

# ATHLETICS ACTIVITIES AND ITS IMPACT ON STUDENTS' ACADEMIC ACHIEVEMENT AT SECONDARY SCHOOL LEVEL

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**ABSTRACT:** *The goal of education is to help children develop as whole people. A kid needs cerebral, physical, social, moral, and emotional growth. We cannot meet all of these criteria alone through book reading. To meet all of a child's demands, we need to provide a variety of athletics activities. Athletics include a variety of competitive sports and physical activities that need a combination of strength, speed, endurance, and ability. These activities are typically organized in various events, competitions, or games, both at the amateur and professional level. The primary goals of the study were to find out athletics activities practiced by secondary school students in District Bannu, assess the impact of athletics activities on the academic achievement of students at the secondary school level, and compare the academic achievement of students who participated in athletics activities with those who did not. The study's population consisted of students from males secondary schools in the Bannu area. Twenty male secondary schools were chosen randomly from fifty male secondary schools, with five hundred males' secondary students from each school and twenty-five male secondary students picked at random. The study adopted a descriptive nature, employing a self-made questionnaire with five-point Likert scores for data collection. The students' academic achievements were gathered using the final ninth-grade examination transcript (DMCs), recently provided by the Bannu Board. Descriptive statistics and the t-test were applied, while the Pearson coefficient correlation served as an inferential statistic. The results indicate that there is no significant relationship b/w students' participation in athletic activities and academic achievement. However, a significant difference exists between the two groups of students: those who participate and those who participate in athletics activities.*

**Key Words:** Athletics, student, academic achievement, secondary school

## 1. INTRODUCTION

Sports have become integral to the fabric of high schools' and colleges throughout the US [1, 2, and 3]. The historical connection between athletics and education spans millennia, leading to the deep integration of sports culture within academic institutions. Traditionally, sports were viewed as a transformative tool for boys, instilling values like collaboration, duty, sacrifice, and devotion, while also fostering character growth and promoting good sportsmanship. Consequently, many scholars argue that organized sports can positively contribute to the comprehensive development of children into educated & experienced individuals [2]. It's a widespread sentiment expressed in various forums and official communications within schools that high school athletic events can profoundly influence our youth, educational institutions, and broader society [4]. Studies indicate that engaging in extracurricular activities could enhance academic performance, strengthen ties to the school community, and promote social growth among high school students'. Engaging in athletics and sports activities aids in the cultivation of teamwork values and allows children to transfer academic skills to various domains, thus enriching their educational experience and fostering a well-rounded development [5].

Utilizing the National Educational Longitudinal Study, the researcher inspected the influence of co-curricular activities, including athletics, on the success of high school students. The analysis of existing literature revealed varied findings, prompting the researcher to contribute new insights through their study. Upon reviewing the data, the researcher concluded that involvement in athletics correlated with improved development and academic achievement among adolescents [6]. [7] The investigation delved into the relationship between the specified factors, centering on

African American high school athletics. Additionally, the researcher identified a positive relationship b/w participation in athletics and academic achievement. While race wasn't the primary emphasis, the insights from his study provided additional perspectives on the diverse approaches adopted by scholars in studying this connection. As a result of these research and ideas, high school athletics have become a ubiquitous and strong part of most major high school activities. However, in the era of accountability and standardized testing, high school athletics have come under more scrutiny. There is notably scant research on the intersection of sports and academic achievement. This highlights the ongoing challenges in empirically establishing what has been a fundamental belief in sports discourse: the notion that involvement in sports enhances non-cognitive aspects of personal development like self-motivation, potentially influencing academic performance positively or negatively [4].

The increasing professionalization of high school sports, influenced by broader pressures from collegiate and professional athletics, complicates the evaluation of the relationship between sports and academics at high schools' level. While many view participation in high school sports as a direct pathway to college and potentially professional athletics, empirical evidence challenges this narrative. For instance, research conducted by the NCAA revealed sobering statistics. Despite the significant number of high school football players—983,000 during the 2004 season only a fraction continued to play at the university level, with an even smaller percentage advancing to professional careers. Similar trends were observed in other sports, such as basketball, baseball, and soccer, where only a minute proportion of high school athletics progressed to professional levels. These findings contradict the prevailing belief that intensive involvement in high school sports

guarantees future success in professional athletics. Instead, they suggest that many high school athletics may be driven by misguided motivations, potentially sacrificing academic pursuits to pursue athletic aspirations under the pressure of professionalization [1].

The emulation of professional sports models by collegiate athletics has led to a rise in instances of exploitation within this realm. Reports indicate a notable surge in inappropriate behavior across all levels. This misconduct encompasses actions aimed at bypassing academic standards for student athletics, such as admitting ineligible students to colleges based solely on their athletic status and faculty offering fake courses tailored for athletics to meet minimum grading requirements. While the era of the "dumb jock" stereotype and win-at-all-costs coaching may be diminishing, numerous student athletics still face undue pressure from the sports system, often being forced to make a difficult choice between prioritizing athletics over academics [3].

The relationship b/w athletics participation & academic performance, laying the groundwork for subsequent research in this area. His observations suggested that engagement in sports tends to divert attention away from academics, as the primary motivation for participation often revolves around gaining popularity rather than academic excellence [8]. Over the past fifty years, Coleman's work has remained a benchmark in this field, with subsequent researchers striving to validate or challenge his assertions [9].

A causal link must be demonstrated using evidence of academic improvement for students in their sample throughout all four years of high school athletic activity. Additionally, it is concluded that during the high school years, athletics involvement is not significantly associated with higher levels or amounts of upward grade shifts [10]. Sought to challenge certain assertions regarding a positive correlation between the variables under investigation, while simultaneously replicating [11]. The involvement in athletics had a detrimental impact on academic performance [8]. There is no evidence to support the notion that sports involvement led to improved academic success. Similarly, it is also stated that the majority of athletics did not achieve higher grade point average as a results of their participations in sports. Further, in sports did not lead to higher GPAs for the majority of athletics [12].

Changes in academic achievement, attitudes, and behaviors throughout the final two years of high school, as well as eventual college enrollment or other post-secondary outcomes, in a thorough research employing a large, nationwide sample of data from students' sophomore and senior years. Multiple regression analysis was employed to establish connections between involvement in extracurricular activities and senior and postsecondary outcomes. Similarly, he discovered a favorable correlation between playing athletics and a number of senior and post-secondary outcomes, such as scholastic achievement, desire to further one's education, and eventual college enrollment. His research encompassed a range of extracurricular activities and concluded that athletics were the most beneficial. This longitudinal study is significant in the field as it not only established a positive relationship between athletic participation and academic achievement but also

identified athletics as the most advantageous extracurricular activity at the high school level. However, the study has several limitations that future researchers may need to address. Despite controlling for other variables, he essentially compared the overall academic performance of athletics to that of non-athletics. While the higher academic achievement of athletics compared to their peers is encouraging, claiming a causal link is problematic as other inherent characteristics may influence the results. Instead of total GPAs, examining the increase in GPA for both groups from grade ten to grade twelve would provide a more reliable indicator of the impact of athletic activity on academic achievement. whereas acknowledging this problem to some level, the researcher made the perplexing claim that he did not attribute sophomore players' superior academic accomplishment to their sports engagement, whereas he did for seniors. Additionally, Marsh primarily focused on "total activity scores," which encompassed all extracurricular activities rather than specifically emphasizing athletics. While the 1980s and 1990s saw many positive findings, some results remained mixed, and numerous researchers continued to rely heavily on cross-sectional data [13].

Important findings from the 1990s included research indicating that athletic participation fostered student engagement in school and contributed to academic achievement [14]. Participation in athletics highly supports students' performance and their confidence that significantly impact students' achievement rate [15]. Numerous contemporary studies have revealed correlations similar to those outlined here, including the connection between athletics and self-esteem, motivation, academic success, and post-secondary aspirations [16].

Positive correlation found between interscholastic sports participation and its enhanced academic achievement, suggesting that this relationship should inform decisions regarding funding, time allocation, and personnel in athletics programs [17]. Various studies have identified several benefits associated with sports led to increased time devoted to homework and higher scores in Math and English [6].

**2. RESEARCH METHODOLOGY**

**Research design**

Descriptive research design was applied in this study to explore the relationship between athletics activities and academic achievement among male secondary school students in district Bannu. A sample of five hundred participants was drawn from twenty secondary schools in district Bannu, KPK and Pakistan. The researcher used a simple random sampling procedure to choose twenty-five participants from each institution, as shown in the table No1. Sample size determination rule of thumb is used in this study. Sample size is recommended 10% ranging from 10 to 100 population size, for sample size 101 to 1000 is 5%, for sample size 1001 to 5000 is 3% while 1% is recommended for sample size ranging from 5001 to 10000+[18].

**Table No. 1 shows the method of selecting participants.**

Number of schools	Number of sampled schools	Total respondents	Each Institution
Fifty	twenty	five hundred	twenty-five

**Data Collection Procedure**

Students' academic achievement data was gathered from their most recent Detailed Marks Certificates (DMCs) for ninth-grade Board examinations, which were provided by the relevant BISE Bannu. The questionnaire was administered directly by the researcher, which was dully filled and returned by the students to the researcher.

**Data Analysis Technique**

The study used mean and standard deviation as descriptive statistics to determine the occurrence of athletics' activities. Pearson coefficient correlation was used as an inferential statistic to evaluate the connection between academic achievement and participation in arts and crafts activities. Additionally, a t-test was utilized to discern differences in academic achievement between students participating in athletics' activities and those who did not participate.

**Instrumentation**

In this study, the data was collected using a self-developed questionnaire. The questionnaire was created with expert directions and after a comprehensive evaluation of available material. It was designed to investigate a variety of athletics activities and its impact on students' academic achievement. The responses were assessed using 5 point liker scale, as indicated in the following table.

**Table No. 2 Design of scale used for Data Collection Scale in the Questionnaire**

Weight	Scale Options	Range
1	Never	1.00 to 1.50
2	Seldom	1.51 to 2.50
3	Sometimes	2.52 to 3.50
4	Often	3.51 to 4.50
5	Always	4.51 to 5.00

**Pilot study**

The pilot study plays an important function in confirming the research's quality. To accomplish this, the first draft was given to a group of 10 experts, including six educators, two psychologists, and two linguists. These experts gave helpful comments on topics including tool concepts, language, and phrases. Following their advice, the necessary adjustments were made to the tool, resulting in the final draft. The experts' insightful ideas led the final development of the research instrument.

The Cronbach's alpha formula was used to assess the study's reliability after the researcher physically visited each of the fifty (50) respondents to ensure the reliability of the research instrument. Items for which there was an overall item consistency .25 or less were excluded. After the deletion of eleven items, twenty-four were maintained, with a Cronbach alpha of .88.

**Table 3 shows the Cronbach Alpha value in tabular form.**

VARIABLE	CRONBACH'S ALPHA VALUE
Athletics	.88

**3. RESULTS**

**Table No. 4 Mean score of Athletics activities total number of respondents = 500)**

SN	Statement	Mean	Stander Deviation
1	Good and race competition	2.50	1.726
2	Look forward to Physical Training class	3.40	1.728
3	Participation in long jump competition	2.02	1.421
4	Taking part in high jump competition	1.94	1.423
5	Taking part in discus throw	1.77	1.317
	Overall mean score	2.32	.89

Table No. 4 Shows the highest level mean score of Look forward to P.T period at school (M=3.40, SD=1.72) on often, participation express a high level of interest in PT period and lowest level means score of participation is discus throw (M=1.77, SD=1.32 the means score indicates a moderate interest in discus throw. The overall mean score of students' participation in athletics activities (M=2.32 & SD=.89) the means score fall in the range of (Seldom = 1.51 to 2.50), this indicate that students frequently participate in athletics activities.

**Table No. 5 shown correlation among athletics activities and students' academic achievement**

<b>Athletics</b>	Pearson Correlation	1	.025
	Sig. (2-tailed)		.580
	N	500	500
<b>Academic achievement</b>	Pearson Correlation	.025	1
	Sig. (2-tailed)	.580	
	N	500	500

Table 5 shows that correlation among athletics activities and academic achievement of the students (r) of 0.025, with a corresponding p-value of 0.580 at the .05 level of significance. The p-value exceeding the .05 indicates a lack of significance. Therefore, the results reveled that there is no significant correlation among athletics activities & students' academic achievement.

**Table No. 6 Comparison between students who take part in athletics and those who don't.**

	Variables	N	F	p	t	M	SD
Athletics	Participate	203	9.356	.002	5.851	11.06	4.18
	Not participate	297				9.04	3.51

The table illustrates mean (M) scores for students participating and not participating in athletics activities as 11.06 and 9.04, respectively, with standard deviations (SD) of 4.18 and 3.51. The F value is 9.356, the P value is 0.002 and the t value is 5.851 at a .05 level of significance. The p-value being less than .05 shows a significant difference between the two students' groups those who participate in athletics and those who do not. This implies that there is a notable relationship between take part in athletics activates and the academic achievement of the students. The observed difference favors those who participate in athletics activities.

#### 4. DISCUSSION

Results show that students occasionally participate in athletics activities at secondary school level. Students who perceive themselves as high achievers academically are more inclined to engage in sports [19]. However, the extent of students' sports participation is inversely correlated with the number of hours they work. Additionally, social capital and sports literacy have been identified factors that can positively influence participation [20]. Attrition from school-sponsored sports is commonly attributed to reasons such as injury, being cut from the team, or the need to prioritize work commitments [21]. Despite these challenges, intercollegiate athletics, particularly those involved in revenue sports, often exhibit academic underperformance [22].

The current results indicate no significant correlation between athletics activities and the academic achievement of students. Findings resonate with the idea that there were no noticeable variations in academic performance before and after each sports season for rural high school students [23]. Furthermore, exploration uncovered no remarkable correlation between engaging in sports and academic achievements in secondary school students [24]. Students participated in athletics may struggle to time management between athletics commitment and academic responsibility, potentially impacting their academic achievement.

Results show that participation in athletics activities has a significant relationship with the academic achievement of students. The observed difference favors those who participate in athletics activities. Both stated that, student athletics excelled academically attributing higher grades and improved test results to sports participation [25, 26]. Further, presented contrasting viewpoints, Rees provided limited evidence of academic improvement whereas Muñoz Bullón identified a positive correlation especially within higher education [27, 28]. One reasonable explanation for these variations in findings is that students who participate in athletic activities foster teamwork and collaboration, enhancing students' interpersonal skill, cohesiveness and communication. These skills are beneficial in group project and academic endeavors. Goal setting in athletics may be applied to academic pursuits, as students who set and achieve milestones in athletics may apply this approach to their academic goals, contributing to their overall success.

#### 5. CONCLUSIONS

The study investigated the impact of athletics activities on the academic achievement of 500 male secondary school students in District Bannu KPK, Pakistan. The results showed no significant correlation between students' participation in athletics activities and their academic achievement. However, there was a significance difference in academic achievement between students who participated in athletics and who's who did not, this suggested that on average, students who participate in athletics had higher academic achievement.

#### LIMITATIONS

In this study there are some limitations. First, the study primarily relies on quantitative data, neglecting potential

valuable insights that could be gained from qualitative data method, such as interview of focus group discussions or mixed-method approach could provide a more comprehensive view of the relationship between athletics activities and academic achievement. Third, the study mainly examined athletics activities, neglecting in the influence of other co-curricular activities on the academic achievement, suggesting a need for a broader exploration of these activities.

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