



## Sports facilities and utilities: - A perceptual analysis of college students

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### Abstract

Aristotle stated that “education is the creation of a sound mind in a sound body”. Following a descriptive survey in quantitative framework the purpose of the study was to compare and analyze the perception of students at Bareilly region about the availability of sports facilities and their utilization. A multi stage sample of 100 colleges was taken from Government and private 568 colleges affiliated to M J P Ruhaikhhand University Bareilly.

**Keywords:** sports facilities, sports utilities, teacher views about sports, student’s perception about sports

### Introduction

Sports assume a significant part in student life in every single angle and there are not many quantities of guardians who know about the significance of sports and its constructive outcome on the scholarly accomplishment of students. The brain requires rewards. If a student gives lot more time to contemplate and does not revive his psyche, he will before long be tired. Additionally, if students don’t complete active work or exercise, it will straightforwardly influence their wellbeing and they will become sick soon.

Essentially the general population and private area colleges are the suppliers of coordinated games in India. There are some different gatherings for instance the games sheets, public local area association, privately owned business that support the games exercises in India. There are additionally business clubs for sports, few games federations and which support sports for students in India.

The effect of sports on instruction can be depicted in few mentalities for example sports need energy and proper time so it can result in scholastic fulfillment. Likewise, on account of related advantages, sports can improve scholastic accomplishment, for instance, great wellbeing decreases truancy, and control is improved which prompt higher scholarly accomplishments. Furthermore, the last one is that sports are not capable to reduce scholastic accomplishment. Sports should be presented and empowered because it is straightforwardly identified with wellbeing and greatly affect expanding the fixation and help growing great investigation conduct (Coalter 2007a) <sup>[12]</sup>. The African students are dynamic much intrigued to participate in sports the other nation students (Feldman & Matjasko, 2007). Miller *et al* (2005) have achieved the same results for white students.

This should be a pattern in instructions that in school/colleges sports interest might be advanced because it is viewed as that towards instructive advancement, scholarly accomplishment, great wellbeing, security and achievement, sport is a decent means (Braddock, Hua & Dawkins, 2007; Dawkins, Williams & Guilbalt, 2006; Leeds, Miller & Stull, 2007) <sup>[6]</sup>. Additionally, the sports participating students are mingled and Jackson & Regoli, 2006). The study and

research on the utilities, facilities of sports are very rare (Taylor *et al* 2012.).

### Objectives of the Study

Following objectives were framed for the study in hand:

1. To analyze the perceptions of college students for the availability of sports facilities.
2. To investigate the utility of available resources by college students, both college as well as outside.
3. To suggest for the provision and use of sports facilities concerning the academic performance of college students.

### Review of Related Literature

In our general public, games take on a wide range of structure. The movement which is constrained by the members in the youth is completed for the sake of entertainment. Past this, the coordinated type of sports is additionally there. These coordinated games are completed by some set standard guideline. This requires extra ordinary abilities and legitimate technique. Legitimate indicated places/positions are specified for the players with headings to contend (Woods, 2007) <sup>[39]</sup>. Similarly at six years of age, students begin to take an interest in these coordinated games. Notwithstanding, some discoveries additionally referenced that three to four years of students are participating in group activities.

The various kinds of sports organized by students outside the educational system have changed power for rivalry and monetary expense. The capable and strong games groups for students are costly and expect going too for sports. Low income family foundation students frequently can’t part take in these games and they need monetary help for support in these games due to significant expenses and travel cost (Woods, 2007) <sup>[39]</sup>.

These days sports for students who are spent significant time in serious games are costly undertaking. Student who have a frail monetary foundation find that going with groups, going to sports camps, employing a mentor and joining sports institutes are monetarily unrealistic (Cary,

2004). Along these lines bringing about chaotic games and their games exercises are not appropriately managed.

Students which spend additional time in games will have a greater advantage (Ginsburg *et al.*, 2006) <sup>[16]</sup>. Among African, American and Hispanic males, general people with little assurance and relationship in games, show interest and social assistance as main portions of taking part in facilitated bunch exercises (Taylor *et al.*, 1999) <sup>[31]</sup>. African, American male, explicitly, is likely going to take part in games at whatever point assisted a partner (Bungum & Vincent, 1997) <sup>[8]</sup>. Consequently, the expectation of males to make some great memories and blend while taking an interest in games should be affirmed and valued (CDC, 1997). Genuine cause are not the only inspiration to look into sports. Or on the other hand, perhaps, it is the skill of delight and connections that is a charming force for males to play sports.

The fundamental cause that students don't take part in games is essentially more contrasted and jumbled than their inspirations to participate in sports. Monetary status and uphold from family are the principal motivation to student's support and interest in games (Haas *et al.*, 2003). Additionally, it can be observed that student's genuine capacity and interest in games are connected to their participation in games (Bois *et al.*, 2005) <sup>[5]</sup>. Investigating that why students don't take an interest in games shows the most broadly perceived clarification behind withdrawal was a shortfall of bliss (Butcher, Linder & Johns, 2002) <sup>[9]</sup>. The major cause for leaving sports is a small level of aptitude.

Desperation significantly confines males' induction to real activity and composed gathering exercises (CDC, 1997). It is especially substantial for such males, whose portrayal is surpassed in poor monetary students (U.S. DHHS, 2000). Students from weak monetary establishments will by and large use open and tolerably modest sports of students' games, for instance, interscholastic gathering exercises (President's Council on physical fitness & sports, 2005) <sup>[26]</sup>. Essentially children of low compensation foundation need real guidance meetings and the usage of establishment defense for after-school activities to offer events to more significant wellbeing (Madsen, Gosliner, Woodward-Lopez, Crawford, 2009). Students of rich monetary establishment take critical speeds of sports collaboration, using open financial resources for partaking in educational gathering exercises. Similarly as Olympic games or other occasion practices give at sports clubs (Wood, 2007) <sup>[39]</sup>.

Putting the vast majority of energy in the home because of local area prosperity progress a fixed life style where school children are more arranged to gaze at the television, run PC games, or sit in front of computers (SGMA, 2000). School children who watch television five hours a day are more likely to be over weight than those who watch up to two hours consistently (Woods, 2007) <sup>[39]</sup>. From inside, African, Americans sit in front of the television the most (Sallis, Zakarian, Hovell & Hofstetter, 1995). The investigation has comparatively demonstrated that poor males have the main sort of latency (CDC, 1997). The African, American females, starting point are the most fixed assembling of minorities foundations (Palmer & Jaworski, 2004) and devour an insignificant proportion of real energy every day (Woodfield *et al.*, 2002) <sup>[38]</sup>. Caucasian males brought into the world in the country or commonplace organization of good monetary foundation living with the guardians will undoubtedly take part in games than African, American and

Hispanic male (Troutman and Dufur, 2007). Investigation exhibits that the central consequences for participation for students of the poor monetary foundation are characteristic, transportation, spending plan, workplaces and social security (Humbert *et al.*, 2006) <sup>[17]</sup>.

Family help is fundamental component of appointment and keeps up real development (Davison, Downs and Birch, 2006). The responsibility of males interest in games needs ceaseless guide and backing from the guardians. Playing little regard to racialism and ethnicity (McGuire *et al.*, 2002). Regardless, scarcely any investigation reasons that family and students development stages are irrelevant as student age (Davison, 2004) <sup>[13]</sup> and that verbally expressed reassurance alone doesn't emphatically influence male, uphold (Kientzler, 1999). At the point when students show up at pre-adulthood, watchmen by and by don't need to exhibit genuine development (Davison, 2004) <sup>[13]</sup>, not are parental activity levels related to their children's real activity (McGuire *et al.*, 2002). This is because family impact vanishes as youngsters become students, and companions become a significant social effect in their lives (Dixon *et al.*, 2008).

Family convictions about a student's degree of capacity moreover influence collaboration in student sports. At a point where a parent has faith in the youngster's actual potential, the individual is compelled to partake in genuine movement and expand the potential for self-viability (Boise *et al.*, 2005). Different examinations recommend that the student fabricates a positive certainty structure in their real capacity to grow to uphold in student sports (Davison *et al.*, 2006). This genuine capacity is the persuading factor for students to show interest in the game, whether or not the possibility of a genuine ability begins with the students or the safeguards. This is particularly significant for grade schoolmen, who have little certainty and self-viability in genuine abilities (Brusted, 1993) <sup>[7]</sup>.

Acquiring skill in a game is an ideal way and executing fear of baffled family or partners (Woods, 2007) <sup>[39]</sup>. A youngster's future athletic accomplishment can't be considered typical before the age of 12 (Ginsburg *et al.*, 2006) <sup>[16]</sup>. Along these lines, the reason or capacity to play in school is successfully underlined among student contenders, in what men and college and master open entryways are limited to students. Particularly when just 5% of subculture contender's advancement from discretionary school to class sports and just 3% of school contenders enter proficient positions, the quest for athletic standing and distinction keeps on being incomprehensible (National college athletic association, 2003) <sup>[21]</sup>. Mentors can reduce the pressure of sports execution by aiding student contenders create reasonable, unequivocal and quantifiable objectives (Gilbert and Moravsky, 2007). Diminishing silly cravings will decrease the danger of negative game insight and afterward the potential for declining athletic help.

Evaluation school/college is a fundamental thing for students to be related with sports. Before thirteen years of age, nine out of ten students participate in planned games union. In this fundamental time, they must be offered wonderful game experiences, and this forms genuine potential. It is significant for students between 6 to 10 years to create abilities as they think the distinctions in mentalities and capacities in their companion's assortments. Essential students balance themselves with companions to quantify their competency level and make evaluation capacities and

worth. Despite advancement splashes and genuine new development, students are similarly enthralled in the progressive tasks of companionships, scholastics and play (Ginsburg *et al.*, 2006) [16]. Recognizing preferences, constructing self-assurance and learning enthusiastic control are important perspectives that men and students of this age bunch get (Woods, 2007) [39].

**Methodology**

The study followed a non-experimental quantitative survey.

**Population**

All the boy’s secondary schools/colleges of Bareilly region were the population of the study. The total number of college is 149 of which the boy’s school was 84. The total number of boys in these colleges is 33558 (Avg.400 students per college).

**Sample Size and its Distribution**

The technique used in this research was the multi-stage sampling technique. From among 48 students from 12 colleges (Avg.4 students per college) i.e. 25% were selected in the first stage. 300 students from the total students were selected by using the Morgan table (1970) in the second stage. This means, 25 students from each college were randomly selected. On the other hand, 2 teachers have been

selected from each college i.e. 24 teachers were purposively selected from these colleges and they were teaching to the secondary/ UG level students.

**Data generation tool**

A self-report questionnaire was designed for data collection, included closed items in a response type of a five-point Likert scale.

**Procedure**

The participants of the study were approached personally, for which they were informed verbally in their respective classrooms. The items of tools were discussed thoroughly and the responses were collected on the spot, yielding a 100% response rate.

**Ethical Consideration**

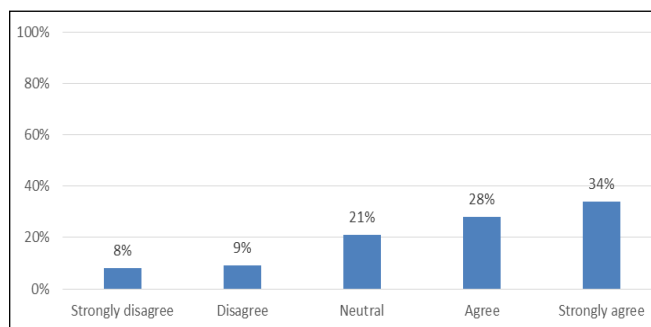
Written consent forms were sent to the principals of the sampled colleges for the collection of data. The permission of the stated principals were received and the details of the participants were kept confidential.

**Data and Analysis**

The collected data organized, tabulated and analyzed using the Kruskal Wallance H test and Mann- Whitney U test. The details are as follows:

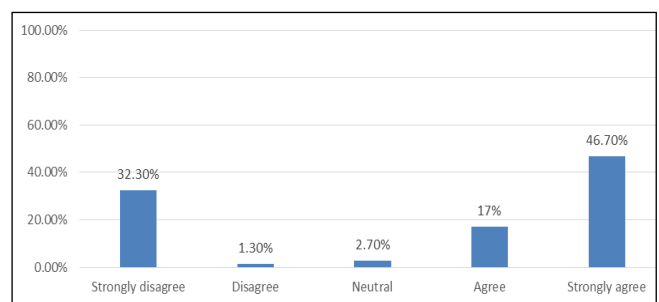
**Table 1:** Sports Facilities and Utilities by Students

C	Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	I participate in sports.	22(8%)	27 (9%)	64(21%)	85(28%)	102(34%)
2	Our college have playground	97(32.3%)	4(1.3%)	8(2.7%)	51(17%)	140(46.7%)
3	In college I take part in sports (during break time)	126(42%)	21(7%)	38(12.7%)	95(31.7%)	20(6.7%)
4	In our residential area playground is available	101(33.7%)	37(12.3%)	28(9.3%)	92(30.7%)	42(14%)
5	Our teachers motivated us to take part in sports	9(3%)	6(2%)	97(32.3%)	146(48.7%)	42(14%)
6	Our parents motivate us to take part in sports	16(5.3%)	67(22.3%)	99(33%)	86(28.7%)	32(10.7%)
7	Our school provide us sports facilities (sports goods etc.)	20(6.7%)	65 (21.7%)	14(4.7%)	113(37.7%)	88(29.3%)
8	Parents provide us sports facilities	18(6%)	81(27%)	59(19.7%)	113(37.7%)	29(9.7%)
9	Our college have appropriate sports facilities	11(3.7%)	95(31.7%)	60(20%)	75(25%)	59(19.7%)
10	We utilize sports facilities in our college	35(11.7%)	114(38%)	32(10.7%)	66(22%)	53(17.7%)
11	Sports facilities outside the college	35(11.7%)	87(29%)	80(26.7%)	78(26%)	20(26.7%)
12	We utilize sports facilities outside colle.	29(9.7%)	63(21%)	89(29.7%)	102(34%)	17(5.7%)



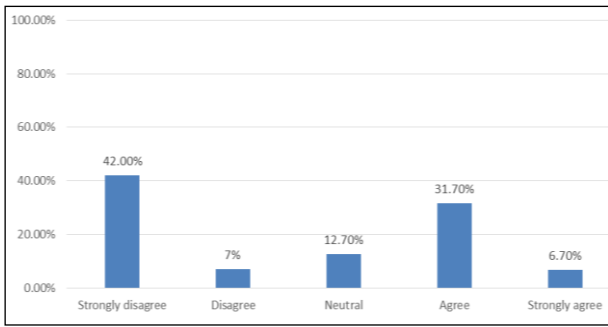
**Fig 1:** I participate in sports

In table, Item 1 shows that the sports participating students were 62% whereas, the non-participating students were 17% and 21% undecided students.



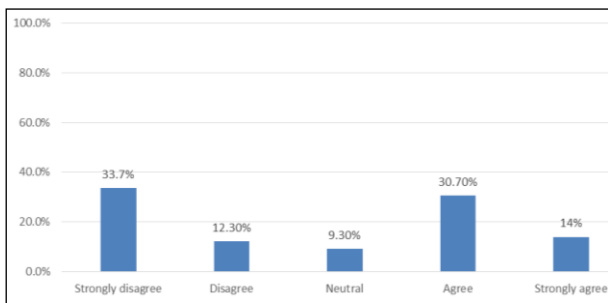
**Fig 2:** Our college have playground

Item 2 indicates that playgrounds in college were available for 63.7% students whereas, for 33.3% of student’s playground was not available in colleges and 2.7% were undecided.



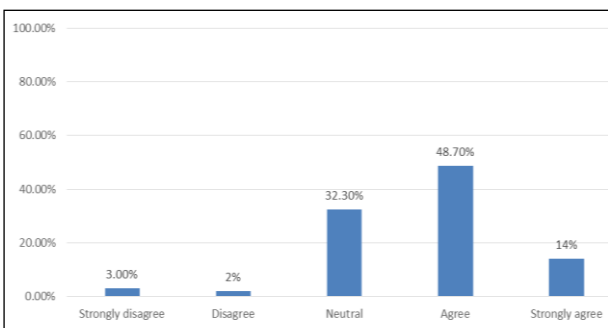
**Fig 3:** In college I take part in sports (during break time)

Item 3 shows that sports participating students during college hrs. were 38.4% whereas, non-participating students were 49% and the undecided students were 12.7%.



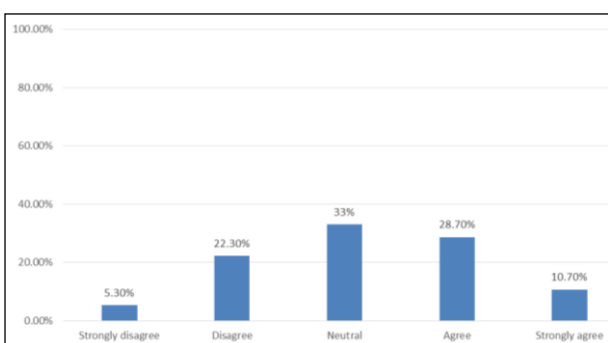
**Fig 4:** In our residential area playground is available

Item 4 reflects that students having a playground in their residential area were 44.7% whereas, students with no playground in their residential area were 46% and undecided students were 9.3%.



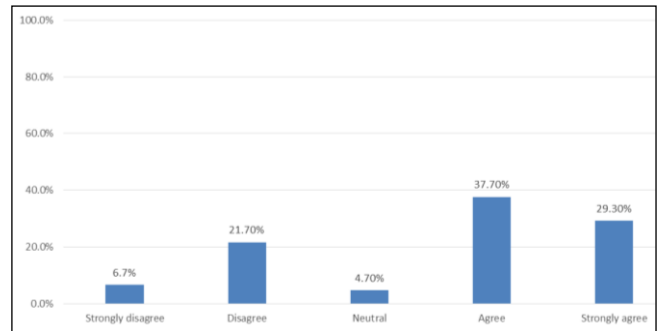
**Fig 5:** Our teachers motivated us to take part in sports

Item 5 show that the encouragement by the teachers to participate in sports is for 62.7% students whereas, 5% students were of the view that they were not encouraged by their teachers and undecided students were 32.3%.



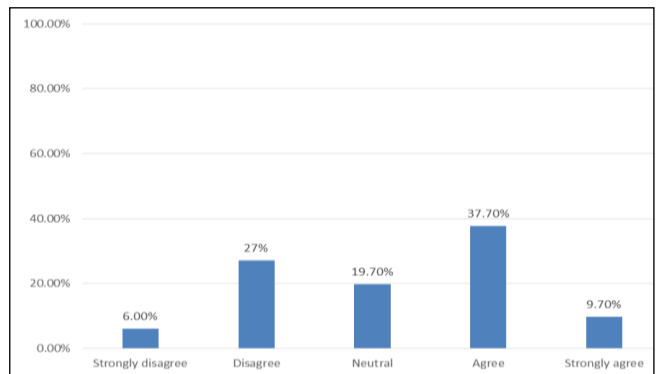
**Fig 6:** Our parents motivate us to take part in sports

Item 6 indicates that parents encourage 39.4% of students to play sports whereas, 27.6% of the students were not encouraged by their parents and 33% were undecided students.



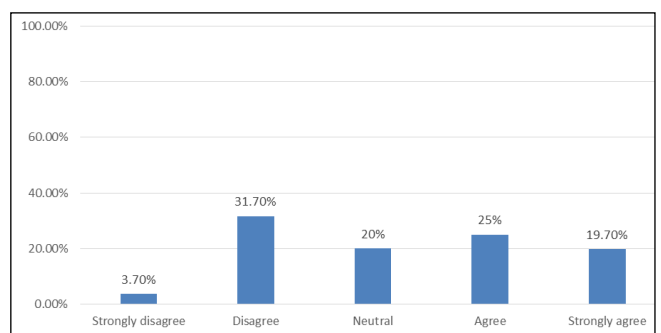
**Fig 7:** Our school provide us sports facilities (sports goods etc.)

Item 7 shows that sports facilities are provided to 67% of students in school whereas, 28.4% of the students were not having sports facilities in school and undecided students were 4.7%.



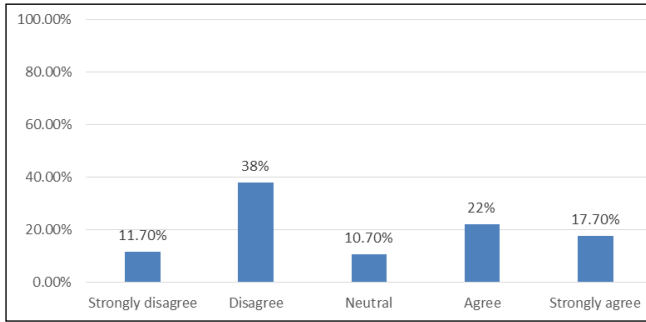
**Fig 8:** Parents provide us sports facilities

Item 8 indicates that parents provide sports facilities to 47.4% of students whereas, 33% of the students were not having sports facilities at home while undecided students were 19.7%.



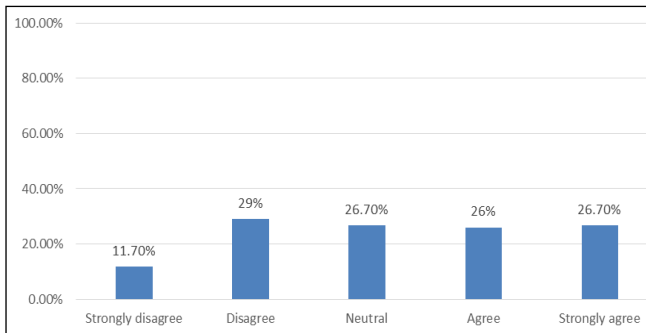
**Fig 9:** Our college have appropriate sports facilities

Item 9 indicates that 44.7% of students think that sports facilities are appropriate in their schools whereas, for 35.4% of students the facilities were not appropriate in their colleges and undecided students were 20%.



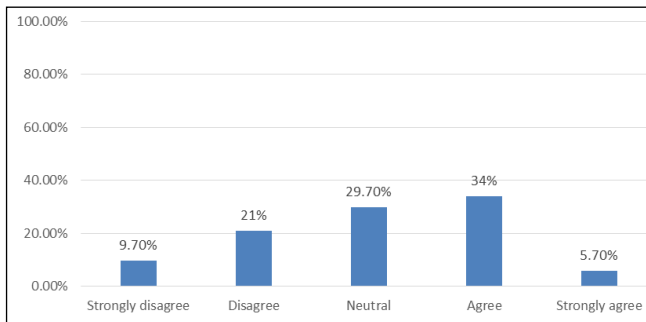
**Fig 10:** We utilize sports facilities in our college

Item 10 shows that sports facilities were utilized by 39.7% of students in college whereas, sports facilities inside the college were not utilized by 49.7% and the undecided students were 10.7%.



**Fig 11:** Sports facilities outside the college

Item 11 show that there are adequate sports facilities for 52.7% of students outside the college whereas, for 40.7% of students the facilities were not adequate outside the college and undecided students were 26.7%.



**Fig 12:** We utilize sports facilities outside college

Item 12 indicates that sports facilities were utilized by 39.7% of students outside the college whereas, sports facilities outside the school were not utilized by 30.7% of students and the undecided students were 29.7%.

**Findings**

Based on the analysis of the data, the following findings have been recorded.

1. 62% of the representatives were taking part in sports.
2. 63.7% of the responding students were having play areas in colleges.
3. 38.4% of students were taking part in sports during college hours.
4. 44.7% of the participating students were having a play area outside the college.

5. Most of the participants i.e. 62.7% were motivated by their teachers to participate in sports.
6. Parents of 39.4% of participants encouraged them to participate in sports.
7. Sports facilities were provided to 67% of the students in the college.
8. 47.4% of the respondents were provided with sports facilities by their parents.
9. 44.7% of the participants think that their school has appropriate sports facilities.
10. Sports facilities were utilized by 39.7% of participants inside the college.
11. Sports facilities are adequate for 52.7% of students outside the college.
12. Sports facilities were used by 39.7% of participants outside the college.

**Conclusion**

On inquisitive about arranging the facilities of sports for students in college, the majority of the students answered that they are provided with the essential game facilities. Which ranges from the play area to sports units, equipment, gears and arrangement of instructing? Not many of the members additionally referenced that they have sports reserves and indicated spending plan however they don't have a playground in their colleges and students can't take part in games because of the non-accessibility of the playground.

The majority of the respondents answered that: Our colleges give sports facilities to the students. In the most recent period, it has been underscored incredibly and the new management is likewise underlining on the games and they are giving the games merchandise, units and different things for the games. We have a playground and are utilized by the students. They replied that our school is fulfilling the criteria and we have an appropriate financial plan for the games. Our college is additionally providing appropriate periods for games and other exercises.

A participant answered that: we have a small space for sports, yet the students are provided with sports material, which they need for the games. The class teachers are likewise giving instructions and prepare the students and facilitate them.

Some participants answered that: The facilities provided are adequate at college level for the students. We have a wide space for games and exercises and the sports goods are bought every year and our students are showing good performance in the games too. We have every facility of sports. The school organization puts together various occasions concerning sports and co-curricular exercises. Additionally, a large portion of them likewise take part in games exercises. The day researchers likewise take an interest in games and they are additionally showing extraordinary advancement.

A participant uncovered that: Facilities for sports are available in school but we are not provided with appropriate time for the games. The organization isn't undermining the games exercises. If the students need to play sports, they need their own sports material.

The vast majority of the participants answered that they give facilities to the students and they have equipment for every game. They have a play area, master mentors and give appropriate rules to the students for investment in game. They shared that they have an appropriate determining

spending plan for the games things and they have adequate financial plans. A portion of the member expressed that the students have a predefined period in colleges and they are also provided facilities for sports after school/college.

The instructors of the colleges with no playground answered to the inquiry as beneath: Few of the instructors reacted that: The College doesn't have adequate sports facilities. The students can't participate in sports due to the non-availability of the play area. The non-availability of playing area is a disaster for our students. The region is exceptionally clogged and it is beyond the realm of the imagination to expect to set up a play area for the students. Different services are provided to the students and students use these facilities. We have various games and appropriate school name packs.

A Respondent uncovered that: We have no grounds for sports in our school/college and that's why we can't provide sports facilities to the students. Sports facilities like hardware's and other materials there however because of unavailability play area we take students to nearby grounds they take part in games there.

The answers show that practically all the schools have the legitimate indicated spending plan for the games and there are buy councils for buying sports things. However, few of the schools/colleges doesn't have grounds for the sports and the students can't take part in games. Most of them have grounds for games and the students take part in sports there. The schools which don't have playgrounds for students can't play sports and in this manner, they deal with issues. The instructors take them outside schools of investment in games at uncommon events, similar to sports competitions, rivalries and occasions etc.

### Recommendations

Based on the information gathered from the investigation, the accompanying suggestions are made:

1. Based on the discoveries of the investigation, it is fundamental that every school have a playground. Also, there should be a legitimate area for sports and uses of sports things.
2. The colleges having no playground must be provided with playgrounds for the students. These colleges must be moved to the buildings having playgrounds or they might be given a playground in their provided space.
3. Considering the significance of sports, the students' sports participation should be guaranteed. The class teacher and instructors for physical training should urge all the students to take an interest in games. Then again the guardians should likewise urge their children to take an interest in games.
4. An appropriate specified time for sports must be given to the school students. The games should be intermittently masterminded after sessions of study.
5. Proper sports events, the festivity of sports week, and game plan of competitions for various games, maybe organized routinely in the colleges.
6. The facilities of sports, sports things should be given to the students for every single game. There may not be any obstacles or limitations to the arrangement of these facilities.
7. The teacher of the class, the instructor for physical training, and related staff is given legitimate preparation time and training courses for various games. They must be taught and provided information regarding the rules

and significance of all the sports and must be trained. Additionally, they should have the data of the relative multitude of students in the school concerning participation in sports and interest.

### References

1. Alfano CM, Klesges RC, Murray DM, Beech BM, Mc Clanahan BS. History of sport participation about obesity & related health behaviors in women. *Preventive Medicine*,2002;3:82-89.
2. American sports data, Inc. Organized youth team sports participation in the U.S. 2001. Hartsdale, NY: Sporting Goods Manufacturing Association, 2000.
3. Biddle SJH, Fox KR, Boutcher S. Physical activity & psychological wellbeing. London & New York: Routledge, 2001.
4. Biddle SJH, Mutrie N. Psychology of physical activity: determinants, wellbeing, & interventions. London: Routledge, 2008, (2).
5. Bois J, Sarrazin P, Brusted R, Trouilloud D, Cury F. Elementary school children have perceived competence & physical activity involvement: The influence of parent's role modeling behaviors & perceptions of their child's competence. *Journal of sport & exercise psychology*,2005;6:381-397.
6. Braddock JH, Hua L, Dawkins MP. Effects of participation in high school sports & non-sport extracurricular activities on political engagement among black young adults. *Negro educational Review*,2007;58(3/4):201.
7. Brusted R. Who will go out & play? Parental & psychological influences on children's attraction to physical activity. *Pediatric exercise Science*,1993;5:210-223.
8. Bungum TJ, Vincent ML. Determinants of physical activity among female adolescents. *American Journal of Preventive Medicine*,1997;13:115-122.
9. Butcher J, Lindner KJ, Johns DP. Withdrawal from competitive youth sport: A retrospective ten-year study. *Journal of Sports Behavior*,2002;25:145-163.
10. California Women's Law Center. Title IX: The good news, the bad news. In J.O' Reilly & S. K. Cahn (Eds.), *Women & Sports in the United States* (pp.353-355). Boston, MA: Northeastern University Press, 2007.
11. Centers for Disease Control & Prevention. Physical activity and sport in the lives of the Male: Physical and mental health dimensions from an interdisciplinary approach, 1997. Retrieved from <http://www.fitness.gov./Malesports.pdf>
12. Coalter F. Sports clubs, social capital, and social regeneration: 'ill-defined interventions with hard-to-follow outcome' *Sport in Society*,2007a;10(4):537-559.
13. Davison KK. Activity-related support from parents, peers, and siblings and adolescents physical activity: Are there gender differences? *Journal of Physical Activity and Health*,2004;1:363-376.
14. Feldman AF, Matjasko JL. The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of Educational Research*,2005;75:159-210.
15. Gilbert ED. Towards a richer understanding of Male sports experiences. *Women in Sport and Physical Activity Journal*,2001;10:117-143.

16. Ginsburg RD, Durant S, Baltzell A. Whose game is it anyway ? A guide to helping your child get the most from sports, organized by age and stage. Boston, MA: Houghton Mifflin Company, 2006.
17. Humbert ML, Chad KE, Spink KS, Muhajarine N, Anderson KD, Bruner MW, Gryba CR. Factors that influence physical activity participation among high-and-low-SES youth. *Qualitative Health Research*,2006;16:476-483.
18. Kernan CL, Greenfield PM. Becoming a team: Individualism, collectivism, ethnicity and group socialization in the Los Angeles Male' basketball. *Ethos*,2005;33:542-566.
19. Larson RW. Toward a psychology of positive youth development. *American Psychologist*,2000;55:170-183.
20. Miller JL, Levy GD. Gender roll conflict, gender – typed characteristics, self- concepts & sport socialization in female athletes & non-athletes. *Sex roles*,1996;35:111-122.
21. National Collegiate Athletic Association. Estimated probability of competing in athletics beyond the high school interscholastic level, 2003. Retrieved from [www.ncaa.org](http://www.ncaa.org).
22. National Women's Law Center. The battle for gender equity in athletics in elementary & secondary schools, 2010. Retrieved from [www.nwlc.org](http://www.nwlc.org).
23. President's Council on Physical Fitness & sports. Psycho- physiological contributions of physical activity & sports for male. *Research Digest*,1998;3:16-20.
24. President's Council on Physical Fitness & sports. Motivating kids in physical activity. *Research digest*,2000;3:1-8.
25. President's Council on Physical Fitness & sports. Healthy people 2010: physical activity & fitness. *Research Digest*,2001;3:8-16.
26. President's Council on Physical Fitness & sports. Physical activity in minority populations: overcoming a public health challenge. *Research Digest*,2005;6:1-8.
27. President's Council on Physical Fitness & sports. Sports & character development. *Research Digest*,2006;7:1-8.
28. Sabo D, Veliz P. Go out & play Youth Sport & Families. East Meadow, NY: Women's sports foundation, 2008.
29. Shaffer DR, Wittes E. Women's precollege sports participation, enjoyment of sports & self- esteem. *Sex roles*,2006;55:225-232.
30. Sporting Goods Manufactures Association. Sport participation top line report: 2005 edition, 2005a. Retrieved from [www.sgma.com](http://www.sgma.com).
31. Taylor WC, Blair SN, Cummings SS, Wun CC, Malina RM. Childhood & adolescent physical activity patterns & adult physical activity. *Medicine & Science in sports & Exercise*,1999;31:118-123.
32. Thompson AM, Humbert ML, Mirwald RL. A longitudinal study of the impact of childhood & adolescent physical activity experiences on adult physical activity perceptions & behaviors. *Qualitative Health Research*,2003;13:358-377.
33. Tomporowski PD, Davis CL, Miller PH, Naglieri JA. Exercise and students' intelligence, cognition, and academic achievement. *Educational Psychology Review*,2008;20(2):111-131
34. U.S. Department of Health and Human Services. Healthy people 2010: Understanding and improving health and objectives for improving health. Washington, DC, U.S. Government Printing Facility, 2000.
35. United State Census. Report on the percentage of working mothers in 1970s to 2004 in the United States. Retrieved from [www.census.gov/employment](http://www.census.gov/employment).
36. Women's Sports Foundation. Urban Male and Sports. Retrieved from [www.womenssportsfoundation.org](http://www.womenssportsfoundation.org).
37. Women's Sports Foundation. Title IX media healer. In J. O'Reilly and S. K. Chan (Eds.), *Women and sports in the United States*. Boston, MA: Northeastern University Press, 2007, 327-335.
38. Woodfield L, Duncan M, Al-Nakeeb Y, Nevill A, Jenkins C. Sex, ethnic and socioeconomic difference in children's physical activity. *Pediatric Exercise Science*,2002;14:277-285.
39. Woods RB. Social issues in sports. Champaign, IL: Human Kinetics, 2007.