

## **A Study of the Association Between Students Sports Participation and Academic Performance at Secondary Level:**

By

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### **Abstract:**

*It has been emphasized by researchers that sports and physical activities has a positive relation with the academic success in term of Grade Point Average, educational and professional dreams and attainment. This study was conducted in the Public and private schools of Quetta. Both male and female students studying in these schools were taken as a population. A questionnaire was used to record the responses of the respondents. These responses were analyzed to measure the impact of sports participation on students' academic performance. It was measured that majority of respondents that is 49 (42.2%) strongly agreed on sports involvement has a connection with academic's achievements. The finding of current study indicated that the students who take part in sports get good grades in schools as compare to the students who are not participating in sports. The results of the study are consistent with findings of other researchers that there is strong bonding of sports participation with the students strong psychological and emotional functioning. It has been argued that sports participation develops the students mentally and improves grade point average and test scores. It will be significant for the policy makers, curriculum developers and school management to ameliorate the students' sports participation for securing good academic performance.*

### **Introduction:**

It is one of the main inspiration of the parents and teachers for the students to flourish academically. This is the reason for them to know the factors that influence their success. With the growing trends in research towards the association between sports and academic performance a number of studies find around the globe that there is direct correlation between high school sports and academic success (Aries and McCarthy, et al.,2004; Olszowski –Rublius, 2004; Ferries and Finster. et al.,2004; Rische,2001; Comeaux,2002). In 1991 a study at

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Hardiness Research found that boys who participate in school sports do better in school and do not drop out. (NHSAW, 2001 p.21). For girls, women's sports foundation in 1989 conducted a study and found that high school sports participation has a good and positive educational and social influence on female students. (NHSAW, P.4). In a study of high school in Colorado it was found that those students who got success on the playing field also got better success in standardized exams. (NHSAW,2001). A study held in 1995 and it was about the Extracurricular participation and student engagement this study found that during the first semester of their senior year, contributors reported better attendance than their non-participating class fellows. (NHSAW, P.6)

There are studies which denied the association and positive influence of sports participation on students' academic performance. The study conducted by Fisher (1996) and Din (2005) concluded that there is no significant relationship between the sports participation and students' academic performance. While on the other hand there are studies carried out by Yiannkis and Melnisk in 2001, Broh 2002 and Jordan in 1999 concluded a strong relationship between the sports participation and students' academic achievement. Many past researches gave arguments that organized sports activities have significant impact on the students having into well-rounded and educated students (Griffith 2004)

Griffith (2004) gave an argument that there is an only little research has been completed on sports and academic achievements. Hills said that sports activities not only leave good and better impact on mood, but also increase mental alertness and mentally alert students always perform well, achieve more. (tras 2005). There are a few studies carried out to establish the effects of sports participation on students' academic achievement at secondary school. Therefore, the current study is conducted to measure, 'Effects of sports participation on academic performance of students at secondary level'. The data is collected through questionnaire from the students of class 9<sup>th</sup> and 10<sup>th</sup> and interview conducted with PTIs of secondary school of Quetta. The scope of this research is very broad as it assesses the effects of the sports activities on the academics or studies of the students. The findings will help to communicate the effects of sports activities on studies and grades.

It is concluded that the sports activities have positive impact on the grades of students and their studies. Moreover, it has also put everlasting impacts on self-confidence and personality.

### **Statement of Problem:**

Different conclusions have been drawn from different studies on the relationship between the sports participation and students' academic

performance. The study conducted by Fisher (1996) and Din (2005) concluded that there is no significant relationship between the sports participation and students' academic performance. While on the other hand there are studies carried out by Yiannkis and Melnisk (2001), Broh (2002) and Jordan (1999) concluded a strong relationship between the sports participation and students' academic performance. Griffith 2004 gave an argument that there is an only little research has been completed on sports and academic achievements. The issue is here that not even a single research has been carried out to establish a relationship between the sports participation and students' academic performance at Quetta. Therefore, a study is conducted to measure, 'Effects of sports participation on academic performance of students at secondary level' in Quetta.

### **Objectives of Study:**

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,

- To measure the relationship between students' academic performance and sports.
- To differentiate the students' academic performance who participate and who do not.

### **Research Questions:**

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?

### **Significance of Study:**

The scope of this research is very broad as it assesses the effects of the sports activities on the academics or studies of the students. The findings will help to communicate the effects of sports activities on studies and grades that will benefit curriculum developers, policy makers, educational and management administrator, school heads and teachers.

### **Purpose of the Study:**

The big idea of the present study is to find out the impact of sports participation on students' academic performance. The existing literature is unable to maintain a clear consensus on the impact of sports participation on students' academic performance. Therefore, the main purpose of the present study is to find out the impact of sports participation on students' academic performance.

### **Research Limitations:**

This study will focus on students of school, Quetta district

### **Operational Definitions of the Key Terms:**

#### **Academic Performance:**

For the present study the academic performance has been measured achieving grades by students of class 10<sup>th</sup> in their SSC exam.

#### **Sports Participation:**

For the present study the sports participation has been measured all the sports like badminton, cricket, football, hockey, running etc played by the students of class 10<sup>th</sup>

#### **Students:**

For the present study the term students have been measured all the students from government and private schools of Quetta district of class 10.

#### **Design of Research:**

The main idea of investigation was to relate the level of achievement with the sports participation. The research was primarily started with review of available literature. After reviewing literature, a questionnaire was made to gauge the relationship of their sports participation with academic achievement. The information was accumulated in number of responses from the participants. Therefore, quantitative method was adopted. The data was coded and analyzed using SPSS.

#### **Population of the Study:**

- All the male and female Public and private schools from Quetta were considered as a population of the study.
- 10<sup>th</sup> grade students from all the public and private schools for the session of 2016-17 were counted as population of this study.

#### **Sample and Sampling Technique:**

Three faceted sampling was adopted,

- A permission letter was sent to 43 school of Quetta at the first stage of sampling. These 43 schools were selected on basis of available list of Public and Private school at Directorate through simple random technique but only 25 schools agreed. (Appendix I)
- Systematic random sampling was adopted in the second stage of sampling when it comes to select the ten students from class 10<sup>th</sup>. Table 3.2 showed details of sampled students from government and private schools in terms of their gender.

**Gender and School-Wise Sample Distribution:**

Students	Government Schools		Private Schools	
	Frequency	%	Frequency	%
Boys	130	52%	93	37.2%
Girls	120	48%	157	62.8%
<b>Total</b>	<b>250</b>		<b>250</b>	

**Tools of the Study:**

After thorough review of literature, a questionnaire was developed to collect responses from the students of class 10 studying the in public and private schools of Quetta. The questionnaire was consisting on the following parts;

**Section 1** This section deals with the student's gender, age, and grades.

**Section 2** This section deals with in depth information about student's level of participation and their impact on learning.

**Administration of the Research Tools:**

The questionnaire was administered personally by the researcher.

**Ethical Consideration:**

"University issued a permission letter on the behalf of education department under the heading of..... to permit the researcher to take in information and second letter of permission was disseminated to the schools to take permission from principals (Appendix V). Teachers were requested to give time to conduct a test from their students. Time and date was decided for the visit of the researcher in the concerned school".

**Data Analysis Techniques:**

Following data techniques were applied to analyze the data.

- Frequency of respondents.
- Percentages of the Responses.
- Standard deviation
- P. Value
- Graphical representation of data.

**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 10<sup>th</sup>. 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
<b>Age</b>		
14-16 years	75	64.7
15-17 years	31	26.7
More than 17 years	10	8.6
<b>Class</b>		
9 <sup>th</sup>	41	35.3
10 <sup>th</sup>	75	64.7
<b>Gender</b>		
Male	29	25.0
Female	87	75.0

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	37 (31.9%)	60 (51.7%)	10 (8.6%)	4 (3.4%)	5 (3.5%)



responsive in school level					
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 (4.3%)	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
<b>Age *</b>		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	
<b>Class **</b>		<b>0.044</b>
9 <sup>th</sup>	36.12 $\pm$ 8.325	
10 <sup>th</sup>	40.72 $\pm$ 10.009	
<b>Gender **</b>		0.087
Male	36.55 $\pm$ 87.633	
Female	39.94 $\pm$ 810.153	

\**Kruskal Wallis Test*      \*\**Mann-Whitney Test*  
(0.05)

*Sig*

### **Discussion:**

The objective of current study was to assess effects of sports participation on academic performance of students at secondary level. Sports and educational performance of students has been a theme of discussion for years. The current study confirms the findings of number of study of Khan, M.Y., et al (2012). Their study asserted that there is strong linkage of sports participation with the academic success in term of Grade Point Average, educational and professional dreams and attainment. The game events organized by the educational institutions for the students builds an imperative impact on students' academic and societal engagement. Van Boekel, M., et al., (2016) confirmed that the student who are engaged in sports activities and having support of family and teachers had better academic achievement level in education.

One of the findings of the present study also support the results of Rees and Sabia (2010) that the students who more engaged in sports have little trouble in doing their homework and more attentive during class, and an increase in test grades is therefore associated with sports participation. Moreover, it is also stated by Trudeau and Shepherd (2008) that the physical activities in schools' outcomes in academic achievements. There are numerous studies conducted in past, have somewhat confirmed the relationship between sports involvement and academic performance. (Fejgin, 1994; Eccles & Barber, 1999; Stephens & Schaben, 2002; Moriana, Alcala, Pino, Herruzo & Riuz, 2006).

It is highlighted by the Current study that participation in sports is important for students because it make them more active in their daily life. This result is also consistent with study conducted by Fox, C.K., et al., (2010) that advanced physical activities are relevant to better academic accomplishment. Though, it is undefined to maintain whether this association has been on account of physical commotion or sports team involvement. This association may result in gaining good grades in schools.

### **Conclusion:**

The current study highlighted the association of student's sports participation with their academic performance. Although there is no agreement on conclusion because different studies outcomes are different. The study conducted by Fisher, (1996) and Din, (2005) concluded that there is no significant relationship between the sports participation and students' academic performance. While on the other hand there are studies carried out by Yiannkis and Melnisk in 2001, Broh 2002 and Jordan in 1999 concluded a strong relationship between the sports participation and students' academic performance. But some studies moderately confirm the association (Fejgin, 1994; Eccles & Barber, 1999; Stephens & Schaben,

2002; Moriana, Alcala, Pino, Herruzo & Riuz, 2006). It is concluded by the present study that there is a significant association between students' sports participation and academic performance. It also emphasized by the respondents that participating in these activities are beneficial for the students for enhancing their motivation towards education, communication with their teachers and classmates and active participation in class. It is also concluded that students participating in sports activities get good marks and perform well in difficult situation than those not participating in sports activities.

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