



# The Effects of Sports on Student Academic Performance



Christina Sapolu  
University of Hawaii West Oahu

## Abstract

By using exploratory research I can investigate school performance of students who incorporate sports into their everyday lives. The independent variable would be a student's participation in sports or lack thereof and the dependent variable being the student's GPA. Thus, with the use of a survey I can measure students GPA's in relations to sports in kids ranging from middle school to high school.

## Research Design & Data Collection

Data was collected by surveying a sample population of students ages 11-17. The survey itself was an anonymous google form survey that asked a series of questions including age, sports participation, and GPA. After surveying students, I proceeded to separate athletes and non-athletes and calculated the average GPA's to compare.

## Introduction & Research Question

**Introduction:**  
In a community encircled by competitive sports and highly intensive training in adolescence, balancing both school and sports has been a popular inquiry for years. Mililani is a community well known for their exemplar performance in both sports and in academics, but not much is known for the effect of a student-athletes' current GPA in relation to their participation in sports. With sports being such a major part of our community, it's important to know its effects on our keiki's education.

**Research Question :**  
Does participation have a negative or positive effect on a student's academic performance/GPA?

**Hypothesis :**  
Participating in sports has a positive effect on student's GPA



Figure 1. Other surveyed students

## Results

As seen from the graph, the data does not reject or accept my hypothesis. Though non-athletes did seem to have a slightly higher GPA, there isn't a statistical significance to prove or disprove that non-athletes perform better academically than athletes. By using the Chi Square value test, I am able to further explain that there is no significant statistical difference in my collected data.

Relationship Between GPA and Participation in Sports

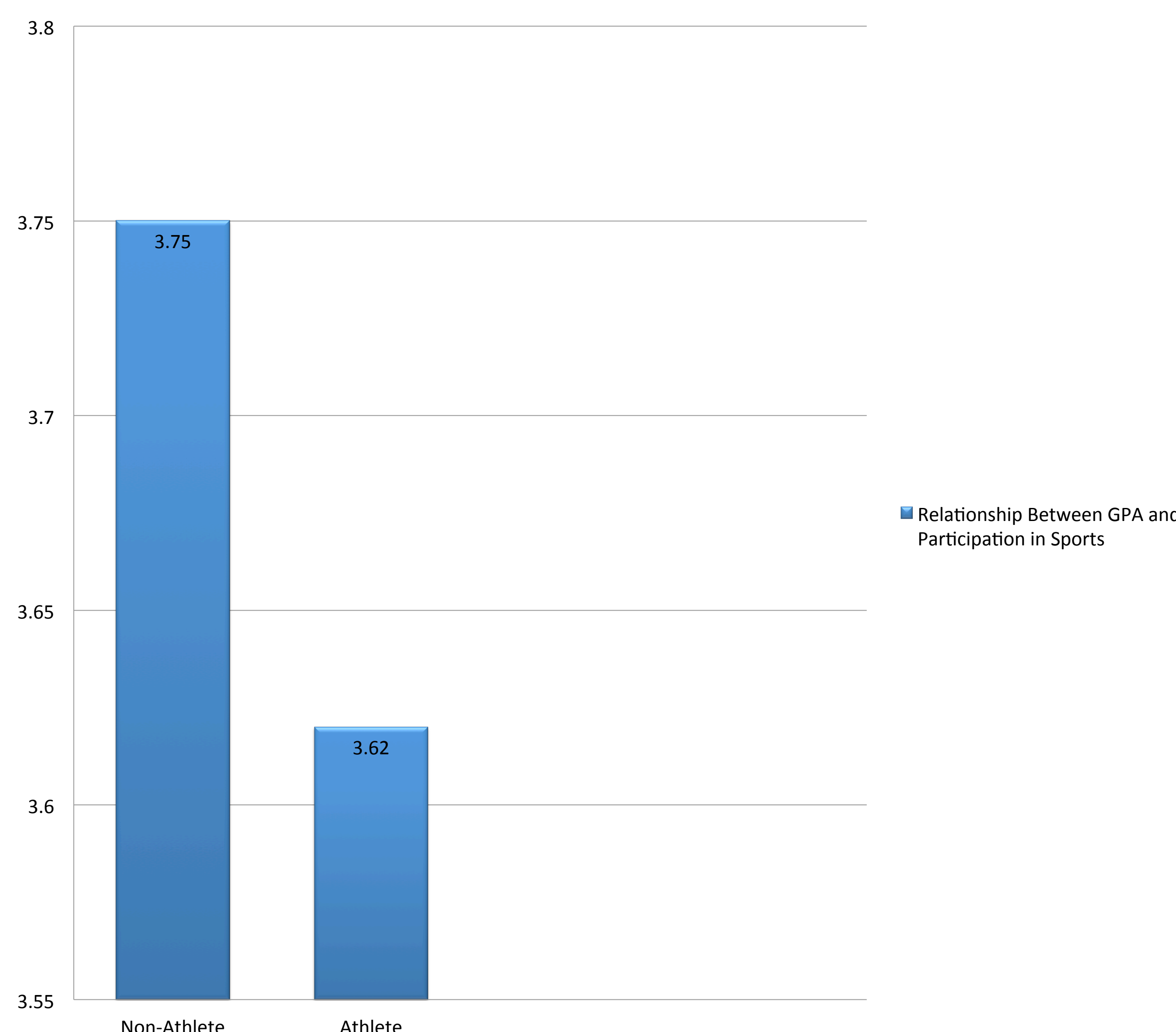


Chart 1. Relation between students' participation in sports with their average GPA.

Method	Observed	Expected	(o-e)	(o-e)^2	(o-e)^2/e
Non-Athlete	3.75	3.0	0.75	0.5625	0.28
Athlete	3.63	3.0	0.63	0.3969	0.20
					0.48

## Discussion

Some error that may have interfered with my data would be that the age range was somewhat broad and the work load from kids in middle school versus high school is vastly different and could be why some have a higher or lower GPA. The survey also did not factor in things such as learning disabilities one might have such as ADHD that may have an effect on their learning and their GPA.

## Conclusions

As concluded from my data, there is not much of a statistical difference in GPA from students who participate in sports versus those who don't participate in sports. Therefore, it doesn't make much of a difference whether a student is participating in a sport or not to have an adequate GPA. This study has further helped me to understand some of the differences in work ethic between athletes and non-athletes. In future studies I would want to focus more on one specific age group, possibly college students, who have more responsibility and pressure to see if there is more of a significance in GPA.



Figure 2. Student Athletes who were surveyed

## Contact

Christina Sapolu  
University of Hawaii West Oahu  
Email: [ctafling@hawaii.edu](mailto:ctafling@hawaii.edu)

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