

COMPARISON OF ACADEMIC PERFORMANCE OF HIGH SCHOOL STUDENTS AMONG ATHLETES AND NON-ATHLETES

Shahzaman Khan*

Head of Department and Assistant Professor, Department of Physical Education and Sports Science, Sukkur IBA University, Sukkur, Pakistan. Email: shahzaman@iba-suk.edu.pk

Yasmeen Iqbal

Professor and Head of Department, Department of Sports Sciences and Physical Education, The University of Lahore, Lahore, Pakistan. Email: yasmeen.iqbal@ahs.uol.edu.pk

Abdul Fatah Khokhar

Physical Training Instructor, Sindh Education and Literacy Department, Government of Sindh, Pakistan. abdufatahkhokhar@gmail.com

Abstract

Athletic participation is an essential component of school life among adolescents who often manage academic responsibilities alongside sports, resulting in varied outcomes. This study aimed to compare the academic performance of high school athletes and non-athletes and investigated whether different demographic and sports-related factors influence their academic performance. A comparative cross-sectional study design was employed. A non-probability quota sampling technique was used to recruit 30 high school athletes and 30 non-athletes from different schools in Jamshoro District. The questionnaire comprised a demographic sheet, questions regarding athletic participation, and a pre-validated tool called the Academic Performance Scale. SPSS statistical tests included Descriptive Statistics, Independent sample t-test, Analysis of Variance, and Pearson's Correlation ($p \leq 0.05$). Out of 60 participants, more than 85% were males, and 53% were between 14 and 16 years of age. Eleven out of thirty athletes were interschool players. Findings revealed that athletes had significantly better academic performance compared to non-athletes with $t(58) = 2.38, p = .021$. Moreover, students studying in grade 11th or 12th significantly outperformed academically than 9th or 10th grade students with $F(3, 56) = 15.41, p < .001$. Athletes involved in sports for 1-2 years also had significantly better academic performance than athletes with less than one year of experience with $F(3, 26) = 4.80, p < .01$. Lastly, the number of absences from school had a weak negative correlation with academic performance ($r = -.29, p = .024$). Academic performance was not found to be significantly different based on participants' gender, number of athletic activities, weekly playing hours, and highest competition level. Based on the results, educational institutions should consider how athletic participation can be purposefully integrated to foster holistic student development beyond the classroom.

Keywords: Academic Performance; High School Athletes; Comparative Study; Athletes; Non-Athletes; Sports Participation; Physical Health.

Introduction

The school years are among the most important in a student's life. The public-school system in Pakistan is the primary provider of education. These educational institutes endorse many components for student growth and transformation, including curricular, cocurricular, and extracurricular activities (Halai & Durrani, 2021). Apart from curricular activities, sports activities are another integral element of students' growth and development. Children and adolescents discover their hidden talents through sports and co-curricular activities in school. These activities help improve the physical and mental health of children because a sound mind rests in a sound body (Ashfaq, 2021). Engaging in sports or physical activities aids in human development across physical, social, emotional, economic, and intellectual dimensions (Abieraba, 2015).

On the contrary, physical inactivity is the fourth largest cause of death worldwide, accounting for 6% of total deaths. Adolescents who engage in physical exercise are less likely to be overweight or obese, addressing a public health issue that is not improving (Kohl et al., 2012; World Health Organization, 2009). Moreover, physical activity, particularly organized school sports, prevents various health problems (National Center for Chronic

Disease, 2018) and is found to enhance cardio-respiratory fitness, higher strength of the musculoskeletal system, fewer symptoms of anxiety and depression, and a lower chance of acquiring a variety of non-communicable diseases (Eldridge et al., 2014).

Despite the understanding of the importance of school sports, public and academic communities debate the harms and benefits of athletics in terms of the demands of sports participation and the resources required to meet them (Overton, 2001). School-based sports activities have been linked to stigma for years, representing athletes as unintelligent. These unfavorable views suggest that athletes lack the drive and intelligence to excel at the intercollegiate level. However, Harmon (2010) noted after four years of working in athletic student services that athletes are articulate, insightful, and brilliant young adults whose academic passions and abilities remain overlooked or underdeveloped.

There has been ongoing discussion about whether extracurricular activities positively influence academic performance or are a distraction that lowers grades. The student-athlete community is distinguished by the distinct factors that encourage and drive them to strive for success in both their athletic pursuits and academic responsibilities. Advocates for

extracurricular activities involvement and athletics argue that these experiences improve academic performance, particularly since students must achieve certain academic standards to remain eligible for participation (Lumpkin & Favor, 2012). It is also believed that involvement in sports activities promotes the social standing of students and improves their morale on one hand, but it may also pose academic concerns because it can distract students from their studies and can impair their academic progress (Yiannakis & Melnick, 2001).

In certain instances, involvement in sports has instilled in students a misleading belief that they are exempt from rules, an outlook that can persist in adulthood. Schools often encounter difficulties with athletes who feel their prominence in the sports program takes precedence over their responsibilities as students in the classroom. Academic learning and performance usually become secondary to athletic achievements. To maintain student eligibility for athletics, both academic standards and administrative measures are sometimes compromised, which can foster a sense of entitlement among some student-athletes (Dyke, 2013).

Despite compromised academic and administrative measures, a common indicator of academic performance is Grade Point Average (GPA). It can be affected by

various factors that impact academic performance. These factors can be organized into two primary categories: those related to the educational institution and those that are external to it. Internal factors include management, faculty, commitment, facilities, discipline, motivation, and curriculum, while external factors pertain to students' individual characteristics, parents, and family (Khan et al., 2020). It is crucial to ensure that both internal and external efficiency are upheld in any academic performance (Alam & Islam, 2022).

Academic achievement has a significant impact on personal success. Students with good academic performance enjoy higher pay, better work opportunities, and prospects of job promotion. Additionally, students who succeed academically tend to be more socially inclined, have lower anxiety levels and despair, higher levels of self-esteem and confidence, and are also less prone to drug abuse or alcoholism (Tadese et al., 2022).

Similarly, the qualities athletes could generally possess include time management skills, goal setting (Fleming, 2015), teamwork and collaborative abilities, discipline, leadership, resilience, handling academic pressure, ability to perform in high-pressure situations, conflict resolution, and many more (Fielding, 2019). However, consistent involvement in school sports

involves risks and repercussions, particularly when injuries happen. Such injuries can have detrimental effects on both the physical and mental well-being of athletes and can significantly influence students' academic achievements, possibly resulting in severe consequences if not addressed properly (Shata et al., 2024).

Given these variable findings, it is necessary to assess and compare the academic performance of student athletes and non-athlete students in a high school setting so that tailored strategies for improvement can be proposed and implemented if needed.

Literature Review

A study compared the academic performance of athletic and non-athletic students from 131 high schools in North Carolina. The study concluded that athletes significantly outperformed non-athletes academically. The results were consistent when gender and race were controlled for. Moreover, the athletes' attendance and graduation rates were significantly higher, while discipline referrals and dropout rates were significantly lower than those of non-athletes (Overton, 2001). Similar results were found in another study conducted among grade 7 to 12 students in Texas, showing that sports participation had a significant positive correlation with the behavioral and educational performance of

athletes compared to non-athlete students (Eldridge et al., 2014).

Abieraba (2015) conducted research in Winneba, which highlighted that students had strong reasons for participating in athletics and believed it had no negative impact on their educational performance. However, students who participate in collegiate athletics might be at a disadvantage since they become too exhausted or miss lectures while doing it. Nevertheless, athletes had a slightly higher average Cumulative GPA than non-athletes.

A qualitative study was conducted in the USA by conducting interviews of thirty collegiate athletes to assess whether athletic participation contributes positively or negatively to the academic achievement of students. The athletes accepted the fact that, in comparison to non-athlete students, they do not have much time for the tasks assigned by the schoolteachers. They do not study as much, and participation in sports creates difficulties. But at the same time, there are multiple benefits of participating in sports, like scholarships for the athletes, educational services, and tutors for guidance, which are of great help for pursuing education. Out of thirty athletes, none of them expressed regret about choosing to participate in intercollegiate sports (Paule & Gilson, 2011).

A longitudinal study conducted in 2019 in US high schools highlighted that athletes scored higher GPAs than non-athletes in the initial year, and this difference was found to be significant. In the next two years, the same trend was observed. However, the academic performance growth rate of athletes was quite slow in comparison to the students who do not participate in athletics (McCarthy, 2019).

Stegall (2012) and (Fleming, 2015) concluded in their studies that athletes had a significantly higher GPA compared to non-athletes. Researchers in Ohio revealed that participation in athletics did not distract high school students from achieving academic success. Athletic participation was linked to higher test scores and higher rates of graduation (Bowen & Greene, 2012).

A study was conducted in Pakistan to assess the influence of athletics on the academic achievement of females registered in graduate programs. It was found that athletics had a positive influence on the academic achievement of female athletes. Furthermore, it has been beneficial to successfully move to college/university, learn management skills, get motivation to attend lectures daily, and continue the degree with persistence (Shiraz & Ershad, 2020).

Macaluso (2013) conducted a qualitative case study at a public high

school in Mesa, Arizona, involving interviews with teachers, parents, coaches, and athletes. It was concluded that athletics fostered the development of qualities and traits such as self-discipline, motivation, responsibility, and a sense of belonging, which contributed to the better academic performance of athletes.

A researcher in another study concluded that the academic performance of high school athletes and non-athletes was not significantly different, as reflected by the GPA of the students. However, male athletes had lower GPA scores than female athletes. These results depict that taking part in athletics did not negatively affect the students' academic performance and thus, should be promoted (Ferrell, 2019). Lemke (2015) also reported similar or non-significantly different academic performance between athletes and non-athletes.

Similarly, a study conducted in Serbia concluded no significant association between athlete and non-athlete students' academic performance. However, male athletes had better academic achievement compared to non-athletes. The female group showed no significant association between engagement in sports and academic achievement. In addition, students who played team sports had lower academic achievement compared to those who played

individual sports. There was no association between competition level and academic achievement. Lastly, years of sports experience also did not have a significant association with academic achievement, both overall and in the male category. However, it was found that females who had greater sports experience outperformed academically (Tubic et al., 2015).

To assess this phenomenon in the local scenario, this study compared the academic performance of high school athletes and non-athletes in the Jamshoro District and investigated whether different demographic and sports-related factors influence their academic performance.

Methodology

Study Design

A comparative cross-sectional study design was used to compare the academic performance of high school students among athletes and non-athletes.

Research Setting

The data was gathered from different schools in the Jamshoro District. Both athletes and non-athletes who were high school students were recruited for the study.

Sample Size and Sampling Technique

Thirty athletes and thirty non-athletes were recruited using a non-probability quota sampling technique.

Research Instrument

Data was collected from students through a self-administered questionnaire comprising a demographic sheet, questions regarding academics, class attendance, athletic participation, and a pre-validated tool called the Academic Performance Scale. This tool comprised eight items. It's a 5-point Likert scale. The total score ranged from 8 to 40. Higher scores on the scale represent good academic performance, while lower scores reflect poor academic performance. The reliability coefficient for the academic performance scale was reported to be .89 (McGregory, 2015). In the current study, the reliability analysis revealed that Cronbach's alpha value of this scale was .75, reflecting good internal consistency.

Research Protocols

The approval to conduct the study was obtained from the school authorities. Participants gave written consent before voluntarily participating in the study. The anonymity of the responses was maintained, and the data was kept confidential.

Data Analysis

After collecting the data, it was coded and analyzed using SPSS version 26. Descriptive Statistics, Independent samples t-test, Analysis of Variance, and Pearson's Correlation ($p \leq 0.05$) were applied for data analysis.

Results

Table 1. Demographic Profile of Students

Variables	n	%
Gender		
Male	52	86.67
Female	8	13.33
Age		
14-16 years	32	53.33
17-19 years	28	46.67
Grade		
9 th	18	30.00
10 th	13	21.67
11 th	21	35.00
12 th	8	13.33
No. of times absent from school per month		
0	8	13.33
1-3	31	51.67
4-6	15	25.00
7-10	6	10.00
Warning received for absences		
Yes	16	26.67
No	44	73.33

n = 60 students.

Table 1 shows that more than eighty-five percent of the participants were males (*n* = 52). More than 50% of the participants (*n* = 32) were between 14 and 16 years of age. Moreover, thirty-five percent of the students (*n* = 21) were studying in 11th grade, while

30% of the students were in 9th grade (*n* = 18). More than half of the participants (51.67%, *n* = 31) were absent from school for 1-3 days a month. Lastly, almost 75% of the students had not received any warning about their absence from the school (*n* = 44).

Table 2. Sports-Related Profile of Students

Variables	n	%
Like sports		
Yes	44	73.33
Somewhat	12	20.00
No	4	6.67
Play sports		
Yes	49	81.67
No	11	18.33
Weekly playing hours		
Not Applicable	11	18.33
Less Than 1 Hour	9	15.00
1-3 Hours	14	23.33
4-6 Hours	16	26.67
7-9 Hours	5	8.33
10 or More Than 10 Hours	5	8.33
Athlete		
Yes	30	50.00
No	30	50.00

Variables	<i>n</i>	%
No. of athletic activities participated in		
0	30	50.00
1-3	26	43.33
4-6	3	5.00
7-10	1	1.67
Duration of participation in athletic activities		
Not Applicable	30	50.00
Less Than 1 Year	3	5.00
1-2 Years	15	25.00
3-4 Years	5	8.33
More Than 4 Years	7	11.67
Highest competition level		
Not Applicable	30	50.00
Interschool	11	18.33
Local	10	16.67
Provincial	5	8.33
National	4	6.67

n = 70 non-elite marathon runners.

The above table shows that almost three-fourths of the students (*n* = 44) liked sports, while 20% somewhat liked sports. More than eighty percent of the students (*n* = 49) play sports. Half of the participants played for 1-3 hours (23.33%, *n* = 14) and 4-6 hours weekly (26.67%, *n* = 16). Athletes and non-athletes were equally included in

the study. Out of 30 athletes, 26 students participated in 1-3 athletic activities, and half of them have been participating in athletic activities for 1-2 years (*n* = 15). Furthermore, eleven athletes were interschool players, and ten athletes were local players.

Table 3. Academic Performance Scale

	Indicator	<i>n</i> (%)	Mean	SD
Academic Performance Scale	Excellent Performance	21 (35.00)	29.23	.69
	Good Performance	25 (41.67)		
	Moderate Performance	14 (23.33)		
	Poor Performance	0 (0.00)		
	Failing Performance	0 (0.00)		

Note. *n* = 60 students.

Table 3 shows that the mean academic performance of students was found to be $29.33 \pm .69$, which means that

the students, on average, reported good academic performance (Range = 8-40).

Inferential Statistics

Table 4. Mean Comparison of Athletes and Non-Athletes on Academic Performance

Independent Variable		Academic Performance		t	df	Sig.	Cohen's d
		M	SD				
Athlete	Yes	30.80	5.18	2.38	58	.021*	.61
	No	27.67	5.03				

Note. $n = 60$ students. *. $p \leq 0.05$.

Table 4 revealed a significant mean difference in academic performance based on athletic status, with $t(58) = 2.38$, $p = .021$. Findings showed that athletes reported significantly higher academic

performance ($M = 30.80$, $SD = 5.18$) compared to non-athletes ($M = 27.67$, $SD = 5.03$). The value of Cohen's d for the academic performance scores was .61, indicating a medium effect size.

Table 5. Mean Comparison of Gender and Age on Academic Performance

Independent Variables		Academic Performance		t	df	Sig.	Cohen's d
		M	SD				
Gender	Male	29.23	5.25	-.009	58	.992	-
	Female	29.25	6.04				
Age	14-16 years	25.81	4.40	-7.53	55.62	<.001***	1.93
	17-19 years	33.14	3.10				

Note. $n = 60$ students. ***, $p \leq .001$.

The above results of an independent samples t-test depicted a non-significant mean difference in academic performance based on gender of the students ($p \leq .05$). However, a significant mean difference was found in academic performance based on the age of the students, with $t(55.62) = -$

7.53, $p < .001$. Findings showed that students of age 17-19 years reported significantly higher academic performance ($M = 33.14$, $SD = 3.10$) compared to students of age 14-16 years ($M = 25.81$, $SD = 4.40$). The value of Cohen's d indicated a very large effect size.

Table 6. Mean, Standard Deviation, and One-Way Analysis of Variance in Academic Performance Across Grades of Students

Independent Variables		Academic Performance		F	df	η^2	Post-Hoc
		M	SD				
Grade	9th	25.94	4.70	15.41***	3, 56	.45	4>1
	10th	25.69	4.31				4>2
	11th	32.48	3.56				3>1
	12th	33.88	2.90				3>2

Note. $n = 60$ students. ***, $p \leq .001$

The above table indicates significant mean differences in academic performance based

on students' grades with $F(3, 56) = 15.41$, $p < .001$. Findings revealed that students

studying in 11th or 12th grade had better academic performance than students

studying in 9th or 10th grade. The effect size was .45, which indicated a small effect size.

Table 7. Mean Comparison of the Frequency of Participation in Athletic Activities on Academic Performance

Independent Variable	Academic Performance		t	df	Sig.	Cohen's d
	M	SD				
Number of Athletic Activities	1-3	31.38	1.62	28	.117	-
	4 and above	27.00				

Note. $n = 30$ athletes.

Table 7 revealed the results of an independent samples t-test, which depicted a non-significant mean difference in

academic performance of athletes based on frequency of participation in athletic activities ($p > .05$).

Table 8. Mean, Standard Deviation, and One-Way Analysis of Variance in Academic Performance Across Sports-related Factors.

Independent Variables		Academic Performance		F	df	η^2	Post-Hoc
		M	SD				
Weekly Playing Hours	Less than 1 hour	30.44	6.31	1.35	4, 44	-	-
	1-3 hours	27.21	5.56				
	4-6 hours	30.19	4.23				
	7-9 hours	30.40	5.90				
	10 or more than 10 hours	32.80	3.90				
Duration of Sports Participation	Less than 1 year	24.00	6.56	4.80**	3, 26	.36	2>1
	1-2 years	33.47	3.89				
	3-4 years	29.00	5.15				
	More than 4 years	29.29	4.03				
Highest Level of Competition	Interschool	31.91	6.02	.34	3, 26	-	-
	Local	30.30	5.44				
	Provincial	30.80	2.59				
	National	29.00	5.60				

Note. $n = 49$ students for weekly playing hours and 30 students for duration of sports participation, and the highest level of competition. **. $p \leq .01$.

The above table shows non-significant mean differences in academic performance based on weekly playing hours and highest level of competition ($p > .05$). However, there existed a significant mean difference in academic performance based on duration of sports participation

with $F(3, 26) = 4.80$, $p < .01$. Findings revealed that those athletes who were involved in sports for 1-2 years reported better academic performance compared to the athletes with an experience of less than one year. The effect size was .36, which indicated a small effect size (Table 8).

Table 9. Pearson's Correlation - Relationship between the number of absences from school and the academic performance of students.

Variables	M	SD	1	2
1. Number of absences from school	3.22	2.48	-	
2. Academic performance	29.23	5.31	-.29*	-

Note. $n = 60$ students. *. $p \leq .05$.

Table 9 highlights that the number of absences from school had a weak negative correlation with academic performance ($r = -.29$, $p = .024$), which means a higher number of absences from school may lead to lower academic performance.

Discussion

The high school phase is a critical period for students as they must balance academic responsibilities with personal development. Involvement in physical activity and sports plays a vital role in student development. Given the established importance of physical activity for health and well-being, its effects on academic activities are still debated.

The current study aims to compare the academic performance of athlete and non-athlete high school students. Out of 60 students, around 87% were males. More than 50% of the students were between the ages of 14 and 16 years. Among athletic students, half of them reported participating in athletic activities for the last 1 to 2 years, with more than one-third of the athletes playing at the interschool level. Moreover, more than forty percent of students reported having a good academic performance.

The present study concluded that athlete students had better academic performance than non-athlete students. These findings are consistent with previous research (Parkhurst, 2020), where athlete students scored better academically compared to their counterparts. The potential reasons for such findings are numerous. When students engage in sports, their executive functions tend to enhance, including concentration, self-discipline, emotional control, and the ability to set goals. Sports also enhance memory and better focusing ability, leading to higher academic performance, enabling students to manage academic pressures more effectively, fostering skills like time management, determination, and resilience to stress, which aid students in remaining organized and driven when facing educational challenges. These skills are crucial for achieving academic success (Kemp, 2025). These psychological advantages are particularly beneficial for enhancing classroom behavior, persistence in tasks, and performance on exams (Singh et al., 2012).

Sports and exercise also enhance blood circulation to the brain, promoting

the production of neurotrophins such as brain-derived neurotrophic factor (BDNF) and activating the areas of the brain involved in learning, memory, and decision-making (Erickson et al., 2019). Ultimately, both sports and academic pursuits contribute to brain development, although in different yet complementary manners (Kemp, 2025).

The current study also assessed the differences in academic performance based on students' gender and age. The findings were partially significant, indicating no significant differences in academic performance based on gender. These findings are inconsistent with previous research that has identified gender differences (Ferrell, 2019; Heil, 2014). The differences were significant based on the age of the students. Findings showed that students aged 17-19 years reported significantly higher academic performance than students aged 14-16 years. Similarly, students in 11th or 12th grade had better academic performance than students in 9th or 10th grade. These results are in congruence with previous research (Pestana et al., 2018). This is because there are different academic pressures on students of varying grades. As 9th and 10th grade students, belonging to the 14-16 years of age, are introduced to new subjects and learning settings, they have greater academic pressures, navigating new

challenges. This may hamper their academic performance. The students of 11th or 12th grade have already passed similar pressure situations, allowing them to deal with this pressure in a better manner (Ye et al., 2025).

Better performance of seventeen to nineteen-year-old students could also be the result of parental expectations and parental pressure. Parents strive to provide the best for their children, often encouraging them to excel academically. The college admissions process can be one of the most stressful experiences for both students and their parents. It's a long-standing belief that securing admission to a prestigious university can lead to better opportunities after graduation. In today's competitive environment, it has become increasingly difficult for students to secure spots at prestigious universities, leading parents to feel the need to do whatever it takes to support their children. High academic performance is a key factor that institutions consider when evaluating applicants for admission. Additionally, many institutes offer merit-based scholarships that depend on a student's academic achievements.

Consequently, parents often urge their children to achieve high grades to qualify for substantial scholarships that can alleviate the cost of tuition (Bruno, 2022). It was also concluded that there are non-significant differences in the academic

performance of participants based on frequency of participation in athletic activities, weekly playing hours, and the highest level of competition. However, the academic performance of athletes engaged in sports for one to two years was better compared to athletes with less experience.

However, the academic performance of such athletes was non-significantly different from that of athletes with more than 2 years of experience. One of the factors about low academic performance in beginner-level athletes could be difficulty in managing multiple commitments, i.e., studies and sports training. Generally, the training requirements develop time constraints for students. Thus, they have fewer chances to complete assignments, study for exams, or seek help when needed. This situation can lead to increased stress and pressure to achieve academically, which could cause lower grades or other educational difficulties.

Student athletes must effectively manage their time to juggle training, studying, attending classes, and fulfilling other obligations. Furthermore, the physical and mental demands of intensive training can exhaust student-athletes and hinder their ability to focus on their studies. This exhaustion results in fatigue. Additionally, student athletes' ability to balance the demands of both sports and studies can be

affected by the level of support they receive from coaches, teachers, parents, and academic counsellors. Individual differences also exist. Differences in learning styles, cognitive skills, and motivation may influence how these young student-athletes cope with the challenges of their dual commitments (Subhash K V, 2024).

In the current study, a student was absent from school three times a month on average. In addition, the results of the correlation between the number of absences from school and academic performance showed a negative correlation, reflecting that a higher number of school absences may lead to lower academic performance. These findings are consistent with previous research (Apaak & Yawson, 2022; Lukkarinen et al., 2016). There is a role of several elements in this association.

Student achievement and attendance are closely linked. Regular attendance goes beyond just being physically present in school. It establishes a foundation for academic success, personal development, and future achievements. Students who consistently attend classes can acquire knowledge, learn skills, and develop habits essential for success in life, whereas skipping school disrupts this growth and often results in poorer academic performance and reduced life prospects. Regular attendance enables students to

develop a solid understanding of advanced concepts and remain aligned with cumulative lessons. It also promotes social growth and fosters meaningful student-teacher relationships, which enhance learning, emotional health, and individualized support (Diesel, 2024).

The rate of attendance within the class holds significance because when students regularly attend classes, they tend to perform better. When a significant number of students are absent from class, teachers struggle to create interactive lessons and encourage student engagement. Students who miss school frequently not only fall behind in their studies, but they are also more likely to receive lower grades (Ancheta et al., 2021).

Limitations

This research had a few limitations that are mentioned below:

1. Firstly, as the cross-sectional approach was used in this research, it does not allow the determination of causal relationships.
2. Secondly, the sample consisted solely of high school students from a limited geographical location of Sindh province; the results may not be generalizable to other areas or provinces, given the differences in cultures and subcultures among different provinces.
3. The representation of female students, both athletes and non-athletes, was relatively low. However, the comparison may provide a foundation that could be beneficial for future investigations.

Conclusion

In conclusion, student-athletes typically excel academically compared to non-athletes, reinforcing existing research while aligning with previous research that emphasizes the beneficial impact of sports on different areas of development, like cognitive development, self-discipline, time management, and mental health. Furthermore, the academic performance of high school students is affected by a complex interplay of athletic participation, developmental years, the duration of sports involvement, and attendance patterns.

While sports can play a vital role in improving academic outcomes, their effectiveness relies on balanced and age-appropriate sports engagement and involvement and regularly attending school. These findings highlight the need for the initiative by the educational institutions and policymakers for the development of structured and organized sports participation to promote the interest of the student body in improved academic performance, regular attendance, and to

assist students in effectively managing their academic and extracurricular obligations.

Future Recommendations and Implications

Future researchers can utilize qualitative research to delve deeper into the factors studied in the current research. They can opt for longitudinal studies to confirm links between the variables. Future studies can also include other factors that might affect the current phenomenon, like the role of personality characteristics, students' motivation levels, student-teacher relationship, the role of sports coaches in encouragement on balancing sports, academics, and social support.

Regarding study implications, this study can help educators identify the academic support needs of both athletes and non-athletes, and then further devise and tailor interventions and counseling programs to address challenges such as time management, stress management, and other related concerns. It may promote students' holistic development by recognizing the significance of both academic and athletic pursuits. It can serve as a baseline for policymakers to develop educational policies to balance sports and academic commitments, along with the provision of athletic scholarships to support the student-athletes. It can also facilitate effective communication among teachers

and sports coaches to develop a supportive and inclusive environment for students, reflecting that they are also equipped to perform at both ends by providing individualized attention and managing their studies and athletic training schedules.

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Conflict of Interest

The authors have no conflicts of interest to declare.

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