

Original Article

Infrastructure, Accessibility and Institutional Support as Determinants of Sports Participation among Youth in Jammu and Kashmir: A Critical Review of Literature

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Received: 09-06-2026

Revised: 09-25-2026

Accepted: 10-02-2026

Published: 10-04-2026

ABSTRACT

Sports participation is shaped not only by personal interest and athletic ability but also by the opportunities available in the places where young people live, study and socialise. This review examines three connected determinants of youth sports participation in Jammu and Kashmir: sports infrastructure, accessibility, and institutional support. It synthesises peer-reviewed reviews on youth physical activity and sport participation with guidance from the World Health Organization and Indian sports-policy documents. The literature consistently points to the relevance of access to facilities, time, cost, social encouragement and opportunities to participate. However, the strength and meaning of these relationships vary by age, gender, socioeconomic position and the setting in which sport is organised. A facility may exist without being affordable, safe, maintained, open at suitable times or supported by trained coaches. Likewise, institutional programmes may create opportunities but have limited reach if transport, equipment or regular local delivery are missing. The review finds that international evidence provides a sound basis for examining these relationships in Jammu and Kashmir, but it does not justify assuming that findings from other contexts apply uniformly across the Union Territory. Publicly accessible evidence specifically measuring how infrastructure, accessibility and institutional support jointly relate to participation among the general youth population of Jammu and Kashmir remains limited within the sources reviewed. The paper proposes a context-sensitive research agenda that distinguishes facility availability from effective access and measures participation through frequency, duration and level of involvement. It concludes that policy assessment should focus not only on infrastructure created or programmes announced, but also on whether young people can use these opportunities consistently and equitably.

KEYWORDS

Youth, Sports Participation, Sports Infrastructure, Accessibility, Institutional Support, Jammu and Kashmir.

1. INTRODUCTION

Sports and physical activity contribute to physical health and can support psychological well-being, social interaction and opportunities for learning. The World Health Organization's physical activity guidelines draw on evidence linking activity among children and adolescents with benefits for physical fitness, cardiometabolic and bone health, cognitive outcomes and mental health (WHO, 2020). These benefits, however, should not be confused with a claim that every organised sport produces the same outcomes for every participant. The type, intensity, regularity and social conditions of participation matter, and recreational activity is not identical to competitive sport.

Participation is therefore better understood as a behaviour shaped by both individual and environmental conditions. Young people may value sport but still be unable to participate regularly when facilities are distant, equipment is costly, grounds are poorly maintained, schedules conflict with education or work, or coaching and organised activities are unavailable. A review by Sallis, Prochaska, and Taylor (2000) found that youth physical activity was associated with a combination of individual, family, social and environmental factors, including access to programmes and facilities, support from parents and others, and opportunities for activity. The authors also noted that findings across the wider literature were not uniformly consistent, cautioning against treating any single factor as a complete explanation.

These issues warrant examination in Jammu and Kashmir, where the conditions for participation may differ across urban and rural settlements, districts, educational settings and seasons. The present paper addresses the general youth population rather than a particular social or community category. It retains the original proposal's central explanatory variables—infrastructure, accessibility and institutional support—and considers how they may be related to the frequency, type and level of sports participation. The aim is not to report findings from a survey that has not yet been conducted, but to critically synthesise relevant literature, identify what can reasonably be inferred, and clarify the local evidence that future research needs to establish.

2. REVIEW APPROACH AND SCOPE

This paper uses a critical narrative review approach. It draws on peer-reviewed literature reviews and systematic reviews concerning correlates of youth physical activity, barriers to voluntary sports participation, and socioeconomic differences in sport and activity, alongside official guidance from the World Health Organization and Indian sports-policy sources. The literature was selected for its direct relevance to one or more of the paper's three central determinants or to the broader conditions under which young people participate in sport. The review is thematic rather than a formal systematic review: it does not claim exhaustive database coverage, a registered protocol, or a reproducible screening process.

A distinction is maintained between evidence from international studies, national policy commitments and evidence specific to Jammu and Kashmir. Findings from studies conducted

elsewhere are used to frame plausible relationships and research questions, not as proof of the prevalence or causes of sports participation in the Union Territory. The source proposal supplies the initial conceptual structure, but its unverified numerical claims about infrastructure and local participation have not been carried forward as established facts.

3. SPORTS INFRASTRUCTURE AND PARTICIPATION

Infrastructure is often treated as the most visible condition for sports participation: a playground, court, indoor hall, gymnasium or supply of equipment creates the physical setting in which activity can occur. Yet facility presence is an incomplete measure of opportunity. A ground may be unavailable at the times young people are free, unsafe for some users, poorly maintained, overcrowded, or unsuitable for the sports they wish to play. Equipment and changing facilities can also determine whether a nominally available site is usable. For this reason, infrastructure should be evaluated in terms of availability, quality, safety, maintenance, suitability and actual use rather than counted only as a physical asset.

The review by Sallis et al. (2000) identified access to programmes and facilities among the variables consistently associated with physical activity in children, while also finding that the correlates of activity differed between children and adolescents. This distinction matters for a youth-focused study: school-age children may depend more directly on school grounds and parental arrangements, whereas older adolescents and young adults may rely on colleges, public facilities, private gyms, community clubs or informal spaces. A single measure of 'facility availability' can conceal these different routes into sport.

Systematic evidence on barriers to voluntary sport participation also suggests that opportunities cannot be reduced to infrastructure alone. The review by Batey et al. (2018) reported time, cost and accessibility among recurring barriers in quantitative studies, while qualitative studies additionally identified concerns such as fear of judgement, not feeling competent and gendered expectations. This implies that building a facility may remove one constraint without addressing the social and practical conditions that determine whether young people use it. The effect of infrastructure is consequently likely to depend on its affordability, proximity, management and connection to organised opportunities.

For Jammu and Kashmir, these findings support investigation rather than a blanket claim that facilities are either adequate or inadequate across the region. A sound local assessment would document the distribution and condition of facilities by district and settlement type, their opening hours, the sports they support, equipment availability, safety and maintenance arrangements, and whether girls and boys report comparable opportunities. Without such data, it is not possible to infer the level of unmet demand from facility counts alone.

4. ACCESSIBILITY: DISTANCE, TRANSPORT, COST AND EVERYDAY CONSTRAINTS

Accessibility describes whether a young person can realistically reach and use a sports opportunity. Distance and transport are important, but access also includes travel time, travel cost, safe routes, weather and terrain, opening hours, fees, equipment expenses and compatibility with school, college, employment or family responsibilities. The same facility can be accessible to one young person and effectively inaccessible to another. This is why geographic proximity and practical access should be measured separately.

Batey et al. (2018) synthesised evidence that time, cost and opportunity/accessibility recur as barriers to voluntary sport among children. Their review also identified psychological and social barriers that are less easily captured by a checklist of physical resources. A later qualitative systematic review by Martins et al. (2021) found that adolescents' accounts of activity barriers and facilitators varied by socioeconomic position. Access to local facilities could be experienced as enabling by some groups but remain a barrier for young people with fewer resources. The implication is not that socioeconomic status determines participation in every case, but that the cost and usefulness of an opportunity depend on the resources a young person can draw upon.

The distinction between physical availability and effective access is especially relevant to a geographically varied region such as Jammu and Kashmir. However, the general features of the region should not be used to assume that every district or settlement faces the same transport or terrain constraints. Those conditions need to be measured locally. Research should record travel time and mode, transport availability, direct and indirect costs, seasonal disruption where relevant, and whether the young person can attend repeatedly rather than only occasionally.

Accessibility measures should also avoid wording that makes respondents agree or disagree with broad statements such as 'distance does not affect my participation' without recording actual travel conditions. Perception-based items can reveal whether a respondent experiences access as a barrier, but they do not substitute for objective indicators. Combining reported travel time, facility location and transport options with questionnaire responses would allow researchers to compare perceived and practical access.

5. INSTITUTIONAL SUPPORT AND THE SOCIAL CONDITIONS OF PARTICIPATION

Institutional support includes the role of schools and colleges, physical education teachers, coaches, local sports bodies, public programmes and community organisations. Its contribution is not limited to funding or formal announcements. Institutions can create regular opportunities, provide equipment, communicate schedules, identify talent, organise competitions, offer coaching and establish rules for safe and fair participation. They can also shape whether beginners feel welcome or believe sport is reserved for already skilled athletes.

The literature indicates that support from parents and other people, community sport opportunities and access to programmes are associated with youth physical activity (Sallis et al., 2000). The barriers review by Batey et al. (2018) similarly points to the importance of local opportunities and coordination between schools and clubs, particularly when cost and time restrict participation. These findings suggest that institutional support may connect infrastructure to regular participation: a ground is more likely to become a sustained opportunity when someone organises sessions, maintains equipment, provides coaching and makes participation predictable.

Nevertheless, the presence of a programme should not be treated as evidence of its reach or effectiveness. Programme availability, awareness, enrolment, attendance and sustained participation are distinct outcomes. An initiative may attract participants for a one-off event without supporting continued engagement. Evaluation should therefore establish who is reached, how often activities take place, whether coaching is available, what costs remain with participants, and whether girls and young people with disabilities can take part on equitable terms.

Indian sports policy provides an institutional context for this discussion. The Ministry of Youth Affairs and Sports describes Khelo India as covering sports infrastructure, competitions and talent development, training centres and academies, women's sport, inclusion of persons with disabilities, and physical fitness among school-going children (Ministry of Youth Affairs and Sports, n.d.). The Government of India's Khelo Bharat Niti 2025 also sets out objectives relating to grassroots infrastructure and wider access to sporting opportunities (Government of India, 2025). These documents establish policy intent; they do not, by themselves, demonstrate the extent to which programmes are available, accessible or effective for youth in each district of Jammu and Kashmir. Local implementation and participation data are needed to assess that question.

6. GENDER, SOCIOECONOMIC POSITION AND DIFFERENCES WITHIN THE YOUTH POPULATION

Youth should not be treated as a homogeneous category. Age, gender, income, educational status, disability, settlement type and family responsibilities can influence both access to sport and the form that participation takes. Sallis et al. (2000) reported sex differences among the correlates of activity in the studies they reviewed, while the qualitative synthesis by Martins et al. (2021) found that gendered experiences and socioeconomic position shaped how adolescents described opportunities and constraints. These findings support testing for differences rather than presuming their size or direction in Jammu and Kashmir.

The relationship between socioeconomic position and participation is particularly relevant where sports require fees, transport, clothing, equipment or time away from paid work. A systematic review and meta-analysis by Owen et al. (2022) found socioeconomic disparities in organised sport and physical activity among children and adolescents in high-income countries, with higher socioeconomic status associated with greater likelihood of sport participation and longer

participation duration. The geographical scope of that review limits direct transfer to Jammu and Kashmir, but it supports examining whether costs and resources distribute opportunities unequally rather than assuming that public provision automatically removes those differences.

Gender analysis should go beyond comparing overall participation rates. It should consider the availability of suitable facilities and schedules, safety during travel, coaching access, privacy and changing facilities where relevant, family expectations, and whether programmes offer a meaningful choice of sports. Similarly, rural-urban comparisons should not rely solely on settlement labels; researchers should measure distance, transport, facility quality and programme availability directly. These variables may explain some apparent group differences and help distinguish demographic association from the conditions that can be changed through policy.

7. SYNTHESIS AND RESEARCH GAP

Across the reviewed literature, three conclusions are reasonably consistent. First, sports participation is associated with a combination of environmental, social and individual conditions rather than any single determinant. Second, facility access matters, but its practical value depends on cost, time, safety, maintenance and the availability of organised activity. Third, participation barriers are not experienced uniformly: gender and socioeconomic position can shape the opportunities young people perceive and can use (Batey et al., 2018; Martins et al., 2021; Sallis et al., 2000).

The evidence is less conclusive about the size and relative importance of each factor in a specific local context. Reviews draw on studies using different age ranges, definitions of physical activity, measures of sport participation and settings. Some studies examine general physical activity rather than organised sport; others focus on voluntary sport, school-based programmes or particular socioeconomic groups. These outcomes overlap, but they are not interchangeable. Self-reported participation can also be affected by recall and social desirability, while cross-sectional associations cannot establish that a facility or programme caused an increase in participation.

For Jammu and Kashmir, the reviewed sources do not provide a sufficient basis for claiming a region-wide participation rate or ranking infrastructure, accessibility and institutional support by their effects on youth participation. The defensible gap is therefore contextual and empirical: locally grounded evidence is needed to examine these factors together among the general youth population, while accounting for gender, socioeconomic position, age and geographic location. A study designed around this gap can contribute by measuring both perceived barriers and concrete conditions of access, rather than assuming that findings from other settings transfer unchanged.

8. IMPLICATIONS FOR RESEARCH AND POLICY

Future research should define its target age range clearly and distinguish recreational participation from organised and competitive sport. Participation can be measured through frequency, time spent practising, competition involvement and level of engagement. Infrastructure

measures should cover availability, condition, safety, equipment and suitability. Accessibility measures should include travel time, transport, cost, opening hours and practical constraints. Institutional support should capture encouragement from educational institutions, coach availability, programme awareness, frequency of organised activities and access to competitions. These dimensions align with the conceptual framework of the source proposal while making the constructs more observable.

A quantitative study could use stratified sampling to include variation across districts, rural and urban settings, gender and educational contexts, provided the sampling frame and sample size are justified. Descriptive statistics can establish the distribution of responses; reliability analysis can assess the internal consistency of multi-item scales; correlation and multiple regression can examine associations among the principal variables. Any regression model should state how variables are coded and which demographic factors are controlled. If data are collected at one point in time, findings should be described as associations rather than causal effects. Questionnaire items should be piloted, and questions about cost, travel and programme access should be specific enough to distinguish actual conditions from general perceptions.

Policy responses should follow diagnosed barriers rather than assume that one intervention will work everywhere. Where facilities are absent or unusable, construction and maintenance may be required. Where facilities exist but remain underused, extended opening hours, local transport, equipment provision, coaching, school-community partnerships or low-cost programmes may be more relevant. Institutions should publish information on programme schedules and eligibility and monitor participation by gender, age, location and socioeconomic indicators. Evaluation should report not only the number of facilities or events delivered, but also repeat attendance, retention and the groups who remain unreachable.

The central policy question is whether public and institutional provision creates regular, affordable and safe opportunities that young people can actually use. Infrastructure investment, accessibility measures and institutional support should therefore be planned and evaluated as connected components rather than independent outputs.

9. CONCLUSION

The literature reviewed here supports a structural understanding of youth sports participation. Infrastructure creates the physical possibility of participation, accessibility determines whether that possibility can be used in everyday life, and institutional support helps turn an available facility into a sustained sporting opportunity. None of these factors should be considered in isolation, and none can be assumed to have the same effect across all groups or locations.

International reviews and national policy documents provide a useful foundation for studying these relationships, but they do not establish the current state of sports participation among

the general youth population of Jammu and Kashmir. A locally grounded investigation is required to determine which barriers are most influential, how they vary across settings and groups, and whether formal sports opportunities translate into regular participation. Such evidence would allow recommendations to be based on measured needs rather than unverified assumptions.

REFERENCES

- [1] Batey, L. S., et al. (2018). Barriers to voluntary participation in sport for children: A systematic review. BMC Pediatrics, 18, Article 47. <https://doi.org/10.1186/s12887-018-1014-1>
- [2] Government of India. (2025). Khelo Bharat Niti 2025: National sports policy. Ministry of Youth Affairs and Sports.
- [3] Martins, J., et al. (2021). Do adolescents' experiences of the barriers to and facilitators of physical activity differ by socioeconomic position? A systematic review of qualitative evidence. Obesity Reviews. <https://doi.org/10.1111/obr.13241>
- [4] Ministry of Youth Affairs and Sports. (n.d.). Khelo India: National Programme for Development of Sports. Government of India. <https://www.kheloindia.gov.in/>
- [5] Owen, K. B., et al. (2022). Fair play? Participation equity in organised sport and physical activity among children and adolescents in high income countries: A systematic review and meta-analysis. International Journal of Behavioral Nutrition and Physical Activity, 19. <https://doi.org/10.1186/s12966-022-01263-5>
- [6] Sallis, J. F., Prochaska, J. J., & Taylor, W. C. (2000). A review of correlates of physical activity of children and adolescents. Medicine & Science in Sports & Exercise, 32(5), 963-975. <https://doi.org/10.1097/00005768-200005000-00014>
- [7] World Health Organization. (2020). WHO guidelines on physical activity and sedentary behaviour. World Health Organization.
- [8] <https://www.who.int/publications/i/item/9789240015128>