

Published March 17, 2005

THE UNIVERSITY OF CENTRAL FLORIDA UNDERGRADUATE RESEARCH JOURNAL

# The Effects of College Student Employment on Academic Achievement

Lauren E. Watanabe Faculty Mentor: Dr. Jana Jasinski

.....

**ABSTRACT:** With college tuition and the cost of living rising, many students find themselves in the position of needing employment while trying to attend classes. This study examines the effects that employment has on college students' academic achievement and other possible factors that might have contributed.

...... Republication not permitted without written consent of the author.

# INTRODUCTION

The purpose of this study is to examine the effects of college student employment on academic achievement. Presently, 55% to 80% of students are employed while attending college (Miller, 1997; King, 1998). These high percentages have led some to believe that students who work suffer from decreased academic performance (Steinberg, Fegley, & Dornbusch, 1993). However, others feel that employment can have a positive effect if in the proper proportions (Dallam & Hoyt, 1981). Research regarding this topic is mixed. Consequently, the current study will attempt to provide further empirical evidence with which to better understand the effects of employment on academic achievement.

#### **REVIEW OF LITERATURE**

Employment among college students has been increasing rapidly. Its effect on the academic performance of students has been questioned by many researchers (Green, 1987). Some of the issues raised in the literature concern matters such as the number of hours worked, whether the students' jobs pertain to their majors, and the students' workloads. As more students are employed, they face having to balance their academic requirements, extracurricular activities, and employment responsibilities to maintain their lifestyles (Furr & Elling, 2000). The literature reviewed below examines how employment has affected academic achievement.

Much of the research indicating that employment negatively affects students' academic achievement stated that an increase in the amount of hours worked was the most influential factor. In one study, more hours worked decreased the likelihood of being an "A" student (Pritchard, 1996). According to Furr and Elling (2000), 29% of the students working 30-39 hours per week and 39% of those students working full time indicated that work had a negative and frequent impact on their academic progress. Those who take on part-time jobs are less engaged in school before they enter the labor force, and part-time employment, "especially for more than 20 hours weekly, further exacerbates this problem" (Steinberg et al., 1993, p. 175). Furr and Elling (2000) also found that upperclassmen worked more hours than freshmen, indicating that the older students would be more likely to suffer in their academics. Therefore, working full time has an even greater impact on academics because, often times, working 40 or more hours further decreases a student's college grade point average (GPA) and is negatively related to completion of a bachelor's degree (Astin, 1993). The act of balancing school work with the 1:38-47

labor market may also lead students to put forth less effort into both because they are spreading themselves "too thin" (Astin, 1993). According to these researchers, it is not the job itself that causes the problems, but the overload on the amount of time worked because "students who work more hours each week spend less time on homework, [and] pay attention in class less often" (Steinberg & Dornbusch, 1991, p. 307).

Not all of the research shows negative GPA effects from the amount of hours a student is employed. Some findings indicated that employment had either a positive effect or none at all. A number of researchers, for example, found that hard work built stronger academic character because it taught the students time-management skills, gave them experience outside of the classroom, and provided them with more satisfaction in college (Pennington, Zvonkovic, & Wilson, 1989). Dallam and Hoyt (1981) suggested that a good balance between students' credit hours and working hours forced students to be more organized and to have better time management. They also found that students who worked between 1 and 15 hours per week showed a slightly higher GPA than those whose workloads were heavier and those who were not working at all (Dallam & Hoyt, 1981; Li-Chen & Wooster, 1979). Not only were higher GPAs found in students who maintained jobs, but Green (2001) also stated "that they had gained job skills, experience, knowledge of a variety of jobs, a sense of accomplishment, a feeling of responsibility, and money for personal and school expenses" (p. 329). Other researchers, when comparing high and low academic performance and the amount of hours students worked, found that the amount of hours employed did not have an adverse effect on their academics (Pinto, Parente, & Palmer, 2001). Similarly, Watts' (2002) analysis of 19 students at the University of Brighton found that 4 of 12 working undergraduates said that working did not affect their academics and 5 said that it actually had a positive impact. Although some of the previously mentioned studies used samples of high-school students rather than undergraduates, their results were consistent. The fact that some contained samples of less than 50 students, however, may have accounted for some of the differences between the positive and negative academic results.

Not accounting for the amount of time actually put into the job, researchers have found that the type of employment a student holds has an impact on academics. Dead-end jobs such as a cashier or fast food worker tend to have a negative effect (Li-Chen & Wooster, 1979),

# URĴ

whereas high-quality, part-time jobs that seemed to develop career-related skills may in effect contribute to increased levels of "career maturity," and these types of jobs are more likely to be flexible and work with students' schedules (Healy, O'Shea, & Crook, 1985). These types of jobs allow for hands-on experience that cannot be gained in the classroom alone. For example, of the 600 full-time students at Lamar University surveyed, 91 out of 215 students whose jobs related to their majors had a mean GPA of 2.98, while those whose jobs were career unrelated had a mean GPA of 2.66 (Li-Chen & Wooster, 1979). Also, student comments suggested that employment related to a potential career provided additional experience. For example, 10 out of 23 comments of a 120 nursing student survey at a university indicated that they were "gaining more practical experience ... " and that "as all [their] employment is in care areas, [they felt] it [had] extended [their] experience" (Lee, 1999, p. 448).

As money and resources become more scarce for college students, jobs become more of a necessity rather than an after-school activity. Any changes to students' routines will lead to changes in academics, whether they are positive or negative. Though the research results were not always consistent, it was a common theme that the more hours worked led to decreased academic performance, but that working in general did not necessarily have a negative effect on grades. When it came to students' jobs as they applied to their majors, the effects were positive in that they provided experience beyond the classroom (Lee, Mawdsley, & Rangeley, 1999). The following study will look at these variables as well as class standing, the amount of credit hours taken, and flexibility of the work schedule in order to determine the positive or negative relationship of working and academics. Other variables, such as demographic factors, will also be examined.

# **HYPOTHESES**

Much of the research reviewed has dealt with how many hours students put into their jobs and what types of jobs they held. Since the results were not consistent, this study examines similar variables in order to provide further evidence to the debate regarding the effects of employment on academic achievement. Much of the research reviewed has used predominantly White American samples from traditional colleges. In contrast, the current study uses a more diverse sample from a metropolitan university. Based upon research evidence, the following hypotheses were developed: (a) Fewer hours worked lead to higher academic achievement; (b) Jobs or internships (paid or 1:38-47

unpaid) that are related to the students' majors have a positive impact on academic achievement; (c) Higher class standing of students lead to higher academic achievement; (d) Students who take fewer credit hours will have higher academic achievement; and, (e) More flexible work schedules lead to higher academic achievement.

# METHODOLOGY Method of Data Collection

The type of method that was used in this study consisted of a self-administered questionnaire. Consent from professors was obtained prior to visiting the classrooms. The surveys were distributed by the principal investigator in classrooms at the University of Central Florida (UCF) during the Spring semester of 2004. The classes visited ranged from lower-level general education classes to upper-level electives. In these settings, students were informed of the purpose of the project, that filling out the survey and turning it in was deemed as having their consent, and that their participation was voluntary. They were also aware that they could skip any question they felt uncomfortable answering and that there was no penalty for choosing not to participate. After explaining procedure, the surveys were distributed. the Administration of the questionnaire took approximately 10 minutes. The principal investigator stood at the front of the classroom, and all the completed surveys were placed by the students into a covered box. This sample type was chosen for convenience so as to obtain as diverse a sample as possible.

The students were asked questions regarding their GPA, the number of credit hours they took, their major, the type of job they held, the average number of hours per week they worked, the flexibility of their job schedule, their reason for working, and general demographic questions regarding age, gender, and race and ethnicity. See Appendix A to review the questionnaire.

# **Conceptual Definitions of Variables**

*Employment:* The student had a job or an internship (paid or unpaid) during the Fall semester of 2003.

*Academic Achievement:* The students' grade point average during the Fall semester of 2003.

*Hours Worked:* The average number of hours a student spent "on the clock" per week at their place of employment during the Fall semester of 2003, or how many hours the student spent at their internship (paid or unpaid) during



the Fall semester of 2003.

Jobs Related to the Students' Majors: For example, if the student was a Hospitality Management major, and worked or had an internship (paid or unpaid) at the front desk of a hotel, then the job related to his or her major (the only relevant jobs or internships would be those that were held during the Fall semester of 2003).

*Class Standing:* Whether the student was considered a freshman, sophomore, junior, or senior by his or her college or university during the Fall semester of 2003.

*Number of Credits:* The number of credit hours a student was enrolled in during the Fall semester of 2003.

*Flexible Work Schedule:* Employers that work with students' schedules regarding when students worked and how many hours they spent working. The only relevant scheduling considerations were jobs or internships held during the Fall semester of 2003.

- *Very flexible* meant that employers worked completely around students' schedules.
- *Somewhat flexible* meaning that the employers take students' schedules into consideration, but do not make it a number one priority.
- Not too flexible meaning that employers only make special scheduling considerations if absolutely necessary.
- *Not flexible at all* meaning that employers do not take into account the students' schedules at all.

#### **Protection of Human Subjects**

At the top of the survey, there was a consent form that explained the research project to the students. It showed how they remained anonymous by both placing the surveys in a covered box so that their names and faces could not be placed together and by having no identifiable information on the survey itself. Reading the top part of the survey, agreeing to the terms and conditions, and filling out the survey was regarded as their consent. There was no formal consent form for the students to sign.

#### **Data Analysis Strategy**

An independent samples t-test was used to analyze job status related to students' majors, flexibility of work schedules, number of credit hours taken, and academic achievement of students with jobs versus students without jobs. A one-way analysis of variance was used to analyze the amount of hours worked and students' class standing.

# RESULTS Univariate Analyses

The sample observed was balanced almost equally between males (41.6%) and females (58.4%). White American respondents comprised the largest portion of the sample (71.4%), with Hispanics being second, although far behind with 12.5% (see Table 1). The other race/ethnicity backgrounds examined included the following: African American (7.4%), Asian/Pacific Islander (3.7%), Native American (.3%), and Other/ Multiracial (4.7%).

Frequency analyses of gender, GPA, percent of people with jobs, percent of people with jobs within their majors, and average number of hours worked were conducted. The nominal variable of gender had a mode of 1.00 (i.e., the variable of female). The mean of GPAs, an interval variable, was 3.44 with the minimum being 1.43, the maximum being 4.00, and the standard deviation being 4.92. The majority of students had jobs (61.7%). Of that 61.7%, 83.5% did not have jobs pertaining to their majors. The mean of the variable measuring the average number of hours worked was 25.26, the minimum being 1.00 hour and the maximum being 60 hours, and the standard deviation was 9.48 (see Table 1).

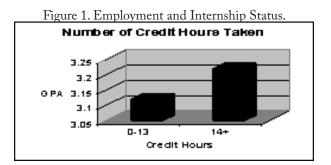
*Table 1.* Descriptives of UCF students regarding employment

Catergorical Variables	%	Ν			
Gender					
Female	58.4	174			
Male	41.6	124			
Race					
Caucasian	71.4	212			
African American	7.4	22			
Asian/Pacific Islander	3.7	11			
Hispanic	12.5	37			
Native American	.3	1			
Other/Multiracial	4.7	14			
Percent with Jobs	61.7	185			
Having to do with their majors	16.5	30			
GPA Recorded					
1.00 – 2.99 (1)	32.4	97			
3.00 - 3.50 (2)	44.1	132			
3.51 – 3.99 (3)	19.7	59			

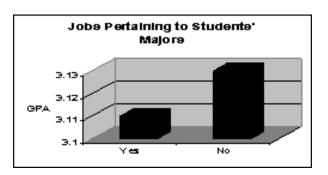
4.00 (4)	3.7	11		
Mean Std. Deviation				
Continuous Variables	%	Ν		
GPA	3.44 4.92	300		
Avg. hours worked per week	25.26 9.48	184		

#### **Bivariate Analyses**

To test the hypothesis that students with jobs had higher academic achievement than students without jobs, an independent t-test was conducted comparing the mean of student GPAs with jobs to the mean of student GPAs without jobs (see Figure 1). No significant difference was found, t (296) = -1.77, p > .05. The mean of student GPAs with jobs (Mean = 3.12, SD = .485) was not significantly different from the mean of student GPAs without jobs (Mean = 3.23, SD = .524).

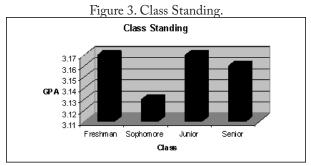


In order to see if having a job pertaining to one's major had a positive effect on academic achievement, an independent t-test was conducted, comparing the mean GPA of students who had academic major-related jobs to the GPA of students who did not have major-related jobs (See Figure 2). No significant difference was found, t (178) = -.147, p > .05. The mean of student GPAs who had major-related jobs (Mean = 3.11, SD = .620) was not significantly different from the mean of student GPAs who had non-major-related jobs (Mean = 3.13, SD = .459).



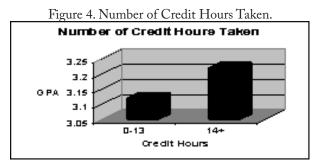
1:38-47

The GPA means of students from four different class standings (freshman, sophomore, junior, senior) were compared using a one-way analysis of variance (ANOVA) to test whether or not class standing had an effect on academic achievement (see Figure 3). No significant difference was found, F (3, 295) = .069, p > .05. The students' GPA from the three different class standings did not differ significantly during the Fall semester of 2003.

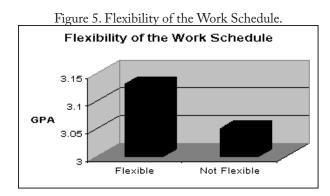


An independent t-test was conducted comparing the GPA of students taking between 0 and 13 credit hours and the GPA of students taking 14+ credit hours in order to test the hypothesis that students taking a lesser number of credit hours would have higher academic achievement (see Figure 4). Considering that students taking 0 credit hours would imply that they were not enrolled in school, the actual range was between 2 and 13, since that was the lowest number of credit hours stated. No significant difference was found, t (297) = -1.78, p > .05. The mean GPA of students taking between 0 and 13 credit hours (Mean = 3.12, SD = .506) was not significantly different from the mean of the students taking 14+ credit hours (Mean = 3.23, SD = .495).





It was hypothesized that the more flexible a student's work schedule, the higher his or her academic achievement, so an independent t-test was conducted comparing the GPA of students having flexible work schedules to the GPA of students not having flexible work schedules (see Figure 5). No significant difference was found, t (180) = .695, p > .05. The mean of student GPAs having flexible work schedules (Mean = 3.13, SD = .474) was not significantly different from the mean of student GPAs not having flexible work schedules (Mean = 3.05, SD = .587).



#### CONCLUSIONS

In this quantitative study, none of the research hypotheses were supported, nor were any of the demographic variables significant. This indicated that the null hypothesis was accepted, which stated that college student employment did not affect academic achievement. This finding is surprising considering the amount of research that has found many positive and negative significant factors of employment affecting academic achievement. The study did not contribute to either the positive or negative relationship between working and academic achievement. Furr and Elling (2000) found that students working between 30-39 hours per week and those working 40+ hours per week felt that their employment had a negative effect on their academic achievement. Others also found that students working between 1 and 15 hours per week showed a slightly higher GPA than those with a heavier workload (Dallam & Hoyt, 1979; Li-Chen & Wooster, 1979). Both of these studies indicated that employment had some kind of impact on academic achievement. The present study, however, showed no significance with regard to this variable. The hypothesis stating that the type of employment students held had a positive impact on academic achievement, if it was related to their major, was not supported. This finding conflicts with those of Li-Chen and Wooster's (1979) survey of 600 students at Lamar University, wherein those whose jobs were relevant to their majors showed a higher GPA than those whose jobs were irrelevant. Class standing in this study did not show a strong significance. This was inconsistent with some of the results found by Astin (1993), which stated that the more years a student spent in school, the higher his or her academic achievement.

1:38-47

Steinberg and Dornbusch (1991), after conducting their research, stated that overloaded students will have decreased attitudes toward academics, and by becoming overly ambitious about trying to get things done will lower academic achievement. Besides the amount of hours worked, another measurement of a student's workload was the amount of credit hours taken. This study did not support the literature because its finding was not significant.

The final hypothesis regarding the flexibility of the work schedule stated that the more flexible a student's schedule, the higher his or her academic achievement. The result showed that this variable did not have an impact on academic achievement, which conflicted with findings from Healy, O'Shea, and Crook (1985), who found that quality jobs that work with students would allow them to put in the needed time towards their studies.

One of the interesting facts was that 25.2% of the other factors that students perceived to affect their academics fell under the category of fraternity/sorority/social life. In second, with 23.9%, was the category of other schoolrelated activities/sports (see Table 2). Both of these findings are viewed as neither positive nor negative. The question on the survey that asked about other factors that may have influenced academic achievement was open ended. It did not require the students to give a

www.URJ.ucf.edu

positive or negative response; it simply showed that academic achievement can also be influenced by variables other than employment.

Table 2. Facto	rs Affecting GP	A of UCF Students
Inon L. I acco	io i mocung OI.	

	%	Ν
Family	11.16	18
Emotional	21.3	33
Fraternity/Sorority/ Social Life	25.2	39
School/Sports Activities	23.9	37
Roommates/Friends	5.2	8
Living Situation	5.2	8
Significant Other	7.7	12
	Total N = 155	

The fact that approximately 70% of the respondents stated that their grade point averages were a 3.00 or above greatly affected the results because of very little variation. This made it very difficult to draw a strong conclusion regarding the research hypothesis.

#### LIMITATIONS OF THE STUDY

The restricted variation in GPAs was a large drawback to the study. One of the possible explanations for this would be that the GPAs were self reported. Students could very easily have embellished or forgotten their exact GPA due to the fact that their answers relied on their memory of the past semester. Having an official report of the GPAs could have at least removed this possibility of human error. Also, one of the questions asked students in an open-ended format to state other factors that influenced their academic achievement. It should have been posed so that students had to state whether the results were positive or negative. The fact that the sample observed was a sample of convenience, and not a random sample, may have presented a problem because it is possible that the sample included the students for which there is no relationship between employment and academic achievement.

#### **Suggestions for Future Research**

The fact that GPA was the only way of measuring academic achievement did not account for other factors that could have affected this same variable. Therefore, even though most of the research has used GPA as its only source of academic achievement, variables such as graduation rates should be examined. Secondly, 1:38-47

multivariate analyses could have been used in addition to the bivariate analyses because multiple factors related to academic achievement could, therefore, be examined. In addition, the relationship between employment and academic achievement may have been curvilinear. Taking very few credit hours may lead to neglecting school work, while taking a moderate amount may lead to better timemanagement skills, and taking too many credits may overload students and add unneeded stress. This should be considered in future studies. Future studies conducted from this survey should ask the students to state whether other factors affecting their academic achievement are positive or negative. Even though none of the research hypotheses were supported by the data, the sample was more diverse than previous studies and, therefore, provides a valuable contribution to this body of literature.

# UR**j**

#### THE UNIVERSITY OF CENTRAL FLORIDA UNDERGRADUATE RESEARCH JOURNAL

1:38-47

# REFERENCES

Astin, A. (1993). "What matters in college? Four critical years revisited." San Francisco: Jossey-Bass.

Dallam, J.W. & Hoyt, D.P. (1981). "Do students have enough time to study?" *College and University*, 57, 84-91.

Furr, S.R. & Elling, T.W. (2000). "The influence of work on college student development," *NASPA Journal*, *37*, 2, 454-470.

Green, G. (1987). "The effect of part-time employment on academic achievement," *Journal of Educational Research*, *80*, 6, 325-329.

Healy, C.C., O'Shea, D., & Crook, R. H. (1985). "Relation of career attitudes to age and programs during college." *Journal of Counseling Psychology*, *32*, 239-244.

King, J. (1998). "Too many students are holding jobs for too many hours." *Chronicle of Higher Education*, p A72.

Lee, T., Mawdsley, J.M., Rangeley, H. (1999). "Students' part-time work: Towards an understanding of the implications for nurse education," *Nursing Education Today*, *19*, 443-451.

Li-Chen, M. & Wooster, R.A. (1979). "The effect of unemployment on the college students' academic performance," *College Student Journal*, *13*, 1, 12-20.

Miller, B. (1997). "Waiters, painters, and Big Mac makers." *American Demographics*, 19, p 26.

Pennington, D. C., Zronkovic, A. M., & Wilson, S. L., (1989). "Changes in college satisfaction across an academic term." *Journal of College Student Development*, 30, 54-58.

Pinto, M.B., Parente, D.H., Palmer, T. S. (2001). "College student performance and credit card usage," *Journal of College Student Development*, 42,1, 49-58.

Pritchard, M. (1996). "Hours of employment and undergraduate grades," *Consumer Interests Annual*, 42, 207-209.

Steinberg, L. & Dornbusch, S.M. (1991). "Negative correlates of part-time employment during adolescence: Replication and elaboration," *Development Psychology, 27*, 2, 304-313.

Steinberg, L., Fegley, S., Dornbusch, S.M. (1993). "Negative impact of part-time work on adolescent adjustment: Evidence from a longitudinal study," *Developmental Psychology*, *29*, *2*, 171-180.

Watts, C. (2002). "The effects of term-time employment on academic performance," *Education* + *Training*, 44,2, 67-75.



#### THE UNIVERSITY OF CENTRAL FLORIDA UNDERGRADUATE RESEARCH JOURNAL

# APPENDIX

# Sociological Survey of College Students

My name is Lauren Watanabe and I am a Sociology student at the University of Central Florida. Under the supervision of Jana Jasinski, I am conducting research regarding the effects of college student employment on academic achievement. You are being asked for about 5-10 minutes of your time to fill out the following survey, answering only the questions you feel comfortable answering. There is no penalty for skipping questions or choosing not to participate in the study, nor will I be able to give you any compensation or extra credit for your participation. There are no risks involved with this study and your identity will remain anonymous because there is no personal identifiable information given on the survey. Please place the surveys in the covered box so that surveys and faces cannot be placed together. You must be at least 18 years of age to participate in this study. Any questions or concerns regarding the information from this survey can be answered via email at lwatanabe01@gmail.com. *Filling out the following survey will be regarded as your consent to participate in the study*.

# Are you at least 18 years of age ? Circle one

- 1. Yes (if so, please specify age in years)
- 2. No (if so, please do not continue on with this survey)

Directions - fill out the following survey using information from only the fall semester of 2003.

# 1. What was your GPA? \_\_\_\_\_

# 2. What was your class standing? Circle one

- 1. Freshman
- 2. Sophomore
- 3. Junior
- 4. Senior

#### 3. How many credit hours were you enrolled?

- 1.0-6
- 2.7-13
- 3.14+

4. What was your major? \_\_\_\_\_

# 5. Were you employed or were you involved in an internship (with or without pay)?

- 1. Yes
- 2. No (Skip to Question #10)

# 6. If yes, how many hours per week on average did you work? \_\_\_\_\_

7. What type of job did you have or what was your job title?

# 8. How flexible was your work schedule? Circle one

- 1. Very flexible (employers worked completely around your school schedule)
- 2. Somewhat flexible (employers took your schedule into consideration, but did not make it a priority)
- 3. Not too flexible (employers only made special scheduling considerations if absolutely necessary)
- 4. Not flexible at all (employers did take into account your school schedule at all)

(Continued on next page)



# 9. What was your reason for working? Circle all that apply

- 1. Income needs
- 2. Spending money
- 3. Career advancement/ Career experience
- 4. Leisure purposes
- 5. Other (please specify) \_

# 10. Were there other factors that may have influenced your academics, your work schedule, or both?

# 11. What is your gender?

- 1. Female
- 2. Male

# 12. What is your race/ethnicity?

- 1. Caucasian
- 2. African American
- 3. Asian/ Pacific Islander
- 4. Hispanic
- 5. Native American