

High School Athletics and Academic Performance

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Table of Contents

List of Figures	i
Abstract	ii
I. Introduction	1
Overview	1
Statement of Problem	1
II. Review of the Literature	2
Benefits of Health and Exercise	2
Positive Effects of Athletics on Academic Performance	3
Negative Effects of Athletics on Academic Performance	6
Summary	7
III. Methods	8
Design	8
Participants	8
Instrument	8
Procedure	9
IV. Results	10
Sports and Athletics History	10
Perceptions of the Effects Athletics Have on Academic Performance	11
V. Discussion	14
Implications of Results	14
Limitations on the Study	14
Implications for Future Research	15

Conclusions	15
References	16

List of Figures

1. Participation in Organized Athletics	11
2. Impact of High School Sports on Academic Performance	12
3. Likelihood of Encouraging High School Athletics	13

Abstract

The purpose of this study was to examine the perceptions that educators and future school leaders have regarding the impact of athletics on academic performance in high school. Forty-five graduate students (prospective athletic directors, administrators, and teachers) were provided a questionnaire and the responses were reviewed to decipher any patterns or disparities. While this descriptive study was able to deliver a diverse outlook into the topic, future studies are recommended involving more accurate and scientific measurements of physical activity, as well as a different means of measuring academic success.

CHAPTER I

INTRODUCTION

Overview

Sports and athletics are generally recognized as beneficial for our youth. In fact, most children participate in some form of athletic activity whether they know it or not. Even if they are unable to join a league, many skills are taught and learned through physical education and even recess. The benefits of sport include strategic thinking, communication, quick action, the ability to deal with adversity, developing social skills, among many other skills that are important both in the academic and working world. Even though all of this has been scientifically proven, there is conflicting research regarding the impact that athletics has on academic performance. It is also unknown as to whether there is a consensus among those in education that athletics consistently have a positive impact on students in high school.

As a physical education teacher and coach, this researcher firmly believes that athletics are beneficial to students in and out of the classroom. Positive experiences as a student athlete, teacher, and coach have shaped this mindset. This researcher was interested to gather the opinions of other graduate students in education to determine if there is indeed a consensus. A descriptive study was conducted to further understand these perceptions, as well as how different factors (demographics, participation in sports, past experiences, etc.) impact these opinions on the overall benefits of high school sports.

Statement of Problem

The purpose of this study was to gain an understanding of the perceptions that graduate students in education have regarding the impact of athletics on academic performance in high school.

CHAPTER II

REVIEW OF THE LITERATURE

This literature review examines the impact of high school athletics on academic performance and achievement. The first section will analyze the benefits of sports and athletics and how they influence our youth. The second section will analyze the positive effects that high school athletics have on a student's performance in the classroom. Finally, the third section will discuss any negative effects that participation can have on academic achievement.

Benefits of Exercise and Athletics

The fact is there are many benefits of exercising daily and/or participating in athletics. The three that were focused on as a part of this research are increased educational outcomes, socialization, and healthier behaviors.

Physical activity leads to increased brain function and concentration. Implementing physical activity in the school day by twenty minutes or more has been shown to improve student performance on perceptual and decisional tasks, as well as boosting grades in both English and mathematics (Trudeau & Shephard, 2008).

A study was performed on over 530 middle school students. Almost 74% of the students were considered physically active and 26% were considered not physically active. The results of the study clearly showed that the students with the highest number of hours per week of physical activity had significantly higher levels of academic achievement and self-esteem compared to students who had no weekly regular physical activity or had less hours (Calik, Pekel & Aydos, 2018).

Physical activity has also been known to have positive effects on the brain in relation to depression. The study conducted by Field, Diego, and Sanders (2001) shows that students that

had a higher level of exercise had better relationships with their parents and their peers. These students also had more family and peer support and reported less depression. High levels of exercise were associated with better relationships as it built better social support. Students with a higher family and peer support system have a greater chance at academic success.

In an observational study conducted by CEKIN in 2015, the physical activity levels of 175 female and 198 male students were calculated and analyzed. Subjects who had a physically active life in the analysis performed showed higher self-esteem than those who were not active (Calik et al., 2018).

Studies show that poor academic performance and low self-esteem are strongly linked to substance use, risky sexual activity, and other problem behaviors (Dudovitz, Chong, Wong, 2016). Since the studies clearly show a positive correlation between exercise/athletics on academic performance and self-esteem, then the participation in these activities would help students avoid these dangerous habits.

Positive Effects of Athletics on Academic Performance

Participation in organized sports is not only beneficial to one's health, but it can also develop many positive character traits that athletes can use in every aspect of their lives. Being part of an organized school team, practicing several times per week and representing the school competitively will also promote self-esteem, self-concept and social capital within the student and develop a strong level of school connectedness (Bradley & Conway, 2016). It is characteristics like these that are built and reinforced through athletic participation, along with motivation, perseverance, self-control, coping, and creativity that are thought to emphasize success in an academic setting.

There was another study that also examined the relationship between after school activity involvement and the development of a sense of belonging at school and academic engagement. The investigation analyzed the participants in 11th grade and then again in 12th grade. It was determined that students who participate in extracurricular activities throughout the academic year develop both higher academic commitment and a stronger sense of belonging at school. Youths that are educationally involved are also less likely to drop out and more likely to complete their high school education (Knifsend & Graham, 2012).

With many academic eligibility requirements in place for student athletes, it can be assumed that most athletes would outperform the majority of their non-athlete peers in the classroom. There was a study that compared the academic results between athletes and non-athletes in grades 9-12. Various data was collected, including students' grade point averages (GPAs), graduation and dropout rates, and state assessment 12 results and ACT scores. All data that was obtained was examined allowing differences to be recognized between athletes and non-athletes. This study concluded that athletes outperformed non-athletes in several academic areas including GPA, state assessments, and the mathematics and science portions of the ACT (Lumpkin & Favor, 2012).

When examining standardized test scores further, Chen, Mason, Middleton, and Salazar (2013) compared ACT and SAT scores of athletes versus non-athletes. There were almost 200 student-athletes who voluntarily took part in this study. Participants filled out an 11-question behavioral survey, in addition to providing their student identification number. This number allowed access to each student's ACT scores, SAT scores, and grade point averages which were then matched to their completed surveys. While the results of this study showed no significant variation in test scores between athletes and non-athletes, they did demonstrate that student

athletes spent more time studying than non-athletes (Chen et al., 2013). In addition, no correlation was found between time spent on athletic participation and diminished academic performance.

In another study from 2017, Dyer, Kristjansson, Mann, Smith, and Allegrante (2017) examined the connection linking sport participation and academic performance among a sample of 3000 high school students. The results clearly present a positive connection between supervised sport participation and academic achievement among high school aged students (Dyer et al., 2017).

In the study referenced earlier, Trudeau and Shepard also reflected on the relationship between academic achievement and a few factors associated with school-based physical activities, including school sports. The results demonstrated that students were allotted up to one added hour daily on extracurricular activity, such as a school-based sport, without participation negatively affecting their academic performance. Additionally, it was found that participation in an extracurricular activity that includes physical activity (school sport) results in an increased academic performance and higher GPAs among student-athletes. This was found to be largely due to positive correlation between participation and increased memory, concentration, and conscientious classroom behavior (Trudeau & Shepard, 2008).

Finally, in the study completed by Lumpkin and Favor, they also looked at a comparison of the academic results between athletes and non-athletes, with a focus on graduation and dropout rates. The study included almost 150,000 high school students. student participants, all of which were currently enrolled in grades 9-12 in Kansas High Schools. The type of data collected was students' grade point averages both graduation and dropout rates, and state assessment results and ACT scores. This study concluded that athletes did graduate at a much

higher rate compared to their non-athlete counterparts, 98% versus 88%. The results of this study also found that the likelihood of non-athletes dropping out of school was significantly higher (15 times more likely) than that of athletes (Lumpkin & Favor, 2012).

Negative Effects of Athletics on Academic Performance

With the high school curriculum and expectations becoming more demanding, it is understandable that some students may struggle with balancing their academics and an after-school sport. With practices every day and games at least once a week, many athletes do not have a consistent schedule during the season. This can make it difficult to find time to complete homework, study for assessments, etc.

In a study completed to address the rising concern of youth over scheduling, Fredricks (2012) examined whether increased involvement in extracurricular activity, more specifically school sports, warrants any harmful academic outcomes. Over 15,000 students from 752 different schools participated in the two-stage sampling process. While some students did acknowledge difficulties with balancing athletics and academics, there was no data to support any harm coming from participating in a sport.

Finally, there was a study in 2015 that compared athlete's grades during the season and in the off-season. This research aids in providing information on whether participating on a sports team takes time and effort away from student-athletes' academic efforts, or in contrast, serves as a motivating force to achieve more in the classroom. Detailed information was collected on the sport the student played, the level in which they participated, and which season the participation took place. This data was then compared to academic transcripts, which contained 13 details of every enrolled class and grade received through the participants' high school years. The results showed no significant change between athlete's in-season and off-season GPAs, and found no

evidence that athletes alter or simplify their course load during their season or seasons (Schultz, 2015).

Summary

Research clearly shows that there are many positive correlations between participating in high school sports and academic performance. Even though there are some concerns, there is no concrete data to confirm any negative relationship between athletics and the classroom. While there are significant positive associations between high school athletic involvement and increased educational success, more research needs to be conducted to gain a better understanding on the potential effects related to athletic participation.

CHAPTER III

METHODS

The purpose of this study was to gain an understanding of the perceptions that graduate students in education have regarding the impact of athletics on academic performance in high school.

Design

A descriptive study was created to identify the perceptions that various graduate students in education have regarding the impact of high school athletics on academic performance. The survey administered allowed the researcher to further understand these perceptions, as well as how various factors (demographics, participation in sports, past experiences, etc.) impact these opinions on the overall benefits of high school sports.

Participants

The survey was conducted with 45 graduate students currently enrolled in Goucher Masters Programs in Education. Of the respondents, 67% were at least 30 years old. Most of the subjects (75%) are specializing in School Improvement Leadership or Athletic Administration. The other 25% are pursuing their master's degree in a different area of specialization. Of those surveyed, 78% are currently teachers and 33% have coaching experience. The 35 subjects that are teachers consisted of 14 elementary teachers, seven secondary teachers, one physical education teacher and 13 special area teachers. Over half of the subjects (57%) say that they are physically active and/or currently participate in an organized sport.

Instrument

This survey sought to gain an understanding of the perceptions that graduate students in education have regarding the positive and/or negative effects that high school athletics have on

academic performance. The instrument used in the experiment was a questionnaire which was composed of 10 questions. All the questions required a response and required participants to identify personal information and opinions related to the topic. The 10 questions were made up of multiple choice, Likert, and demographic questions. There was also an optional comment field at the end of the survey to give participants the option to communicate any additional info that they see necessary.

Procedure

Questionnaires were distributed to 45 graduate students in the 2019 fall semester at Goucher College. Participants completed the survey independently. After respondents finished the questionnaire, it was collected immediately. All information obtained in the surveys was anonymously reported. The surveys did not collect any personal information or information that could be attributable.

CHAPTER IV

RESULTS

The purpose of this study was to gain an understanding of the perceptions that graduate students in education have regarding the impact of athletics on academic performance in high school. Forty-five graduate students at Goucher College completed a 10-question survey during the Fall 2019 semester. The responses to the survey were tabulated and calculated as shown in Charts 1, 2 and 3.

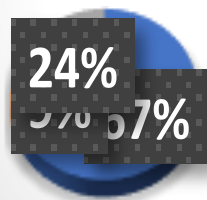
Sports and Athletics History

Opinions are often based on personal experiences. It is safe to assume that an individual who had a positive experience with high school athletics would also have a positive outlook on the benefits of participation. However, an individual who had a negative experience, or no experience at all, could in fact have a negative opinion on high school sports.

Chart 1 identifies the number of respondents who participated in high school sports. It also identifies the number of subjects that participated in sports, but not for their school, and the number of subjects that never participated in organized sports. Of those surveyed, 67% participated in high school athletics. Half of the high school athletes also competed at the collegiate level. Four respondents (9%) participated in sports, but not for school. Finally, 11 subjects (24%) never participated in any organized sports.

Chart 1

Participation in...

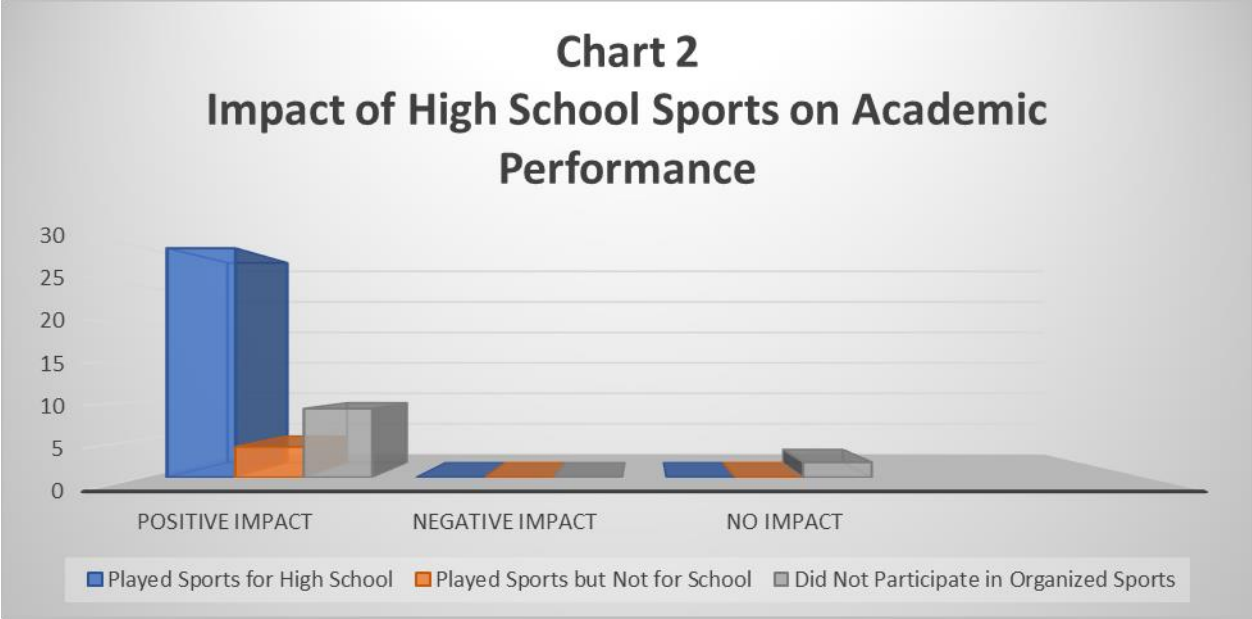


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Perceptions of the Effects High School Athletics have on Academic Performance

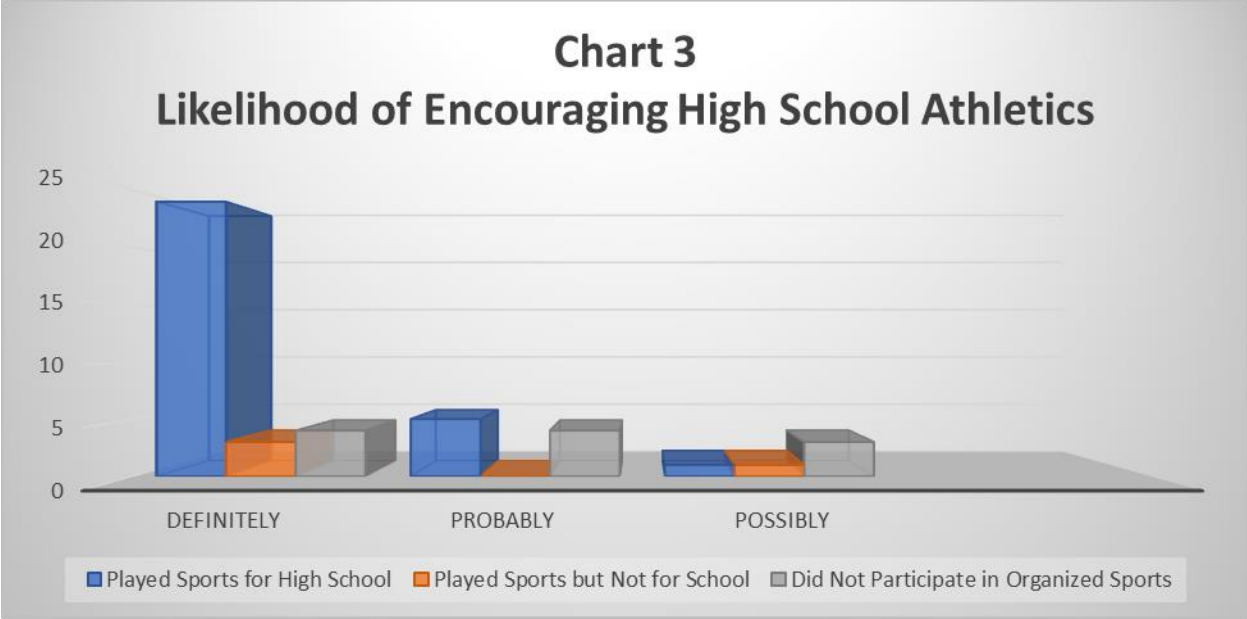
In response to the question regarding the impact that the subjects believe high school athletics has on academic performance, the responses were generally positive. Over 95% (43 out of 45) respondents believe that high school athletics has a positive impact on academic performance. The other two believe that they ultimately have little to no impact.

When looking at Chart 2, and the influence of past experiences, it appears that there is a correlation. All respondents who participated in some form of organized sport, believe that they have a positive impact in the classroom. Regarding the subjects that did not participate in organized sports, 82% still believe that they ultimately are beneficial to our youth.



The final question of the survey, sought to determine how likely the respondents are to encourage others (family, friends, students, etc.) to participate in high school sports. Chart 3 illustrates the results from this question. While none of the subjects implied that they would discourage others from participating, the results were not as overwhelmingly positive as the previous question. Only 64% would definitely encourage participation, while 22% would probably encourage. Finally, 14% would possibly encourage participation in high school athletics.

Of the 29 subjects that would definitely recommend high school athletics, 25 of them participated themselves (83% of the former high school athletes surveyed). Of the six respondents that would possibly encourage others to participate, only one competed in high school athletics themselves. In fact, four of them never participated in any organized sport, and five of them are not currently physically active.



In summary, most of the graduate students surveyed not only believe that high school athletics has a positive effect on students' academic performance, but they would recommend participation to others. None of the respondents believe that athletics has a negative impact or would discourage participation.

CHAPTER V

DISCUSSION

This study surveyed educator opinion on the effects that high school athletics have on academic performance. The study surveyed 45 graduate students during their Fall semester at Goucher College. Through a questionnaire, the study examined these individuals' experiences with high school athletics and their perceptions on how they can impact athletes in the classroom.

Implications of the Results

According to the results of this study, almost all the respondents believe that high school athletics indeed have a positive impact on academic performance. In fact, none of the graduate students believe that participation will have a negative impact. Since the majority of those surveyed are pursuing their masters in school improvement or athletic administration, it can be assumed that this overall response is indicative of the mindset that most school leaders have. Unfortunately, funding for high school athletics, as well as other after school activities, continues to be cut year after year. With so many after school programs being eliminated, or modified with the pay to play initiative, one must wonder how much damage we are causing to our youth by not continuing to provide these resources.

Limitations on the Study

Descriptive studies always have certain risks that could potentially impact the validity of the research. Subjects may not always be honest, and instead offer answers that they believe researchers want to hear. There is also the possibility of a low response rate or the results being biased. It is important to understand the limitations of a small sample size, such as the one used for this research.

Implications for Future Research

The responses provided by these graduate students cements the idea that most individuals in the education world believe that participating in high school athletics can benefit students in many ways, including their academic performance. Unfortunately, after school programs continue to be eliminated because there is a lack of data confirming the benefits that they ultimately have on academic performance. If additional scientific research can be completed to further prove the impact that these programs have on academic performance, it is possible that school leaders will be forced to find other ways to save money.

Conclusions

From this study, it can be concluded that most individuals believe that participating in high school athletics has a positive effect on academic performance. Sports develop many positive character traits that easily translate to school and other aspects of life. It can also be concluded that participating will not have a negative effect on a student's ability to perform in the classroom. Since there is a minimum GPA that students must maintain in order to participate in high school athletics, none of the respondents suggested that there would be a negative impact on academic performance.

Overall, the research and the survey results seem to agree with the effect that high school athletics will have on academics. In the future, if more research can be completed to prove a positive correlation, it is possible that athletics and other after school activities will stop being cut in order to save school districts money.

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