical abilities and participate more confidently in social and recreational activities. Providing accessible facilities, supportive coaching, and opportunities for both competitive and non-competitive participation can contribute to a positive college experience.

Further research involving Indian college students is needed to establish the long-term effects of sports participation on self-confidence and to identify the conditions under which sporting activities provide the greatest psychological benefits.

References

- [1] Y. Ouyang, K. Wang, T. Zhang, L. Peng, G. Song, and J. Luo, "The influence of sports participation on body image, self-efficacy, and self-esteem in college students," *Frontiers in Psychology*, vol. 10, article 3039, 2020. doi: 10.3389/fpsyg.2019.03039.
- [2] S. D. Yadav, "The role of self-confidence on participation in sports tournament," *International Journal of Yoga, Physiotherapy and Physical Education*, vol. 4, no. 1, pp. 42–44, 2019.
- [3] "Effects of physical activity interventions on physical self-perception in college students: A systematic review and meta-analysis," 2024. PubMed PMID: 39187247. <https://pubmed.ncbi.nlm.nih.gov/39187247/>
- [4] D. L. Arey and O. Levental, "Beyond the game: The influence of varying degrees of sports involvement on college students' self-perceptions and institutional affiliation," *Education Sciences*, vol. 14, no. 3, article 332, 2024. doi: 10.3390/educsci14030332.



- [5] C. Liu, "Research on the influence of college students' participation in sports activities on their sense of inferiority based on self-esteem and general self-efficacy," *Frontiers in Psychology*, vol. 13, article 994209, 2022. doi: 10.3389/fpsyg.2022.994209.
- [6] R. Li and R. Huang, "The influence of physical activity on mental well-being in college students: A systematic review," *Frontiers in Psychology*, vol. 16, article 1573446, 2025. doi: 10.3389/fpsyg.2025.1573446.
- [7] M. Wang, D. Li, Y. Song, H. Kong, and F. Wu, "The impact of exercise intervention on physical self-esteem of Chinese college students: A systematic review and meta-analysis," *Frontiers in Psychology*, vol. 17, article 1852169, 2026. doi: 10.3389/fpsyg.2026.1852169.

