

Running Head: Student Athletes

GRADE POINT AVERAGE DIFFERENCES IN STUDENT-ATHLETES VERSUS
NON-ATHLETE-STUDENTS

By

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Submitted to

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Submitted in Fulfillment for the Requirements for
61-683 Research Paper

Fall 2014

January 25, 2015

ABSTRACT

The purpose of this study was to evaluate the grade point average of student-athletes versus non-athlete students. The research question proposed was “is there a significant difference in GPA between student-athletes and non-athlete-students?” The data was collected from suburban districts in Missouri and Arizona. A Statistical Program (ASP) and Microsoft Excel were used to analyze and produce the data. A t-test was used to challenge the null hypothesis. The study proved that there is a significant difference in GPA between student-athletes and non-athlete-students. The average GPA of student-athletes was 3.56, while the average GPA of non-athlete-students was 3.40.

INTRODUCTION

Background, Issues and Concerns

Student athletes and academic success has been an intriguing topic for many years. People take very opposing sides to this issue and a lot of research has been done. Most schools, secondary and collegiate, have academic standards for their student athletes. Some of the main concerns though are if these student athletes are actually held to these standards? Are teachers encouraged to give them higher scores on papers? Do student athletes take easier content courses in order to achieve the standards? There is also cause for concern that athletics take students away from their academic careers. Or that the athletic departments take resources away from other school related opportunities. There are many conflicting viewpoints on whether or not athletics are positive for students. The data for the research is based upon self-recorded GPA from high school student-athletes. Many studies have concluded that there is a significantly higher GPA for student-athletes than non-athlete-students. While other studies have concluded that there is no distinct GPA difference between the two types of students.

Practice under Investigation

The practice under investigation is to see if there is a significant difference in GPA between student-athletes and non-athlete-students.

School Policy to be Informed by Study

Many schools have individual policies in order for students to be able to participate in school sports. Some states also have requirements for their student athletes. In the state of Missouri, the Missouri State High School Activities Association (MSHSAA) sets a minimum standard that student athletes must pass 80% of the

maximum allowable credits which may be earned at your school. Policies range district to district and state to state regarding student athletes.

Conceptual Underpinning

The focus of this study to see if there is a significant difference in GPA between student-athletes and non-athlete students. There is research conducted on this topic, but no concrete theories about how being a student-athlete can affect learning in a positive way. Athletes, in large, are held to a higher standard in order to participate in their sport. Most look at academics as an equal partnership with their sport, while some look at academics as a stepping stone in order to play their sport. Either way, these student-athletes take academics seriously and strive to work hard in order to be able to achieve scholastically as well as competitively. Non-athlete-students do not have the extra incentive behind their personal drive to achieve highly academically. Student-athletes have more self-discipline that allow them to outperform non-athletes academically.

Statement of the Problem

To determine if there is a difference in GPA between student-athletes and non-athlete-students.

Purpose of the Study

The purpose of the study is to see if there is a significant difference in GPA between student-athletes and non-athlete-students.

Research Question(s)

Is there a significant difference in GPA between student-athletes and non-athlete-students?

Null Hypothesis(es)

There is no significant difference in GPA between student-athletes and non-athlete-students.

Anticipated Benefits of the Study

The study will benefit schools to determine whether or not they should encourage students to be involved in school sports. If it is determined that GPA is significantly higher as a student-athlete, then schools can use that information in the future. This information can lead to more informed meetings with parents, staff, community members, and students.

Definition of Terms

Student-athlete: a full-time student that is involved in a school sport

Non-athlete-student: a full-time student that is not involved in a school sport

Sport: an activity involving physical energy and skill that competes individually or as a team

GPA: Grade Point Average

ASP: A Statistical Package

NCAA: National Collegiate Athletic Association

Summary

Whether or not there is a significant difference in GPA between student-athletes and non-athlete-students has been a captivating topic of discussion for many years. There is a substantial amount of research that has been done on this topic, involving many different things including GPA. Former studies have drawn different conclusions, but none have confirmed that student-athletes have lower GPA's than non-athlete-students. The question this study is evaluating is if there is a significant difference in GPA between

student-athletes and non-athlete-students? The conceptual underpinning is that student-athletes will have a higher GPA than non-athlete-students. The theory was formed because athletes are held to a higher standard of academics in order to be a part of their sport while non-athlete-students do not have the same expectations.

REVIEW OF LITERATURE

Many articles and studies have been conducted on student-athletes and academic performance. The majority of the articles reviewed show the many positive effects that athletics have on academics. These articles also show the importance that athletics tend to have on students outside of school. It is important to recognize these studies since according to the Centers for Disease Control and Prevention, in the United States, “nearly 60 percent of all high students play on a school-sponsored sports team” (Parsons, 2013, p. 401).

Despite the common stereotypes that come with being an athlete, student-athletes are held to high standards. Requirements for student-athletes vary from state to state and district to district. The majority of states do have a set GPA for their student athletes at a 2.0 on a 4.0 scale. While that GPA is common, there are some states that opt for more strict rules for their student-athletes. Many states have begun to enforce a “C” average rule. This means that in order for students to play their sport, they must pass their classes. Texas called this rule “no pass, no play” (Lapchick, 1989). Texas is just one of the six states that is allowing this challenge for student athletes; the other “five are California, Hawaii, Mississippi, New Mexico, and West Virginia” (Lapchick, 1989, p. 32).

In high school, it is common for academic standards to vary, but in higher education, the National Collegiate Athletic Association has academic standards for all student athletes. Before high school students enter college they are made aware of the academic standings of universities. The NCAA requires institutions to “distribute graduation rates to prospective student-athletes and/or their parent(s) or guardian(s) to ensure athletes and their families are made aware of the academic reputation of the

institutions they are considering” (Dilley-Knowles, Burnett, & Peak 2010, p. 3). This is a great way for students and parents to not only know the expectations made of them, but also for students and parents to know how each university prioritizes academics. Not only is it a requirement that universities distribute information, they also have to hold their athletes to high academic standards. The NCAA’s Proposition 48, requires that a student entering college must have a “high school GPA of at least 2.0 in specific courses and a combined SAT score of 700 or an ACT score of 17 in order to be eligible to compete during their first year in college” (Zwart, 2006, p. 2). After a student’s first year of college, there are still expectations that must be met in order for them to play at the collegiate level. There are four specific academic eligibility areas: “1) minimum individual grade point average for athletic participation, 2) maximum number of Fs that an athlete can have and still participate, 3) the time frame for athletic-academic suspension for athletes that don’t achieve the minimum requirements, and 4) adherence to individual state association guidelines for academic eligibility” (Bukowski, 2008, p. 2). These strong eligibility requirements allow for students to not only succeed at their sport, but academically as well.

Even with the academic requirements student-athletes are held to, these students do tend to meet and often exceed the standards. Most of the research conducted showed that being a part of a school sport has a positive impact on students and that they do perform higher academically than non-athletes. In a U.S. Department of Education analysis including “30,000 high school sophomores and 28,000 seniors demonstrated that high school athletes outperform non-athletes academically. The study found that 88 percent of varsity athletes had better than a 2.0 (C) grade point average, while 30 percent

of all students had below a C average” (Lapchick, 1989, p. 33). Another study conducted by researchers at Michigan State University, showed that “students who participated in vigorous sports did 10 percent better in Science, English, Math and Social Studies compared to other students” (Hamilton, 2005, p. 28). Both of these studies determine that being a part of a school sport allows for students to highly achieve academically. The same researchers also looked at the difference in GPA between male and female student athletes. Female athletes had a significantly higher grade point average than male student-athletes. The “average GPA for a female high school graduate was 3.10 and 2.90 for male students” (Hamilton, 2005, p. 29). While there is a difference between gender, student-athletes overall have significantly higher GPA’s than non-athlete-students.

School sports not only have positive impacts on students academically, but personally as well. Athletes have to juggle many things on their plate at all points of time and for that reason, tend to be better developed in many areas of their lives. Participating in athletics has a “positive net impact on the development of leadership and interpersonal skills” (Garrett, 2000, p. 3). Athletes experience things in life that differentiate them from their peers and it allows for this great growth. Being a part of athletics also allows for students to gain greater “self-concept, realistic self-appraisal, and long range goals” (Garrett, 2000, p. 9). Executive director of the National Federation of State High School Associations stated that athletic “participation is a valuable educational experience every bit as important to the student's development as classroom experience” (Lapchick, 1989, p. 32). The character traits that students gain from athletics allows them a chance to be greater at whatever they choose to do because they have so much expected from them.

While the student-athletes need to do their part in order to maintain good grades, there are programs that can be implemented or assistance that can be provided in order to help these very busy students. Providing our student-athletes with quality support services can benefit them and their busy schedules greatly. “Student–athletes often spend more than 40 hours a week on sport-related activities, not to mention the mental fatigue, physical exhaustion, and nagging injuries” (Comeaux & Harrison, 2011, p. 236). Having tutorial services, academic advising, and teaching study skills can help to support athletes. While the majority of responsibility is on the student-athletes, accommodations can be made to help when classes are missed due to games. It is up to the athletes to “successfully balance the dual role of athlete and student despite time-constraints and competing external pressures from both athletic and academic entities” (Parsons, 2013, p. 400).

The effects of athletics on student achievement is a largely debated topic, but the majority of the research previously conducted proves the positive impact athletes can have on students, both academically and personally. Athletic participation needs to be accepted and encouraged by all to make our student-athletes feel welcome and celebrated.

RESEARCH METHODS

Research Design

The data for the study was collected through surveys. The surveys included gender, grade, GPA, involvement in a school sport, and several follow-up questions to those involved in a school sport. The data was collected anonymously and was self-reported information. The data has being studied involves 193 high school students and analyzes GPA on a 4.0 grading scale. The results are based upon a t-test. The independent variables of this study are student-athletes and non-athlete-students. The dependent variable is GPA (grade point average). The alpha level for the t-test was 0.25. The survey administered to students to gather data can be found in the appendix.

Study Group Description

The data was collected through surveys of 193 students: 95 student-athletes and 98 non-athlete-students. The students range from grades 9 through 12 and are from a school district in Missouri and in Arizona. Both school districts surveyed in 2014 had very low free and reduced lunch percentages, both below 30% of students. These school districts are also primarily Caucasian communities.

Data Collection and Instrumentation

The data for this study was collected through anonymous surveys. The surveys detailed whether the student was or was not involved in athletics as well as their GPA. The survey can be found in the appendix.

Statistical Analysis Methods

A *Statistical Package* was used to complete the t-test analysis. The independent variables are student-athletes and non-athlete-students. The dependent variable is grade point average. The alpha level is set at 0.25.

FINDINGS

A t-test was used to evaluate the self-reported surveys completed by students. The data includes whether or not the student is or is not a student-athlete as well as GPA. The following information, graphs, and charts will show the findings.

Figure 1

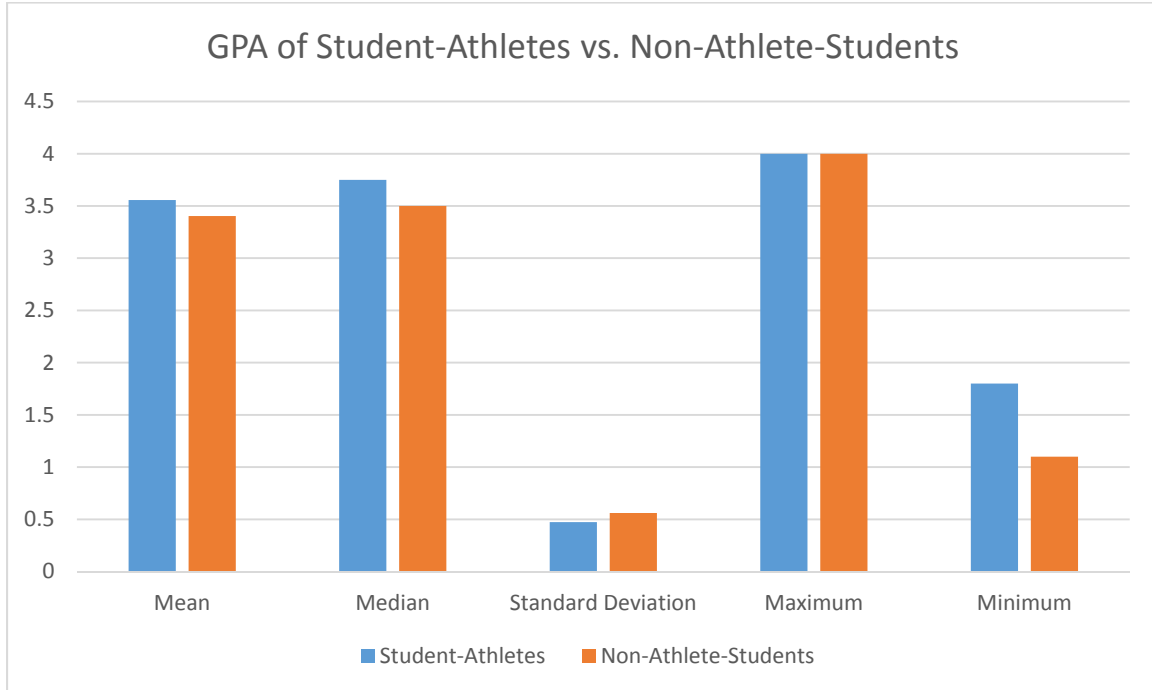
T-Test Analysis Results for GPA of Student-Athletes vs. Non-Athlete-Students

Source	Mean	Mean D	t-test	df	p-value
Student-Athletes (95)	3.56				
Non-Athletes (98)	3.40	0.152	2.057	191	0.041

Note: Significant when $p \leq 0.25$

The independent variables were student-athletes and non-athlete-students. The dependent variable was GPA. There were 193 students surveyed and divided into groups based upon their athletic involvement. There were 95 students in the student-athlete group and 98 students in the non-athlete-student group. The mean GPA for student-athletes was 3.56, while the mean GPA for non-athlete-students was 3.40. The difference between the mean scores (Mean D) was 0.152. The t-test value was 2.057. The degrees of freedom were 191. The null hypothesis was: There is no significant difference in GPA between student-athletes and non-athlete-students. The null is rejected because the p-value is .041, which is less than the alpha level of .25. This means that there is a significant difference in GPA between student-athletes and non-athlete students. Student-athletes have a higher GPA than non-athlete-students.

Figure 2



The chart above shows the difference in GPA between student-athletes and non-athlete-students. The athletes are depicted in blue while the non-athletes are in orange. The GPA calculations are shown on the y-axis (left side of the chart) and the mean, median, standard deviation, maximum, and minimum are represented on the x-axis (bottom of the chart). The mean GPA for athletes is 3.56 while the mean GPA for non-athletes is 3.40. The average GPA of student-athletes is higher than the GPA of non-athletes. The median GPA for student-athletes is 3.75 and the median GPA for non-athletes is 3.5. The standard deviation for athletes is .47, the standard deviation for non-athletes is .56. The maximum GPA for athletes and non-athletes is 4.0. The minimum GPA for athletes is 1.8, while the minimum for non-athletes is lower at 1.1.

CONCLUSIONS AND RECOMMENDATIONS

The null hypothesis stated that there was no significant difference in GPA between student-athletes and non-athlete-students. The results of the research rejected the null because it determined that there is a significant difference in GPA between athletes and non-athletes. The average GPA of student-athletes was 3.56 while the GPA of non-athlete-students was 3.40. The sample size of this study was 193 students: 95 student-athletes and 98 non-athlete-students. The majority of articles reviewed drew the same conclusions; that student-athletes tend to achieve at a higher level academically than non-athlete-students. Students involved in athletics prove that they are able to achieve at a higher level than their non-active peers even with the strenuous schedules that participation requires.

There are many reasons that could affect why student-athletes perform better academically than non-athletes. Student-athletes may be more motivated internally than those that do not participate in athletics. These students also have eligibility requirements to meet that may help to encourage them to perform better academically. For the most part, athletes tend to be extremely motivated and succeed. The conceptual underpinning was proved in the data that student-athletes have stronger motivation to work.

Standards for student-athletes are continually pushing them to achieve academically as well as in their sport. The NCAA and many high schools have requirements that students must meet in order to play their sport. These athletes are not only meeting the requirements, but exceeding them. Studies prove that student-athletes do have higher GPA's than non-athlete-students. Athletics have the ability to push

students to not only do well in the classroom, but help to teach them life lessons that they will use in the future.

Schools should begin to encourage students to participate in school athletics. Even if it is not at a competitive level, extracurricular sports can be great for students. Students should begin to explore the many outlets that they have to be included in school activities, especially athletics. Being a part of a school sport not only has a positive impact on students academically, but socially as well. In a future study, the affects that athletics have on personality should be examined. This could include integration, social skills, leadership, ability to communicate, and overall attitude.

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APPENDIX

The following survey was administered to students to gather data:

Figure 3

Student Survey

Please answer all questions as accurately as possible.

- 1) Gender (circle one): Male Female
- 2) Grade (circle one): 9th 10th 11th 12th
- 3) Grade Point Average: _____
- 4) Are you involved in a school sport? (circle one) Yes No

If you answered **yes** to the previous question (#4), answer the following:

- 5) How many sports do you play for your school? _____
- 6) What sport(s) do you play for your school? _____
- 7) How many years have you been playing your sport(s) for your school?

- 8) How many hours a week do you practice your school sport(s)?

- 9) What season does your school sport(s) occur?

- 10) How many hours do you spend at games/performances/extra activities besides
practice for your school sport? _____