Undergraduate Psychology Research Methods Journal

Volume 1 | Issue 8 Article 8

11-2008

To Play or Not to Play: Comparing Athlete's GPA to Non-Athlete's GPA

Lisa Clark
Lindenwood University

David Kanning
Lindenwood University

Fall 2008 Research Methods Journal

To Play or Not to Play:

Comparing Athlete's GPA to Non-Athlete's GPA

Lisa Clark & David Kanning

This study examines whether participating in athletics at Lindenwood University is related to the athlete's GPA. It was hypothesized that due to the higher demands of coaches and maintaining a minimum GPA, athletes will have a higher GPA than non-athletes. The researchers contacted professors and coaches to ask permission to survey their students and athletes. After giving a survey to participants, the Lindenwood University Registrar's Office looked up official GPAs of participants who gave their permission. The findings showed no significance supporting our hypothesis. There are several possible reasons for this weak correlation such as the number of participants and not receiving consent to look up participants' GPA. However, this study could lead to the possibility of conducting some interesting future research.

Historically, athletics have been a rising influence in the lives and culture of numerous individuals. Not only are athletes participating in sports at the professional level but also at the collegiate level. These athletes are dedicating time and effort into their particular sport while focusing on receiving an education of their desired field of study. The effect of such strenuous time and effort has also been a topic of much debate over the recent years. Consequently, the growth of American sports has contributed to the evolution of specific sports stereotypes and myths, most notably the 'dumb jock' stereotype (Sailes, 1993). Does playing a particular collegiate sport affect the study, or grade point average, of the student-athlete?

While athletes may miss out on some of the experiences of college, Potuto and O'Hanlon (2007) conducted a study, in which, 90% of the student-athletes rated their experience in college as "Good" or "Excellent." The same study indicated that nearly 80% of student-athletes attributed athletics to positive personal and educational development. In addition, the study noted the tremendous amount of support the athletes receive from coaches, professors and their peers.

However, some professors resent student-athletes because they miss more classes than the average student. A study by Van-Blerkom (1996) found a significant correlation between class attendance and final course grade. This finding was confirmed by a study by Silvestri (2003) where a positive correlation was found between attendance and college degrees. Athletes have to deal with the negative impact of missing class and have to work even harder to make up class work. According to the *College Student Journal's* Ten Commandments, "Class attendance is a must, unless you want everything to go 'bust'" (Parish, Henke, & Dopp, 2007). The same article talks about time management, working hard, and self-confidence and how they affect students.

In a recent article in *Sporting News*, Ryan Fagan (2008) explains how Division I college basketball players have improved their GPA through mandatory study halls. These athletes have to deal with lots of exposure and academics are something that can easily be forgotten by the player. The coaches at Lindenwood that require study tables force the student-athletes to focus on their academics, hoping that this will help their GPA.

We, as researchers, are interested in athletics and the relationship between playing a sport and a student's GPA. We would like to conduct research to see if being active

and participating in a collegiate sport at Lindenwood University is related to student-athletes' GPA. It is believed that an athletes' GPA is positively related to eligibility rules set by the university and/or team, team study halls made mandatory by the coach, and individual coaches' demands. This research will require researchers to administer a brief survey with questions related to GPA, college sport, year in school, practice and game times, and coaches' demands set promoting education at Lindenwood University. Just as previously researched by Sedlacek and Adams-Gaston (1992), who used SAT scores in selecting and predicting the early student-athletes' success in school, we too are expanding the research to see if GPA is affected by participation in a collegiate sport.

Thus, we predicted that student-athletes would have a higher grade point average than students who did not participate in a sport. Therefore, it could be assumed that if non-athletes had a lower GPA, they might want to consider participating in a collegiate sport to increase their GPA.

Even though athletes have become increasingly more popular over the years, athletes have been targeted by negative stereotypes, specifically involving education. Researchers do believe that these athletes, not of the norm society, have broken these stereotypes and are receiving and working hard for a higher GPA that is often times higher than that of non-athletes.

Method

Participants

A total of 63 participants completed the survey. Due to illegible handwriting or consenting to have their GPA looked up, 4 participants were excluded. Therefore, 59 Lindenwood University undergraduate students were used in this study. First semester

freshmen were excluded from the study due to the fact that they do not have a collegiate GPA. Participants were recruited from the Lindenwood Table Tennis team on campus and from Psychology classes at Lindenwood University. There were 21 student-athletes and 38 students who do not participate in athletics. Also, there were 20 males and 39 females. Of the 59, two were second semester freshmen, 16 were sophomores, 20 were juniors, and 21 were seniors.

Materials

The only materials used in this study included an e-mail sent out to coaches and professors (see Appendix A), two informed consent forms (see Appendix B), one for the researchers and one for the participant, a 14-question survey (see Appendix C), a consent form to have the Lindenwood Registrar look up the participant's GPA (see Appendix D), a feedback letter with the researchers' contact information (see Appendix E), and pens for the participants to use. The survey included questions such as amount of credit hours, whether the participant plays a sport, and additional information related to GPA and the participant's sport. The survey was personally created by the researchers.

Procedure

The experimenters first contacted the professors or coaches to arrange a time to offer the survey. Experimenters showed up on time and informed the participants that the survey was optional and not mandatory. Those willing to participate were given an informed consent form to sign as well as a consent form to have their GPA looked up by the faculty advisor. After all preliminary paperwork was filled out and all questions had been answered, the survey was conducted. Once participants were finished with the survey, they turned it in, and were compensated for their time with candy. They were

given a feedback letter which included information about the study and contact information for the experimenters. Questions were also fielded by the experimenters in regards to the survey. The experimenters then analyzed and processed the results which were made available to the participants.

Results

This study that was conducted included 20 males and 39 females (see Table 1) ranging in age from 18 to 26 with 84.7% of the participants among the ages of 19-22 (see Table 2). Of the 59 participants, there were 2 second semester freshmen, 16 sophomores, 20 juniors, and 21 seniors (see Table 3). Also, among the 59 participants, there were 21 student-athletes and 38 non-athletes (see Table 4). Additional information was asked of the student-athletes. A total of 10 sports were represented in our study. Over 42% of the athletes did not have to miss a single class because of their athletic event. However, one-third had to miss 4 or more classes (see Table 5). The vast majority of the athletes were not required by their coaches to have study tables, which is a team study hall monitored by the coach. Surprisingly, none of the athletes were required to have study halls while on the road. In addition, all of the athletes stated that they had to maintain a certain GPA, most likely the 1.5 required by the University, to remain eligible to participate in their collegiate sport. All of this information led to our hypothesis: athletes would have a higher GPA than non-athletes. After conducting a one-tailed independent t-test, no significance was found supporting out hypothesis that athletes would have a higher GPA. The mean GPA of athletes was about 2.75 and the mean GPA of non-athletes was about 2.46 (see Table 6.1). The critical value was .804 and our computed value was .424 (see Table 6.2).

Discussion

The results of this study were disappointing because we could not find significance. We cannot say that athletes have a higher GPA than non-athletes. This means that the study halls and demand of the coaches do not help athletes to improve or keep a higher GPA than non-athletes. Perhaps if more participants had been run or if various universities had been considered, our hypothesis would have been supported. Our results did not cover attendance of participants sufficiently enough. Athletes were asked how many classes they missed due to their sport, but non-athletes were not asked about their attendance at all. Because of this, it was not reasonable to conclude anything about attendance and GPA. One can suppose that attendance is positively correlated to GPA.

Overall, there were several limitations to this study. The first limitation pertains to the number of participants in the study. We were unable to coordinate with the coaches as well as we had hoped and this is reflected in the demographics. There were nearly twice as many non-athletes as there were athletes. Also, there were twice as many women as there were men. The study could have incorporated other departments because the Psychology department is made up of mostly females. This likely skewed the correlation coefficient. Also, if the study were to be conducted again, a shorter survey would be recommended. Another limitation of this study was the reliance on others in order to conduct the study. We were dependent on coaches and professors concerning times to meet, and we were dependent on the Registrar to provide us with feedback about the GPAs. The results of this study can lead to other topics for future research. Future considerations include the involvement of coaches within their player's academics,

professor's attitude toward student-athletes and whether there is a relationship between an athlete's grade and the level of support or adaptability that the professor provides. Another area to look at is the level of effort put forth by an athlete in class compared to the level of effort in their particular sport. If solutions are made to the limitations brought up in this study, the researchers are confident that their hypothesis would be supported.

References

Fagan, R. (2008). Play hard, study hard. *Sporting News, 232*(14), 18.

Parish, T., Henke, W. & Dopp, A. (2007). The ten commandments for college student-athletes. *College Student Journal, 41*(4), 1045.

Potuto, J.R. & O'Hanlon, J., (2007) National study of student-athletes regarding their experiences as college students. *College Student Journal, 41*(4), 947-966.

Sailes, G. A. (1993). An investigation of campus stereotypes: The myth of black athletic superiority and the dumb jock stereotype. *Sociology of Sport Journal, 10,* 88-97.

Sedlacek, W. E., & Adams-Gaston, J. (1992). Predicting the academic success of student-athletes using SAT and noncognitive variables. *Journal of Counseling & Development, 70,* 724-726.

Silvestri, L., (2003). The effect of attendance on undergraduate methods course grades. *Education, 123*(3), 484-486.

Van Blerkom, M. L., (1992). Class attendance in undergraduate courses. *Journal of Psychology 126,*(5), 487-494.

Author Note

Lisa Clark, Department of Psychology; David Kanning, Department of Psychology, Lindenwood University.

Lisa and David would like give a special thanks to Dr. Nohara-LeClair for her support, feedback, assistance, and encouragement throughout the duration of our project. We would also like to thank the Registrar's office, especially Barry Finnegan and Jeff Weinrich, for all their help in providing the GPAs of the participants. We appreciate Dr. Kelly, Dr. Scribner and the coaches who allowed us to interrupt their classes and practices to conduct our study. We finally thank our classmates who reviewed and commented on our paper.

Correspondence concerning this article should be addressed to: David Kanning, 3307 Woodsway Dr., St. Charles, MO 63303. E-mail: davidkanning@sbcglobal.net

Appendix A

Email Sent to Professor

Dear Professor,
My name is David Kanning/Lisa Clark and I, along with a partner, am conducting an experiment for my Advanced Research Methods class. I would like to conduct a survey in your class and was hoping to arrange a time in which this would be possible. The survey will take no more than 10 minutes of class time and the students will be compensated for their time. Please note that participation by the students is not required and is completely voluntary.

Thank you for your consideration,

David Kanning
Lisa Clark

Email Sent to Coaches

Dear Coach_____
My name is David Kanning/Lisa Clark and I, along with a partner, am conducting an experiment for my Advanced Research Methods Class. I would like to conduct a survey before one of your team's practices and was hoping to arrange a time in which this would be possible. The survey will take no more than 10 minutes and the athlete's will be compensated for their time. Please note that participation by the students is not required and is completely voluntary.

Thank you for you consideration,

David Kanning
Lisa Clark

Appendix B

Informed Consent Form

I, _____ (print name), understand that I will be taking part in a research project that requires me to complete a short survey asking about my study habits, GPA, and my participation in Lindenwood University Athletics Program. I understand that I should be able to complete this project within 10 minutes. I understand that my GPA will be viewed by the researchers and the Supervisor, but all information will be kept confidential. I am aware that my participation in this study is strictly voluntary and that I may choose to withdraw from the study at any time without any penalty or prejudice. I understand that the information obtained from my responses will be analyzed only as part of aggregate data and that all identifying information will be absent from the data in order to ensure anonymity. I am also aware that my responses will be kept confidential and that data obtained from this study will only be available for research and educational purposes. I understand that any questions I may have regarding this study will be answered by the researchers involved to my satisfaction. Finally, I verify that I am at least 18 years old and am legally able to give consent or that I am under the age of 18 but have on file with the HSP office, a completed parental consent form that allows me to give consent as a minor.

_____ Date: _____

(Signature of participant)

_____ Date: _____

_____ Date:_____

(Signature of researchers obtaining consent)

Supervisor

Lisa Clark 314-803-8521

David Kanning 636-299-1957

Dr. Michiko Nohara-LeClair

(636) 949-4371

mnohara-leclair@lindenwood.edu

Appendix C

PLEASE ANSWER ALL OF THE QUESTIONS. IF A QUESTION DOES NOT APPLY OR MAKES YOU UNCOMFORTABLE, PLEASE SKIP. THANK YOU!

1 . I am a: MALE FEMALE

2. I am a FRESHMAN SOPHOMORE JUNIOR SENIOR

3. How old are you? _____years old

4. Do you participate in a sport at Lindenwood University? YES NO
If no, skip to question #13.

5. What sport(s) do you participate in?_____

6. How many games do you have a week during the season? _____

7. What times are your games typically during the week?_____

8. On average, how many hours are spent traveling during the school week to your athletic event?_____

9. Have you ever missed a class period because of your athletic activity? YES NO

How many? 1 2 3 4 5 more than 6

10. Does your coach require that you have study tables/study hall? (any set time dedicated to homework with the team) YES NO

If yes, how many hours a week?_____-

11. On the road, does your coach require you to have study tables/study hall? YES NO

12. Does your team require you to maintain a certain GPA to be eligible to participate in the sport? YES NO

13. How many credit hours are you taking?_____

14. On average, how many hours do you spend studying or doing homework a week?

0-1 1-3 3-5 5-7 7-9 more than 10

Appendix D

GPA Consent Form

I understand that by giving my consent to the experimenters, I am allowing Dr. Michiko Nohara-LeClair, faculty advisor for Advanced Research Methods, permission to obtain the records of my GPA. I also understand that all information given to the experimenters will be given back confidentially and anonymously.

_____ _____

(Signature of Participant) (Date)

_____ _____

(Signature of Experimenter) (Date)

_____ _____

(Signature of Faculty Advisor) (Date)

Appendix E

Feedback Letter

Thank you for participating in our study. The survey was used in order to determine if participation in a collegiate sport at Lindenwood University is related to the GPA of those athletes. The survey was also used to show or indicate if any trends relating to age, sex, specific sport, and coach/teacher involvement relates to the students' GPA.

Please note that we are not interested in your individual results: rather, we are only interested in the results of a large group of athletes and non-athletes at Lindenwood University, of which, you are a part of. No identifying information about you will be associated with any of the findings.

If you have any questions or concerns regarding any portion of this study, do not hesitate to bring them up now or in the future. Our contact is found at the bottom of this letter. If you are interested in obtaining a summary of the findings of this study at a later date, please contact, and we will make it available to you at the completion of this project.

Thank you again for your valuable contribution to this study.

Sincerely,

Principle Investigators:

Lisa Clark	314-803-8521	ljc815@lionmail.lindenwood.edu
David Kanning	636-299-1957	dlk644@lionmail.lindenwood.edu

Supervisor:

Dr. Michiko Nohara-LeClair 636-949-4371 mnohara-leclair@lindenwood.edu

Table 1.1

Sex of Participant

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	20	28.6	33.9	33.9
	Female	39	55.7	66.1	100.0
	Total	59	84.3	100.0	
Total		70	100.0		

Table 2.1

Age of Participant

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18	2	2.9	3.4	3.4
	19	13	18.6	22.0	25.4
	20	9	12.9	15.3	40.7
	21	11	15.7	18.6	59.3
	22	17	24.3	28.8	88.1
	23	3	4.3	5.1	93.2
	24	2	2.9	3.4	96.6
	25	1	1.4	1.7	98.3
	26	1	1.4	1.7	100.0
	Total	59	84.3	100.0	
Total		70	100.0		

Table 3.1

Class Rank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Freshman	2	2.9	3.4	3.4
	Sophomore	16	22.9	27.1	30.5
	Juniors	20	28.6	33.9	64.4
	Seniors	21	30.0	35.6	100.0
	Total	59	84.3	100.0	
Total		70	100.0		

Table 4.1

Athletic involvement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	21	30.0	35.6	35.6
	No	38	54.3	64.4	100.0
	Total	59	84.3	100.0	
Total		70	100.0		

Table 5.1

Absence in class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	9	12.9	42.9	42.9
	2	3	4.3	14.3	57.1
	3	2	2.9	9.5	66.7
	4	1	1.4	4.8	71.4
	5	2	2.9	9.5	81.0
	6	4	5.7	19.0	100.0
	Total	21	30.0	100.0	

Table 6.1

Group Statistics

	Athletic involvement	N	Mean	Std. Deviation	Std. Error Mean
GPA of All	Yes	21	2.7495	1.30661	.28513
	No	38	2.4595	1.33627	.21677

Table 6.2

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
GPA of All	Equal variances assumed	.088	.768	.804	57	.424	.29005	.36054	-.43191	1.01201

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
GPA of All	Equal variances assumed	.088	.768	.804	57	.424	.29005	.36054	-.43191	1.01201
	Equal variances not assumed			.810	42.184	.423	.29005	.35817	-.43268	1.01278