

5-2010

Relationship between Student Involvement and GPA

Jennifer Ellen Burdick
Lindenwood University

Paige Martin
Lindenwood University

Follow this and additional works at: https://digitalcommons.lindenwood.edu/psych_journals



Part of the [Psychology Commons](#)

Recommended Citation

Burdick, Jennifer Ellen and Martin, Paige (2010) "Relationship between Student Involvement and GPA," *Undergraduate Psychology Research Methods Journal*: Vol. 1 : Iss. 11 , Article 6.
Available at: https://digitalcommons.lindenwood.edu/psych_journals/vol1/iss11/6

This Article is brought to you for free and open access by the Psychology, Sociology, and Public Health Department at Digital Commons@Lindenwood University. It has been accepted for inclusion in Undergraduate Psychology Research Methods Journal by an authorized editor of Digital Commons@Lindenwood University. For more information, please contact phuffman@lindenwood.edu.

Relationship between Student Involvement and GPA

Jennifer Ellen Burdick

Paige Martin⁵

Data were collected regarding student involvement and grade point average in a way that could be beneficial to the students of Lindenwood University. Many students, whether actively involved in a sport, work, and/or other extracurricular activities, spend their college career engaging in time management. These people may have to sacrifice some schoolwork in order to accomplish everything they desire. In understanding this, the researchers wanted to see if the activities had a relationship with grade point average. The hypothesis stated that students who are actively involved outside of the classroom have less free time. These students may spend less times studying and may have a lower GPA compared to students who have more free time and use that time to study. 59 participants were recruited from the Lindenwood Participant Pool, of these; valid data were obtained from 51 of the participants. The results of this study revealed that there was no significant relationship between the number of hours participants studied and their actual cumulative GPA. Furthermore, no significant relationship was found between whether a students' involvement in extra-curricular activities and their actual cumulative GPA.

For most individuals, college is a necessary step in achieving a brighter future. However, making this step may come with challenges over the course of his or her education. Whether it is joining a sports team or simply supporting school functions, institutions encourage students to become active in their school and also maintain a 'healthy,' usually considered a C average or above, grade point average (GPA). Furthermore, many work in addition to attending classes in

⁵ Jennifer Ellen Burdick, Psychology Department, Lindenwood University; Paige Martin, Psychology Department, Lindenwood University. We would like to thank the Barry Finnegan and Jeffrey Weinrich in Lindenwood University Registrar's office for assisting us in obtaining grade point averages. Correspondence concerning this project should be directed to Jennifer Ellen Burdick, jb596@lionmail.lindenwood.edu, (217)-565-0077 or Paige Martin, plm694@lionmail.lindenwood.edu, (636)-866-9813

order to pay for their education. In many instances, students find themselves struggling to balance activities such as work, athletics, free time, and their studies simply to be successful in school.

There is very little research regarding student involvement and GPA. However, some research regarding high school and community college student involvement has suggested higher levels of student involvement are associated with higher academic achievement. Fox, Barr-Anderson, Neumark-Sztainer and Wall, (2010) found that a higher GPA associated with high school girls was independently related to sports team participation and physical activity. On the contrary, a higher GPA for boys was only related to participation on a sports team. However, in the study conducted by Fox, et al. (2010) the participants were asked to provide a self-report survey regarding their academic grades. This may have been a limitation of the study because the participants could have misreported their actual GPA.

Little research has been done to address the GPA's of working students. Our research could be very valuable considering the economic times the United States is facing. Many students make choices every day that lead to limited participation in their school system simply because they have to work to afford their education. Future studies should look at the growing population of working students and maybe even working student athletes.

Researchers also need to address students that are not involved in school or outside activities such as work. Common sense may tell us that a student who has more free time than a student, who does not, is more likely to have a higher GPA. However, other behaviors such as procrastination could also affect a student's GPA. Research findings suggest that students with low GPAs report the most problems with procrastination (Zarick, & Stonebraker, 2009). People procrastinate for many reasons, but Zarick and Stonebraker (2009) state that if we are not as

motivated to accomplish a task, then we simply put off the task until later. Many college students engage in procrastination which could easily contribute their GPA.

A question arises when looking at student athletes: How do they maintain a higher GPA when most collegiate athletes are gone for part of their semester? Some studies have suggested that student athletes may be encouraged to take many easy classes in order to maintain a minimum GPA to stay eligible for competition. It has also been assumed that athletes are underachievers from the academic standpoint (Horton, 2009). However, in the study conducted by Horton (2009), students stated that their dedication to their team increased the desire to stay eligible and keep desired grades.

In looking at student involvement in campus activities, studies have found that there is not a positive correlation between student involvement and GPA. In fact, a study done by Yin and Lei (2007) tested 109 undergraduate students. They used a four-part survey instrument. It should be noted that approximately half of the participants worked part-time while the other half did not. Interestingly, Yin and Lei (2007) found that there was a significant negative correlation between level of campus activity and overall student achievement. It is possible that over-involvement and socialization in campus activities may have produced lower academic results at this university (Yin & Lei, 2007). Importantly, student-athlete counseling is a key role in the success of students. Just like the stresses of working part-time and going to school, athletes have a number of stressors as well. Storch and Ohlson (2009, p 78-79) state that the “stresses imposed by athletic commitments may interfere with psychosocial and academic development.” A recommendation given to prevent psychological and psychosocial break downs of students is to devise a system where the student meets with faculty or advisors on campus to help the student deal with these issues (Storch & Ohlson, 2009).

The present study was conducted in order to examine further, the relationship between student involvement and GPA. The researchers hypothesized that students who are actively involved outside of the classroom have less free time, spend less time studying and have a lower GPA compared to students who have more free time and use that time to study. Surveys were administered to obtain actual GPA and time schedule management. GPA and individual schedules were compared in order to find a correlation between the two. In addition, actual GPA was compared with the number of hours a student worked if he or she had a job outside of the university.

Method

Participants

Fifty-nine participants were recruited through the Lindenwood Participant Pool (LPP) from Lindenwood University. However, data obtained from 51 were used in recording our data due to inconsistencies in the participant responses. For example, six of these participants' names and student ID they provided did not match up therefore, we could not obtain their GPA from the registrar's office. In addition to the six participants' data that was omitted, two more were omitted because of a labeling error by the experimenters. Participants were recruited from general education classes in psychology, sociology, anthropology, athletic training, and exercise science. These participants received extra credit toward their respective courses as a form of compensation for their volunteered time for this study. 15 men and 36 women made up the 51 participants recorded in the study. The majority of the participants were freshmen but the results consisted of 24 freshmen, 14 sophomores, 9 juniors, and 4 seniors.

Materials and Procedure

In this study, all participants were asked to complete a short survey concerning the participants' time management skills outside of regular classes. The survey and all other related material was given to the participant in a packet form. The participants were first given two consent forms. The first consent form was to simply verify that the participants were 18 years old and that the purpose of the study (Appendices A). The second consent form was to be signed if the participants agreed to have the registrar's office release their official cumulative GPA anonymously for the study (Appendices B). The second consent form was unique because it had to be kept confidential to protect the participants' information. Each participant was assigned a number by the researcher to use when entering data. Once participants agreed to release their GPA, they were asked to provide their student identification number and name so the registrar's office at Lindenwood University could access their GPA. The registrar's office then stripped the name and student ID number and replaced it with the assigned number provided by the researchers. Fortunately, all participants choose to release their cumulative grade point average. However, six participants GPAs could not be obtained due to error in identification.

Next, the participants were given a short survey (seven questions) asking their sex, class rank, if they were involved in any extra-curricular activities and if they worked outside of school. We asked participants to estimate their cumulative GPA to see if they overestimated or underestimated their GPA (Appendix C). Then participants were given a schedule labeled from 12:00AM through 11:00PM, Monday through Friday to indicate how many hours' participants reported working and time devoted to extra-curricular activities. The schedule had blank spaces for each time so that the participants could fill out their daily routine (Appendix D). Finally, after completing the study participants were given a feedback letter explaining our research, and

contact information for the experimenters were provided if the participants had any questions regarding the study (Appendix E). All data were kept securely in a locked box and kept in experimenters' personal living spaces. Once the study was complete all GPA consent forms were destroyed.

Results

There were more women than men in our study: 36 women to 15 men. Twenty percent of participants were not involved in extra-curricular activities outside of Lindenwood University while eighty percent were involved in extra-curricular activities. Furthermore, six people were involved in volleyball and four people were involved in wrestling. These were the most represented extra-curricular activities reported in our study out of 34 different activities that were represented. Most of the participants did not work outside of the university; 32 participants did not work while 19 participants did work.

The researchers hypothesized that the participants would overestimate their GPA. The correlation between estimated cumulative GPA and the participants actual cumulative GPA proved to be a strong positive relationship; $r(51) = .856, p < .01$

Furthermore, the hypothesis stated there would be a strong relationship between participants actual cumulative GPA and the number of hours he or she studies. The correlation between actual cumulative GPA and the number of hours the participants studied was a weak positive relationship; $r(51) = .193, p > .05$

The researchers looked at actual cumulative GPA and extra-curricular activities. They hypothesized if a person was involved in extra-curricular activities their actual cumulative GPA would be lower, however in our findings this was not the case. The correlation between the participants actual cumulative GPA and their involvement in extra-curricular activities was a

weak positive relationship; $r(51) = .164, p > .05$. This suggests that a participants' involvement in extra-curricular activities does not appear to be strongly related to their actual cumulative GPA.

The researchers then looked at the number of hours a participant worked and his or her actual cumulative GPA. They hypothesized there would be a strong positive relationship between the number of hours a participant worked and their GPA. Again, our findings did not support this hypothesis. The relationship between GPA and the number of hours worked was a moderately strong negative relationship; $r(51) = -.369, p < .05$. These findings suggest there is not a strong positive relationship between hours worked and GPA.

Discussion

The experiment conducted was a between participants design. The researchers hypothesized the students who are actively involved outside of the classroom have less free time. These students may spend less time studying and may have a lower GPA compared to students who have more free time and use that time to study. The findings did not support our hypothesis. The researchers first looked at the number of hours a student spent studying and the student's actual GPA. Then the researchers correlated, using Pearson's correlation, and found a weak positive relationship between the two suggesting there may still be a relationship however it is not a strong one. Next, the experimenters looked at whether the participant was involved in extra-curricular activities and the participants actual cumulative GPA. After correlating these two, it was also found that there was a weak positive relationship and suggests that there was not a strong relationship between the number of hours the participants worked or if they were involved in extra-curricular activities. Both of these findings do not support the stated hypothesis.

The researchers were also interested in participants' responses when asked about their estimated GPA, provided on the survey, and actual cumulative GPA, provided by the registrar's office. The researchers hypothesized that students would overestimate their GPA when asked on the survey. However, the results found that students were accurate in estimating their cumulative GPA. Using the Pearson's Correlation, the researchers correlated actual cumulative GPA with the participants estimated cumulative GPA and found there was a very strong positive relationship. These findings supported the second hypothesis and suggested that students were close to being accurate in reporting their estimated GPA.

There were limitations encountered in this study. The number of participants surveyed was small. The current study had many participants with a high GPA, which lead the researchers to wonder if the experiment description had deterred people with a lower GPA. The experiment description stated the current study dealt with GPA. It is possible that people with a low GPA would not feel comfortable signing up for our experiment because it had to do with releasing their cumulative GPA. Another limitation encountered was participants did not give their accurate information when asked to release their name and student identification number. A final limitation encountered was participants not correctly filling out the schedule part of the survey.

For future researchers in replicating the current study, the researchers suggest a more creative title that would not deter people with a low GPA from participating in the study. Furthermore, try to recruit participants as soon as possible to maximize number of participants and avoid measurement error by making sure all identification is correct. The researchers feel that even though the sample size was small and only one hypothesis was supported, the current research is a step in the right direction. More students are working while going to school because times are tough; therefore, future studies should look at the growing population of working

students and maybe even working student-athletes. On the flip side, future research should also be dedicating to those students who are not involved in any extra-curricular activities and/or work.

References

- Fox, C. K., Barr-Anderson, D., Neumark-Sztainer, D., & Wall, M. (2010). Physical activity and sports team participation: Associations with academic outcomes in middle school and high school students. *Journal of School Health, 80*(1), 31-37.
- Horton, D. Jr. (2009). Class and cleats: Community college student athletes and academic success. *New Directions for Community Colleges, 147*, 15-27.
- Storch, J., & Ohlson, M. (2009). Student services and student athletes in community colleges. *New Directions for Community Colleges, 147*, 75-84.
- Yin, D., & Lei, S. A. (2007). Involvement on hospitality student achievement and satisfaction. *Education, 128*(2), 282-293.
- Zarick, L. M., & Stonebraker, R. (2009). I'll do it tomorrow. *College Teaching, 57*(4), 211-215.

Appendix A

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 regarding my involvement in extra-curricular activities or work (outside of Lindenwood University). I understand that I should be able to complete this project within 10 minutes. 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 should not incur any penalty or prejudice because I cannot complete the study. 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 understand that any questions I may have regarding this study shall be answered by the researcher(s) involved to my satisfaction. Finally, I verify that I am at least 18 years of age and am legally able to give consent or that I am under the age of 18 but have on file with the LPP office, a completed parental consent form that allows me to give consent as a minor.

 (Signature of participant) Date: _____

 (Signature of researcher obtaining consent) Date: _____

Student Researchers' Names and Numbers:
 Paige Martin 636 866 9813
 Jennifer Ellen Burdick 217 565 0077

Supervisor:
 Dr. Michiko Nohara-LeClair
 Course Instructor
 (636)-949-4371
 mnohara-leclair@lindenwood.edu

Appendix B

ARM ID (provided by researcher) _____

GPA Informed Consent Form

I, _____ (print name) give permission to the researchers in this study to access my cumulative GPA in order to conduct this study. I do not have to fill out this form if I feel uncomfortable and I will not be penalized or not be able to take the experiment. My Lindenwood Student ID number is _____ and I am also aware that my GPA will be released by the registrar's office and stripped of any identifying information so that the researchers have no way of identifying which GPA belongs to whom.

_____ Date: _____

(Signature of participant)

_____ Date: _____

(Signature of researcher obtaining consent)

Student Researchers' Names and Numbers:

Supervisor:

Paige Martin 636 866 9813

Dr. Michiko Nohara-LeClair

Jennifer Ellen Burdick 217 565 0077

Course Instructor

(636)-949-4371

mnohara-leclair@lindenwood.edu

Appendix C

ARM ID (provided by researcher) _____

Instructions: Please fill out the following survey. Participants may skip any questions they do not wish to respond to.

SURVEY

- 1) Are you: MALE FEMALE

- 2) Class Rank: FRESHMAN SOPHOMORE JUNIOR SENIOR OTHER

- 3) Are you involved in extra-curricular activities (extra-curricular activities include: Lindenwood University sponsored sports or clubs)? YES NO

- 4) If yes to question 3, please list the extra-curricular activities your involved in (extra-curricular activities include: Lindenwood University sponsored sports or clubs): _____

- 5) What is your cumulative GPA? _____

- 6) Do you work outside of Lindenwood University (this does not include work and learn)?

YES NO

- 7) If you answered yes to question 6, how many hours do you usually tend to work a week (Monday-Friday)? _____

Appendix D

ARM ID (provided by researcher) _____

Survey (continued)

Directions: Please fill out the chart with your daily schedule. This consists of how much time you spend at work, extra-curricular activities, and studying. Please indicate throughout the table which one is which. For Example, if you are usually studying from 12 a.m. to 3 a.m. on a Monday indicate that on the chart by putting studying on 12:00 a.m. box and drawing an arrow down to 3:00 a.m.

	Monday	Tuesday	Wednesday	Thursday	Friday
12:00a.m.					
1:00 a.m.					
2:00 a.m.					
3:00 a.m.					
4:00 a.m.					
5:00 a.m.					
6:00 a.m.					
7:00 a.m.					
8:00 a.m.					
9:00 a.m.					
10:00a.m.					
11:00a.m.					
12:00p.m.					
1:00 p.m.					
2:00 p.m.					
3:00 p.m.					
4:00 p.m.					
5:00 p.m.					
6:00 p.m.					
7:00 p.m.					
8:00 p.m.					
9:00 p.m.					
10:00p.m.					
11:00p.m.					

Appendix E

Feedback Letter

Thank you for participating in our study. The survey was used to discover that people that spend more time involved in extra-curricular activities or work, outside of Lindenwood University, will devote less time to studying and have a lower cumulative GPA. This is beneficial because we believe that in completing our study our results could be found beneficial to students who may or may not view their time as being well managed as a student. By finding out the results students can then assess their own habits in regards to how or if GPA is affected by how much they are involved in life outside of the classroom.

Please note that we are not interested in your individual results; rather, we are only interested in the results of a large group of consumers, of which you are now 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, please do not hesitate to bring them up now or in the future. Our contact information 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 us 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,

Principal Investigators:

Paige Martin 636-866-9813

Jennifer Ellen Burdick 217-565-0077

Supervisor:

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