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Research Article

**EFFECT OF SPORTS PARTICIPATION ON ACADEMIC
PERFORMANCE OF STUDENTS AT SECONDARY LEVEL
IN GOVERNMENT AND PRIVATE SCHOOLS OF QUETTA,
PAKISTAN**Farah Deeba^{1*}, Nadia Ali ², Khalid Khan ²¹ M.Phil. Scholar, Education, Pakistan Study Centre University of Balochistan² Education Department, Pakistan Study Centre, University of Balochistan**Abstract:**

The importance of school environment in to of students in secondary schools today in particular cannot be overemphasized. Participation in sport reduces the time off the classroom and shifts the student's attention from the study. They added that it was not probable for students to attain superiority and gratification in sports as well as in schooling. Researchers showed that extracurricular (sport and physical) activity participation was positively related to Grade Point Average, educational aspirations, educational /occupational attainment, and standardized achievement test scores. This study was done in different government and Private high schools comprised of both genders i.e., male and female from Quetta city were included as population in this research. Questionnaire responses were recorded to analyze sports impact on education. Most of respondents 49 (42.2%) strongly agreed on participation in sports activities has a link with academic's achievements. Current findings showed respondents were agreed on students participating in sports activities get good marks than those not participating in sports activities which is consistent with findings where they observed contribution in school sports, solely with other additional actions, is related with higher levels of psychosocial functioning and strong conduct than participation in other supplementary doings alone or nonparticipation. Participation in these activities improves mental development or cognition of students, grade point average and test scores. These activities have a positive effect on the memory and concentration of students in education.

Key words: *Sports, Participation, Academic Performance, Secondary***Corresponding Author:**

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INTRODUCTION:

Sports and student achievement have been a subject of debate for many years. Athletes supporting sports programs in educational institutions say that participation in sports improves student grades, academic achievement, enhances their educational aspirations, and maintains them in school and college. Participation in sport reduces the time off the classroom and shifts the student's attention from the study. They added that it was not probable for students to attain superiority and gratification in sports as well as in schooling. An ongoing debate over the role of athletics and student accomplishment has long been taking place, but there is no consensus to date [1]. School sports and academic demonstrations. These relationships have been the subject of widespread discussion among PE supporters and skeptics, PA schools, and athletic programs [2].

Some theories exist in literature, which augments and supports the association between sports and education. Educators and societal experts have long worked to determine the relationship between sport and education. Research shows that a positive impact of physical activity on education; and also in the academic enhancement of the participants [1]. Studies have demonstrated the positive relationship between sport participation and mental health [3]. It is also investigated that physical activity can play an imperative role in the management of mild to moderate mental illness, principally depression and anxiety. Though people with depression lean towards to be less physically active than those without depression, enhancing aerobic exercise or strength training has significantly reduced the symptoms of depression [3].

In developed nations it is evident that sports and academic activities goes parallel. Sports has become a major business and attracts the American public. Print media, radio, television, the internet and cinema contributed to the explosion of both professional and college sports. Billions of dollars are spent on professional and college sports. Therefore, it is not surprising that the popularity of professional and college sports has been reflected in the athletic programs of US high schools [4]. Researchers showed that extracurricular (sport and physical) activity participation was positively related to Grade Point Average, educational aspirations, educational /occupational attainment, and standardized achievement test scores [5].

Literature suggests various studies have been conducted to explore associations, comparisons and outcomes of sports and academics. Sports seem to be an attractive aspect of high school experience for many students [6]. Fisher et al. conducted a

survey on the positive and negative correlations of participation in sport in high school students in the inner city [7]. Participants were found to frequently report that games, recreation and competition were the reasons for participation. The authors found that a significant proportion of students considered sport more important than school [8].

Another study conducted, which showed that there were positive effects of participation in physical activity on scores, autonomy, control status and educational aspirations in addition to negative effects on disciplinary issues [9]. Another study showed the effects of participating in extra-curricular activities such as high achievement athletes. The author notes that the materials reviewed for the study indicate a combination of the results and research conducted by the author that will help to add the material. The author analyzes the data and reports that participation in sport has led to increased growth and higher academic attainment in students [10]

A widely debated topic is still not adequately reported in Pakistan. And an association between sports and education is primary parameter to enhance and improve quality of education in Pakistan. Therefore, this study aimed to assess the effect of sports on academic performance in Quetta.

METHODOLOGY:**Study Objectives**

The basic objective of this study is to know the impacts of sports participation on the academic performance of the students

The specific objectives of the study are mentioned below,

1. How does sports participation enhance the student's performance?
2. Is there any difference of students' academic performance of the students who participate in sports?

Study Design and Setting

A Cross sectional descriptive study led in various Government and Private schools of Quetta. Students' sports participation with academic achievement of Quetta was assessed this study was done in different government and Private high schools comprised of both genders i.e., male and female from Quetta city were included as population in this research.

Sample and sampling technique:

In the first phase permission letter was sent to 43 Government and private schools to get permission but only 25 schools agreed. On account of this only Twenty five Government and private schools from

Quetta were targeted to collect the required data on the basis of convenience based sampling, In the 2nd phase, ten students of class 10th from each sampled school were selected on the basis of systematic random sampling. In systematic random sampling every fourth child from a class of 40 students and every alternative from the class of 20 students were included in the sample.

Study Tool:

The questionnaire was developed by extensive lit search and developed in English by experts of Pakistan Study Centre then it was translated into national language of Pakistan Urdu and approved by expert committee. Likert five points rating scale was used for assessing sports participation with academic achievement. A questionnaire was designed to collect information regarding the student's participation and level of achievement in their last Board exam from the contemporary sampled Secondary School students. This questionnaire was comprised of 2 different sections as under:

Section 1 (Demographic information): In this section detail about their gender, age, and grades was required.

Section 2 (In-depth questions about the participation and their impact on learning): In this section, students were asked about their level of participation and their impact on learning.

Ethical Consideration

The study was performed according to National Bioethics Committee Pakistan's guidelines [11] and study approved by Department of Education, Pakistan Studies Centre, University of Balochistan, Quetta, Pakistan. According to the standards,

written consent was taken from participants prior to data collection.

Statistical Analysis:

Collected data was entered in SPSS version 20. Descriptive statistics were used to demonstrate the characteristics of the study population. Categorical variables were measured as frequency and percentage where continuous variables were expressed as mean standard deviation. Inferential statistics (Kruskal Wallis, Mann-Whitney U test, $p < 0.05$) were used to assess the significance among study Variables.

RESULTS:

Demographic characteristics

Demographic characteristics are shown in table 1, in which maximum respondents 75 (64.7%) were have age ranges between 14-16 years. Majority of respondents 75 (64.7%) were from class 10th. Majority of respondents 87 (75.0%) were female students.

Sports activities

Sports activities are shown in table 2. this showed students activities related to sports activities and timing. Maximum students 68(58.6%) had taken "Grade A" last year. Maximum respondents 49 (42.2%) studied 1-2 hours daily. Maximum respondents 99 (85.3%) participate in sports. Equal proportion of respondents 42 (36.2%) play sports occasionally and frequently. Maximum respondents 53 (45.7%) weekly participate in sports activities and if they play game or sports maximum respondents 62 (53.4%) play less than 1 hour. About indoor and outdoor choice, maximum responds which were observed in indoor game were Mobile games 13 (11.2%) and Cricket was most playing game 37 (31.9%) outdoor.

Table 1: Demographics

Demographics	Frequency	Percentage
Age		
14-16 years	75	64.7
15-17 years	31	26.7
More than 17 years	10	8.6
Class		
9 th	41	35.3
10 th	75	64.7
Gender		
Male	29	25.0
Female	87	75.0

Table: 2. Sports activates

Activities	Frequency	Percentage	
What was your grade in last exam?	A	68	58.6
	B	35	30.2
	C	10	8.6
	D	3	2.6
How much time do you study in a day?	Less than 1 Hour	14	12.1
	1 to 2 Hours	49	42.2
	3 to 4 Hours	27	23.3
	More than 4 Hours	26	22.4
Do you participate in sport activities?	Yes	99	85.3
	No	17	14.7
How often do you play sports?	Very frequently	24	20.7
	Frequently	42	36.2
	Occasionally	42	36.2
	Rarely/Never	8	6.9
How often do you participate in sports activities?	Daily	28	24.1
	Weekly	53	45.7
	Monthly	18	15.5
	Once in a year	17	14.7
If you play daily how much time do you give to sports activities?	less than 1 hour	62	53.4
	1-2 hours	44	37.9
	3-4 hours	9	7.8
	More than 4 Hours	1	0.9
Which indoor type of game do you prefer?	Nil	61	52.6
	Mobile Games	13	11.2
	Ludo	9	7.8
Which outdoor type of game do you prefer?	Nil	40	34.5
	Cricket	37	31.9
	Football	20	17.2

Questionnaire responses

Questionnaire responses were recorded to analyze sports impact on education was presented in table 3. Most of respondents 49 (42.2%) strongly agreed on participation in sports activities has a link with academic's achievements. Maximum respondents 68 (58.6%) strongly agreed that sports participation is important for students. Maximum respondents 60 (51.7%) agreed on sports participation has strong impact on work ethics of students in their academics. Majority 62 (53.4%) stated that Sports activities have strong influence on self-esteem and motivation towards studies. Maximum were agreed 60 (51.7%) that students participating. sports activities are more responsive in school level. Most of respondents strongly agreed 49 (42.2%) that students participating in sports abstain from drugs and alcohol. Maximum were 61 (52.6%) agreed that student's participation in sports has positive influence on their behavior in class room. Maximum respondents 61 (53.6%) agreed on students participating in sports, activities can communicate their message to others effectively. Almost maximum 43 (37.1%) were strongly agreed on students participating in sports activities have low absence level in class than other students. Maximum were just agreed 37 (31.9%) on students participating in sports activities get good marks than those not participating in sports activities.

Maximum were just agreed 46 (39.9%) students participating in sports activities have good relations with their Teachers. Majority 48 (41.4%) were strongly agreed that students participating in sports activities have wide social circle of friends. Maximum respondents were strongly agreed 52 (44.8%) that Students participating in sports activities perform well in pressure situations. Maximum respondents 60 (51.7%) agreed that students participating in sports activities participate in voluntary works. Maximum 38 (32.8%) were agreed that Students participating in sports activities are more committed to their studies. Majority 51 (44.6%) were strongly agreed that Students participating in sports activities are more active in everyday life than other students. Majority respondents 55 (47.4%) were agreed that Engaging in sports increases the confidence level of students. Maximum respondents 62 (53.4%) agreed that performance increases by engaging in sports the teacher student interaction improves. Maximum were 74 (63.8%) strongly agreed on students engaging in sports activities are more mentally active and therefore more responsive to their environment. Majority were 60 (51.7%) agreed that students' communication skill become better as they have a wider social circle due to engagement is sports.

Table 3: Questionnaire response

Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Participation in sports activities has a link with academic's achievements	49 (42.2%)	46 (39.7%)	7 (6.0%)	5 (4.3%)	9 (7.8%)
Sports participation is important for students	68 (58.6%)	38 (32.2%)	4 (3.4%)	2 (1.7%)	4 (3.4%)
Sports participation has strong impact on work ethics of students in their academics	39 (33.6%)	60 (51.7%)	12 (10.3%)	4 (3.4%)	1 (0.9%)
Sports activities have strong influence on self-esteem and motivation towards studies	33 (28.4%)	62 (53.4%)	10 (8.6%)	8 (6.9%)	3 (2.6%)
Students participating. sports activities are more responsive in school level	37 (31.9%)	60 (51.7%)	10 (8.6%)	4 (3.4%)	5 (3.5%)
Students participating in sports abstain from drugs and alcohol	49 (42.2%)	40 (34.5%)	10 (8.6%)	4 (3.4%)	13 (11.2%)
Student's participation in sports has positive influence on their behavior in class room	40 (34.5%)	61 (52.6%)	8 (6.9%)	5 (4.3%)	2 (1.7%)
Students participating in sports, activities can communicate their message to others effectively	36 (31.0%)	61 (52.6%)	15 (12.9%)	3 (2.6%)	1 (0.9%)
Students participating in sports activities have low absence level in class than other students	43 (37.1%)	31 (26.7%)	15 (12.9%)	23 (19.8%)	4 (3.4%)
Students participating in sports activities get good marks than those not participating in sports activities	24 (20.7%)	37 (31.9%)	35 (30.2%)	16 (13.8%)	4 (3.4%)
Students participating in sports activities have good relations with their Teachers	45 (38.8%)	46 (39.9%)	16 (13.8%)	7 (6.0%)	2 (1.8%)
Students participating in sports activities have wide social circle of friends.	48 (41.4%)	56 (47.5%)	9 (7.8%)	3 (2.6%)	----
Students participating in sports activities perform well in pressure situations	52 (44.8%)	44 (37.9%)	11 (9.5%)	8 (6.9%)	1 (0.9%)
Students participating in sports activities participate in voluntary works	25 (21.6%)	60 (51.7%)	22 (19.0%)	8 (6.9%)	1 (0.9%)
Students participating in sports activities are more committed to their studies	27 (23.3%)	38 (32.8%)	35 (30.2%)	14 (12.1%)	2 (1.7%)
Students participating in sports activities are more active in everyday life than other students	51 (44.6%)	42 (36.2%)	15 (12.9%)	8 (6.9%)	----
Engaging in sports increases the confidence level of students	52 (44.8%)	55 (47.4%)	7 (6.0%)	2 (1.7%)	----
Because performance increases by engaging in sports the teacher student interaction improves	27 (23.3%)	62 (53.4%)	20 (17.2%)	7 (6.0%)	----
Students engaging in sports activities are more mentally active and therefore more responsive to their environment	74 (63.8%)	31 (26.7%)	7 (6.0%)	4 (3.4%)	----
Students communication skill become better as they have a wider social circle due to engagement in sports	44 (37.9%)	60 (51.7%)	10 (8.6%)	2 (1.7%)	----

Comparison of mean scores with demographics
 mean comparison of individual demographics characteristics were taken and mean comparison is calculated and determining of p-value have been done which shows that some of the p-values are

exceeding than 0.05 that show no significance over study particularly there is no statistical significant difference in the study variables of age and gender ($P > 0.05$) except of class ($p = 0.044$) which is statistically significant as shown in table 4

Table 4: Comparison of mean scores with demographics

Demographics	Mean \pm SD	P value
Age *		0.576
14-16 years	39.21 \pm 10.497	
15-17 years	39.48 \pm 8.290	
More than 17 years	37.00 \pm 7.303	
Class **		0.044
9 th	36.12 \pm 8.325	
10 th	40.72 \pm 10.009	
Gender **		0.087
Male	36.55 \pm 87.633	
Female	39.94 \pm 810.153	

*Kruskal Wallis Test

**Mann-Whitney Test

Sig (0.05)

DISCUSSION:

The objective of current study was to assess effects of sports participation on academic performance of students at secondary level. Sports and educational routine of students has been a theme of discussion for years. The factions of sports program in educational institutes stated that contribution in sports advances students' grades, academic accomplishment, increases their educational ambitions, and keep them in schools and colleges [1]. For students, school-organized game play or activities has an imperative part in students' academic and community involvements. The effects of contribution in school-organized games or activities associated has positive impact on academic achievement and students' observations of family support, teacher and community support, and school safety [12].

Matters and discussions regarding sports contribution and participation and educational accomplishment have been topic of debate for many years [13]. Sports fans were demanding that involvement in any sports support the students to have "a comprehensive mind and a sound body" [14]. Though, persons in the academia thought that sports involvement hindered students' aptitude to outclass in their academic career because maximum of their times were given to sports commitments such as exercise and competitions than studying [15]. Some opponents additionally supposed that there was no option that the student attain distinction in sports as well as in study at the same time [16].

Past studies have created positive relationships between participation in extra activities in schools and academic achievement. But some studies emphasize how participation in curriculum activities may affect students' academic achievement [17]. Physical activity has a lot of potential to encourage the development of children and therefore should attract social workers. An imperative breach in literature reflects the potential

of school sports to improve academic performance [18].

Current study highlighted that sports participation is important for students and students participating in sports activities are more active in everyday life than other students this finding is consistent with study conducted by Claudia where they showed advanced physical activity stages are related with better academic accomplishment among students. Though, it remains uncertain whether relations are due to bodily activity or sports team involvement, which may include necessities for preserving certain grades [19].

Current study showed that respondents who used to play game or participate in gaming abstain from drugs and alcohol. This finding is similar to study, where they have showed addiction related to drugs or alcohol where they examine smoking patterns, smoking initiation, and the relationship of sports participation. Though, conclusion drawn was not similar to current study finding where they concluded early age can rise the danger of nicotine dependence throughout youth and that athletic involvement may impact smoking behavior [20].

Findings of this study showed students participating in sports, activities can communicate their message to others effectively. Similar results were seen where it was showed that sport is a substantial aspect in the expansion of students' self-esteem, individuality and state of mind of capability. By means of sport to encourage capability in childhood has marvelous aids and dangers. The greatest risk is the belief apprehended by numerous that we can make a difference by just 'throwing the ball and letting them play.' [21].

Current findings showed respondents were agreed on students participating in sports activities get good marks than those not participating in sports activities which is consistent with findings where they observed contribution in school sports, solely with other additional actions, is related with higher

levels of psychosocial functioning and strong conduct than participation in other supplementary doings alone or nonparticipation [22]

CONCLUSION:

School students who participate in sports, have a competitive temperament which also motivates them to do well in school. The aim of this study was to assess if student acknowledge the link between their sports keenness and their motivation in their academic activities. Conclusions have been drawn that there is a link between sports participation and learning outcomes and positive sports activities affect education. These activities are useful for enhancing the academic mission of colleges, the academic focus of students, and the ability of students to succeed in their studies. Continuing to conclude that participation in these activities improves mental development or cognition of students, grade point average and test scores. These activities have a positive effect on the memory and concentration of students in education.

REFERENCES:

- 1.Khan, M.Y., et al., *Association between participation in sports and academic achievement of college students*. International Journal of Academic Research in Business and Social Sciences, 2012; **2**(8): p. 419.
- 2.Clotfelter, C.T., *Big-time sports in American universities*2011: Cambridge University Press.
- 3.Paluska, S.A. and T.L. Schwenk, *Physical activity and mental health*. Sports medicine, 2000; **29**(3): p. 167-180.
- 4.Sitkowski, L.S., *The effects of participation in athletics on academic performance among high school sophomores and juniors*2008: Liberty University.
- 5.Fredricks, J.A. and J.S. Eccles, *Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations*. Developmental psychology, 2006; **42**(4): p. 698.
- 6.Akos, P. and J.P. Galassi, *Middle and high school transitions as viewed by students, parents, and teachers*. Professional School Counseling, 2004: p. 212-221.
- 7.Finn, J.D. and D.A. Rock, *Academic success among students at risk for school failure*. Journal of applied psychology, 1997; **82**(2): p. 221.
- 8.Udovicic, A.Z., *Special Report: Sports and Gambling a Good Mix? I wouldn't Bet on it*. Marquette Sports Law Review, 1998; **8**(2): p. 401.
- 9.Stewart, E.B., *School structural characteristics, student effort, peer associations, and parental involvement: The influence of school-and individual-level factors on academic achievement*. Education and urban society, 2008;**40**(2): p. 179-204.
- 10.Smith, J.S., R. Feldwisch, and A. Abell, *Similarities and differences in students' and parents' perceptions of the transition from middle school to high school*. RMLE Online, 2006; **29**(10): p. 1-9.
- 11.NBC, N.B.C., *Human Subject Research Ethics*, in *National Bioethics Committee (NBC)*, P. Dr. Farhat Moazam MD, Editor 2016, Healthcare Ethics Committee (HCEC): Karachi.
- 12.Van Boekel, M., et al., *Effects of participation in school sports on academic and social functioning*. Journal of Applied Developmental Psychology, 2016; **46**: p. 31-40.
- 13.Holland, A. and T. Andre, *Participation in extracurricular activities in secondary school: What is known, what needs to be known?* Review of Educational Research, 1987; **57**(4): p. 437-466.
- 14.Branscombe, N.R. and D.L. Wann, *Role of identification with a group, arousal, categorization processes, and self-esteem in sports spectator aggression*. Human Relations, 1992; **45**(10): p. 1013-1033.
- 15.Helsen, W.F., J.L. Starkes, and N.J. Hodges, *Team sports and the theory of deliberate practice*. Journal of Sport and Exercise psychology, 1998; **20**(1): p. 12-34.
- 16.Montecalbo-Ignacio, R.C., R.A. Ignacio III, and M.M. Buot, *Academic Achievement as Influenced by Sports Participation in Selected Universities in the Philippines*. Education, 2017; **7**(3): p. 53-57.
- 17.Martinez, S. and E. Mickey, *The effects of participation in interscholastic sports on Latino students' academic achievement*. Journal for the Study of Sports and Athletes in Education, 2013; **7**(2): p. 97-114.
- 18.Wretman, C.J., *School Sports Participation and Academic Achievement in Middle and High School*. Journal of the Society for Social Work and Research, 2017; **8**(3): p. 399-420.
- 19.Fox, C.K., et al., *Physical activity and sports team participation: Associations with academic outcomes in middle school and high school students*. Journal of School Health, 2010;**80**(1): p. 31-37.
- 20.Escobedo, L.G., et al., *Sports participation, age at smoking initiation, and the risk of smoking among US high school students*. Jama, 1993; **269**(11): p. 1391-1395.
- 21.Danish, S.J., T. Forneris, and I. Wallace, *Sport-based life skills programming in the schools*. Journal of Applied School Psychology, 2005; **21**(2): p. 41-62.
- 22.Harrison, P.A. and G. Narayan, *Differences in behavior, psychological factors, and environmental factors associated with participation in school sports and other activities in adolescence*. Journal of School Health, 2003. **73**(3): p. 113-120.