

## Sports Infrastructure's Effects On Student Participation And Physical Health: A Case Study Of Kashmiri Colleges

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### Abstract

*This study focuses on colleges in Kashmir and examines how sports facilities affect students' physical health and participation. A structured questionnaire was used to gather information from 250 students in four main areas: students' perceptions of the advantages of participating in sports, physical health indicators, involvement in sports, and the availability of sports infrastructure. According to the findings, there is a notable lack of suitable sports facilities, with 60% of colleges experiencing inadequate infrastructure. Nevertheless, 70% of students kept their body mass index (BMI) within a healthy range, and 62.4% of students participated in sports on a regular basis. Students believed that playing sports had the greatest positive impact on their physical and mental health. The results highlight the need of enhancing sports facilities to encourage more involvement, which may improve physical and mental health outcomes and advance the general development of students. According to the survey, lawmakers and educational officials should work together to give building sports facilities in universities first priority.*

**Keywords:** Sports Infrastructure, Student Engagement, Physical Health, Participation, Body Mass Index, Mental Well-being, College Students, Kashmir, Sports Benefits, Educational Development.

### INTRODUCTION

Around the world, sports have become extremely popular and have ingrained themselves into society. Sports play an important social and cultural role in society and aid in the holistic development of the individual. It offers a wide range of healthy options for leisure and relaxation of the human psyche and community. It is widely acknowledged that a healthy body is just as vital as a healthy mind. It offers chances for social interaction that promote harmony and understanding between various racial, religious, and national groups. Sports also give people and nations a chance to compete with one another in an effort to reach the highest levels of human achievement. On campus, sports play a significant role in students' lives. The youth have the opportunity to enjoy and take advantage of their potential while they are in college. In order to slow down this degradation process, UNESCO recently issued a resolution calling for physical education and sports to be required in every nation in the globe (N.C.E.R.T., Physical Education, 1981). The primary prerequisite for the physical education and sports plan is the provision of sufficient facilities for the operations of the programs. Previous studies by Prasad (1993) and Kewal Krishna (2001) have examined the state of physical education and sports facilities in India, and they are not particularly encouraging. However, the Aravali's landscape is

similar to that of many European nations, and the desert is similar to that of many African nations, where sports are of very high quality. High-caliber players, however, cannot be produced in Jammu & Kashmir or its universities. One of the reasons for subpar performance in sports could be a lack of facilities and an inadequate administrative and organizational structure for physical education and sports at various levels. Therefore, it is crucial to understand the current organizational structure and sporting facilities. The researcher has chosen to pursue the study in light of the current state of sports and physical education at different levels in Jammu & Kashmir. And to identify the underlying reasons why Jammu & Kashmir state's universities are unable to produce talented athletes despite the fact that there is no shortage of potential that just requires the active participation and assistance of the government and other organizations.

## 1. LITERATURE REVIEW

**Bhat et al., (2016)** investigated the connection between college students' involvement in athletics and their academic achievement. 400 respondents (250 male and 150 female students) chosen by stratified random sampling were given a well-crafted questionnaire with a three-point Likert scale. According to the research, Kashmiris have long engaged in sports at any age since they view it as a means of maximizing their free time. Sports' good effects on students' educational results, both mentally and physically, led to the study's conclusion that playing sports was associated with better academic performance. The survey also found that while traditional games in the Kashmir valley were dwindling and only the older generation remembered them, newer generations were more interested in sports that were covered by electronic media. It was determined that participating in athletics helped colleges fulfill their academic missions.

**Singhet al., (2018)** centered on the standard of athletic facilities offered to athletes at Jammu & Kashmiri universities. Eight universities in the area participated in the survey, and information was gathered using a questionnaire created by C.S. Bhati (2005). The survey evaluated the accessibility of a range of sporting facilities, including indoor gyms, playgrounds, track and field fields, and swimming pools. Descriptive statistics were used to examine the replies. According to the survey, the majority of state institutions in Jammu & Kashmir lacked sufficient sports facilities on campus, exposing serious infrastructure deficiencies that impeded the growth of athletic programs and chances for students to participate in physical education.

**Hassan et al., (2016)** investigated the impact of socioeconomic status on physical education students' involvement in sports. Using random sampling, 150 physical education students from various degree colleges in the Kashmir Valley were chosen as a sample. A self-made questionnaire measuring socioeconomic position and levels of sports involvement was used to gather the data. According to the report, 36% of the students also received part-time pocket money, and 72% of the kids received monthly pocket money from their parents. It was discovered that 82% of students believed that having their own transportation influenced their engagement in sports, and 34% of students had played intercollegiate sports. Additionally, 86% of students who had participated in international sports said they had never participated in such a competition, underscoring obstacles pertaining to resources and access.

**Khanmoradi and Abbas (2024)** offered an eight-phase plan for enhancing school sports facilities through cooperation between the public and private sectors. The concept placed a strong emphasis on how government regulations and physical education instructors contribute to the construction and furnishing of these facilities. The model's initial portion addressed government policies and offered solutions like research team development, public-private collaborations, and legislative frameworks.

The section on teacher participation recommended tactics such as social media promotion of investment opportunities, sports facility summits, and reward schemes. Auctions and tenders were used to address the engagement of the private sector. In order to monitor progress, the teacher evaluators division lastly implemented a project reporting system. The study promoted cooperative contracts to upgrade school sports facilities and underlined the role that educators play in fostering collaborations between the public and private sectors. The application of this concept was thought to be essential for developing a long-term strategy for improving sports facilities and creating better spaces for instructors and students to participate in academic learning and physical activity.

## **2. RESEARCH METHODOLOGY**

### **2.1. Research Design**

This study looks at how sports facilities affect college students' physical health and involvement using a descriptive research design. The goal of the study is to determine how students' perceptions of the advantages of participating in sports, their physical health metrics, and the availability of sports facilities relate to each other. Without any intervention or variable manipulation, the research approach focuses on assessing the current situation and offering comprehensive insights into these areas.

### **2.2. Population and Sample**

College students enrolled in different degree programs in Kashmiri colleges make up the study's population. The 250 students that make up the sample for this study were chosen at random from several colleges in the area. To guarantee a varied and representative sample, the students are drawn from a variety of age groups, genders, and academic backgrounds. The sample size is selected to retain feasibility within time and resource limits while guaranteeing accurate data collection and analysis.

### **2.3. Sampling Method**

Simple random sampling was the sampling strategy employed in this study, meaning that every student in the population had an equal chance of being chosen for the survey. This approach was selected in order to minimize biases and guarantee that the sample is representative of the larger student body across several universities. In order to make valid inferences on the availability of sports infrastructure, participation levels, health indicators, and attitudes toward sports involvement, a sample size of 250 students is considered enough.

### **2.4. Data Collection Tools**

A structured questionnaire that was specifically created to capture a variety of elements linked to the study's goals was used to gather the data. Each of the four sections that made up the questionnaire focused on a different topic of interest. In Section 1, the availability of sports infrastructure was gathered, and the suitability of facilities like sports courts, playing fields, and gymnasiums was evaluated. Data on students' involvement in sports, including how often they participate and what kinds of sports they play, was gathered in Section 2. Questions on students' health, namely their body mass index (BMI) and general physical health indicators, were covered in Section 3. Last but not least, Section 4 investigated how students perceived the advantages of playing sports, looking at things like enhanced social interaction, academic achievement, mental and physical health, and more. The questionnaire's structured methodology made it possible to collect a large amount of data and conduct a thorough analysis of the main variables affecting students' physical health and engagement with sports.

## 2.5. Data Collection Procedure

Over the course of three weeks, data was gathered. The students were requested to take part in the poll when they were contacted during regular college hours. Respondents were guaranteed that their answers would be kept private, and participation was completely optional. Students with different tastes and levels of access to technology were accommodated by administering the survey in both digital and physical modes. 250 questionnaires were filled out in total, and they were coded for analysis.

## 2.6. Data Analysis

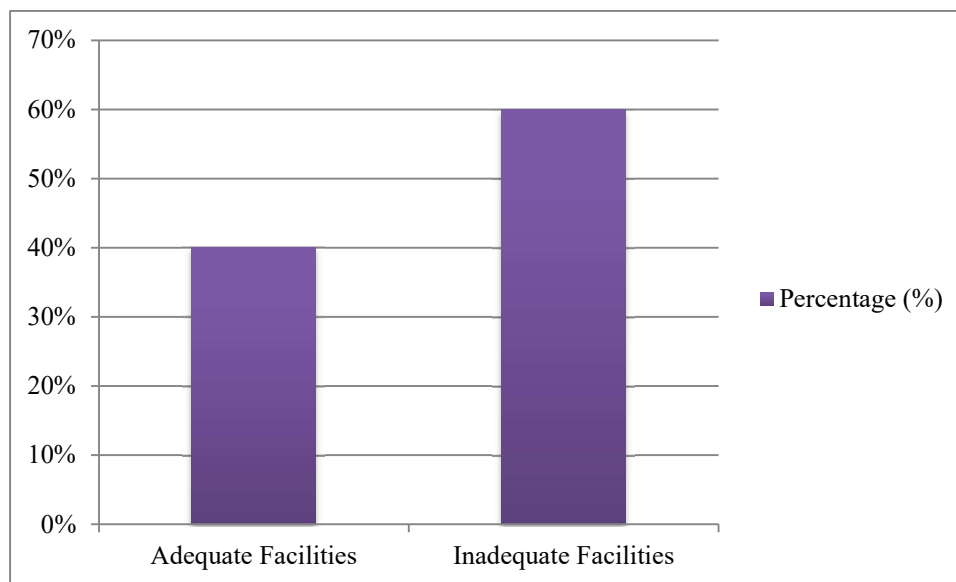
In order to efficiently summarize and explain the survey replies, data analysis was done using both frequency analysis and descriptive statistics. The initial stage was to compute frequency distributions and percentages for every variable, such as perceived benefits of sports engagement, physical health indicators, participation rates, and the availability of sports infrastructure. These computations aided in locating trends and patterns within the data. Key trends were therefore easier to spot after the results were shown in tabular form, which provided a clear and succinct depiction of the data. The goal of the analysis was to determine how student engagement, physical health outcomes, and perceptions of the advantages of sports relate to sports infrastructure. A strong basis for deriving significant results from the study was established by using statistical tools, such as SPSS, for data processing and interpretation in order to guarantee the correctness and dependability of the analysis.

## 3. DATA ANALYSIS

According to the research, there is a notable disparity in the amount of sports facilities available in universities; just 40% of institutions have appropriate facilities, and 60% have inadequate ones. A systemic problem that may have significant effects on student involvement and general development is highlighted by this discrepancy. Encouraging physical activity, collaboration, and improving students' mental health all depend on having adequate sports facilities.

**Table 1: Availability of Sports Infrastructure in Colleges**

Availability	Frequency (n)	Percentage (%)
Adequate Facilities	100	40%
Inadequate Facilities	150	60%
<b>Total</b>	250	100%

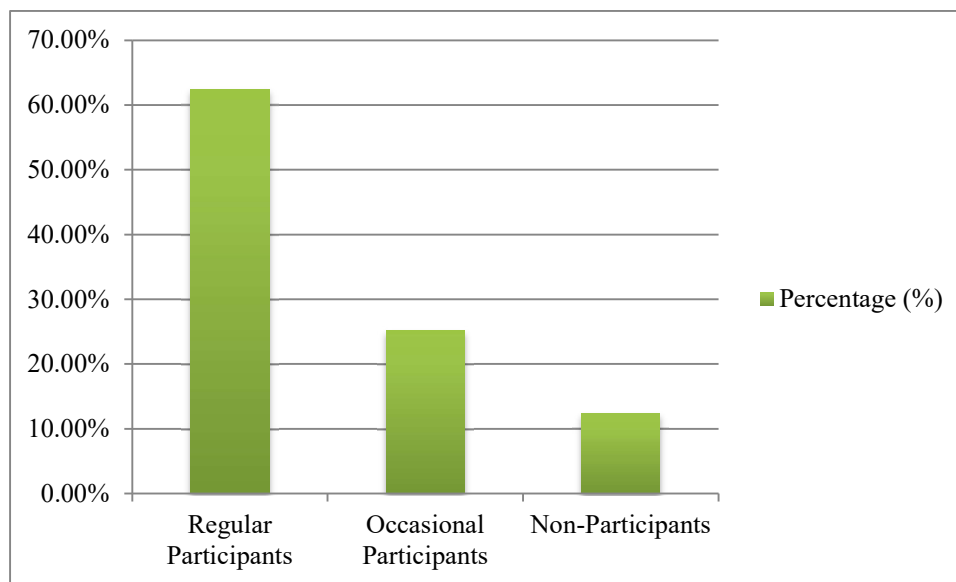


**Figure 1: Availability of Sports Infrastructure in Colleges**

Nonetheless, most universities' inadequate facilities might serve as a deterrent, preventing students from participating in sports and other physical activities. Since physical activity is frequently linked to better stress management and cognitive function, this restriction may potentially impair kids' social and intellectual development in addition to their physical health. Policymakers, educational authorities, and stakeholders should give priority to the construction and upkeep of sports facilities in colleges immediately, according to the findings. By providing a setting that promotes consistent physical exercise, well-equipped sports facilities can enhance the overall educational experience and help achieve the larger objectives of developing a student body that is healthier, more active, and well-rounded.

**Table 2: Participation in Sports Activities**

Participation Category	Frequency (n)	Percentage (%)
Regular Participants	156	62.4%
Occasional Participants	63	25.2%
Non-Participants	31	12.4%
Total	250	100%

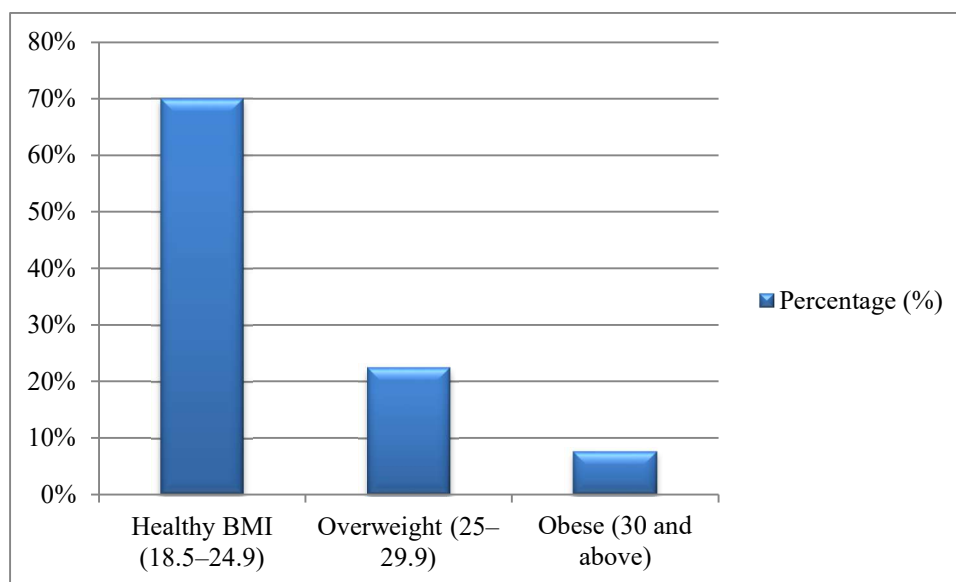


**Figure 2: Participation in Sports Activities**

According to data on college students' involvement in sports, there are positive trends: most (62.4%) of them regularly participate in sports. This suggests that a sizable segment of the student body understands the advantages of consistent physical activity and takes advantage of them. Nevertheless, a noteworthy 25.2% of students only infrequently engage, pointing to possible obstacles including lack of desire, restricted access to facilities, or time constraints that can prohibit more regular participation. Additionally, 12.4% of students do not play any sports at all, which raises questions about their physical and mental health because inactivity is frequently associated with negative health outcomes as well as lower levels of social and academic engagement. In order to promote increased engagement, our findings emphasize the significance of developing supporting conditions, such as enhancing infrastructure, raising knowledge of the advantages of physical activity, and incorporating sports into academic life. By tackling these issues, universities can guarantee that more students benefit from sports on a social, mental, and physical level, promoting their overall development.

**Table 3: Physical Health Indicators**

Health Status	Frequency (n)	Percentage (%)
Healthy BMI (18.5–24.9)	175	70%
Overweight (25–29.9)	56	22.4%
Obese (30 and above)	19	7.6%
<b>Total</b>	250	100%

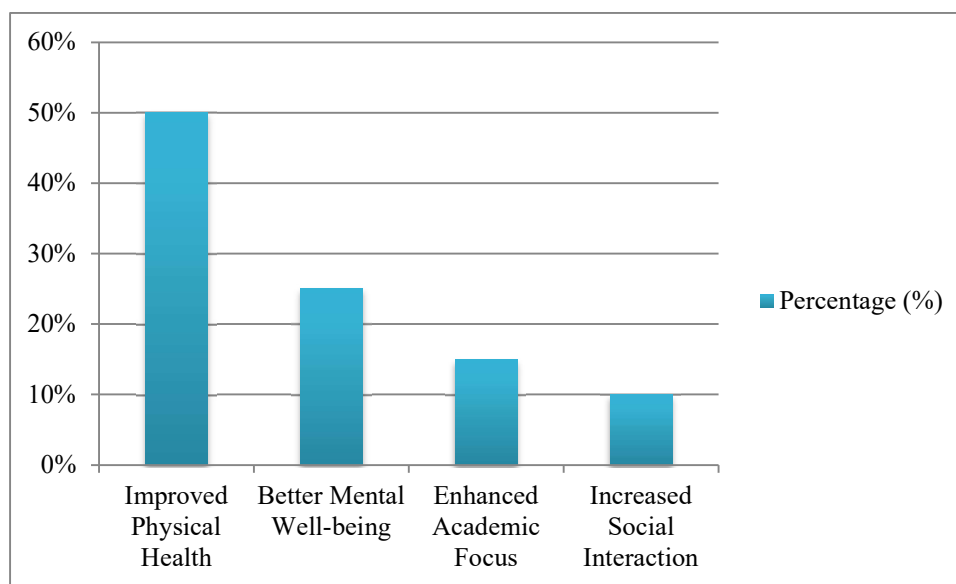


**Figure 3: Physical Health Indicators**

According to data on physical health markers, particularly body mass index (BMI), 70% of college students fall within the "healthy BMI" range of 18.5–24.9, indicating a generally healthy trend among this demographic. This implies that most students preserve a healthy weight, a sign of balanced physical well-being. However, 7.6% of students are obese, with a BMI of 30 or more, and 22.4% are overweight, with a BMI between 25 and 29.9. Being overweight or obese affects a large percentage of students, which is alarming because these diseases are linked to a higher risk of heart disease, diabetes, and joint problems, among other health problems. According to the findings, it is critical to encourage physical activity and make health resources available on college campuses. Sports infrastructure and programs need to be improved in order to address and lower the prevalence of overweight and obesity among students, which will improve their general health and well-being. This is evident given the favorable correlation between playing sports and keeping a healthy BMI.

**Table 4: Student Perceptions on Benefits of Sports Participation**

Perceived Benefit	Frequency (n)	Percentage (%)
Improved Physical Health	88	50%
Better Mental Well-being	75	25%
Enhanced Academic Focus	62	15%
Increased Social Interaction	25	10%
<b>Total</b>	250	100%



**Figure 4: Student Perceptions on Benefits of Sports Participation**

The majority of students (50%) link regular participation in sports to better physical health, according to data on students' opinions of the advantages of sports participation. This shows how widely accepted the physical benefits of active participation are. Furthermore, 25% of students believe that one of the main advantages of sports is improved mental health, demonstrating an understanding of the beneficial impacts that sports may have on lowering stress, elevating mood, and increasing mental health in general. However, just 15% of students think that playing sports directly improves academic attention, which raises the possibility that students are not as aware of or appreciative of the academic advantages of physical activity. Furthermore, just 10% of students believe that playing sports improves social interaction, which may suggest that social components of sports are not as highly regarded or stressed throughout their college years. In order to promote increased participation and a more thorough understanding of how sports can benefit students' lives in ways other than their physical health, these findings highlight the necessity for colleges to further emphasize the holistic benefits of sports, including the academic and social advantages.

#### 4. CONCLUSION

The study concludes by highlighting the important influence that sports participation, facilities, and students' views of their advantages have on college students' physical health outcomes. The results show a troubling lack of suitable sports facilities, with most universities experiencing inadequate infrastructure that prevents students from actively participating in sports. Despite this, a sizable percentage of students continue to play sports on a daily basis, which is positively correlated with their physical health, as evidenced by the majority of participants' healthy BMIs. Additionally, students believe that playing sports improves their physical and mental health, but the advantages for their academic and social lives are not as strongly highlighted. These findings highlight the necessity of upgrading sports facilities to encourage increased involvement, which may have more extensive beneficial effects on students' general growth and well-being. To create a healthier, more involved student body, colleges and legislators should place a high priority on improving sports facilities and highlighting the all-encompassing advantages of sports.

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