

Does Part-Time Job Affect College Students' Satisfaction and Academic Performance (GPA)? The Case of a Mid-Sized Public University

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Abstract

This study examines the effect of work (number of working hours) on college students' satisfaction and GPA first by grouping the respondents into two categories: working and non-working. The findings show that the average satisfaction and GPA of those students who did not work were found to be slightly higher than those who did work. However, examining the effect of work on satisfaction and GPA by grouping college students as working and non-working may lead to unrealistic conclusions. Hence, we examined the effect of work on satisfaction and GPA by grouping students into 5 categories: those who worked for 0 hours (unemployed), 1- 10 hours, 11-15 hours, 16-20, 21-30, and 31 hours or more. An interesting finding of the current study is that work has positive effect on both satisfaction and GPA, when students did work fewer than 10 hours. Thus, part-job may not always be detrimental to students' satisfaction. However, when students work for more than 11 hours a week, students' satisfaction and GPA were found to decline for each additional category of work, although the change is very small. Both theoretical and practical implications of these findings and future research directions are discussed.

Keywords: part-time job, college students, satisfaction, public university

1. Introduction

Prior research has shown that the number of college students who work while attending college has increased substantially. For example, Carroll and Chan-Kopka (1988), based on 1980-84 data, found that one in twelve full-time college students were employed more than full time while attending college, and 25 percent worked less than 20 hours per week. By 2003-04, about 80 percent of American undergraduates worked while attending college (King, 2006). This represents an 8 percent increase compared with the previous decade when 72 percent worked (Cuccaro-Alamin & Choy, 1998). King's (2006) study also reveals that, on average, employed students spend almost 30 hours per week working while enrolled, about one-quarter of full-time students work full time, and one-third of working students describe themselves as employees who also are taking classes. The above statistics are indicative of the increase in student employment and the corresponding rise in working hours on American campuses (U.S. Dept. of Labor, 2013).

Babcock and Marks (2010) report that between 1961 and 2003, the time spent on academics by full-time college students in the United States declined. In 1961, full-time students allocated 40 hours of study per week toward classes compared with about 27 hours per week in 2003. Young (2002) indicates that 12 percent of first-year college students spent 26 or more hours weekly preparing for classes; 63 percent spent 15 or fewer hours on class preparation, and 19 percent spent only one to five hours per week preparing for classes. The report states that seniors reported studying even less than freshmen, with 20 percent studying 1 to 5 hours per week. One of the reasons for this decline in studying hours is an increase in students' engagement in paid work. Most university officials inform incoming students that 2 hours of study will be required for every hour in class to obtain satisfactory grades. However, most students report substantially fewer hours of study outside of the classroom (National Survey of Student Engagement, 2000).

There are many reasons for the increase in student employment. Some of the reasons why more students working while attending college are: earning money for covering basic essentials or related expenses (Callender, 2008), relieving the financial burden of parents (Hall, 2010), improving the network with managers, employees, and customers (Curtis, 2007), gaining work experience or practical skills (Wang et al., 2010), supporting a particular lifestyle or as a reaction to peer influence (Oi I & Morrison, 2005), and socializing and meeting people (Curtis, 2007).

The question is: *Why do we want to know the effect of part-job on students' satisfaction and academic achievement (GPA)?* It is argued that if the majority of college students are working, knowing the effect of part-time job (and number of working hours) has on student satisfaction and GPA is critical for stakeholders such as students, parents, academic advisors, counselors, faculty and administrative staff. For instance, students want to “know the extent to which work affects their college satisfaction and academic achievement (GPA)” and “how many hours to work without affecting their satisfaction and GPA”, which in turn affect “retention and graduation rate” which are important issues to advisors and administrators (Callender, 2008; Hall, 2010; Tessema, Ready, & Malone, 2012).

Previous research has shown students' satisfaction and academic achievement (GPA) to be directly related to student persistence (Bryant, 2009; Elliott & Healy, 2001; Pascarella & Terenzini, 2005). GPA is often taken as the best predictor of a student's graduation and future educational attainment (Mortenson, 2005; Pascarella & Terenzini, 1991). Although institutions have responded to student retention issues by implementing programs and services, retention rates have not improved. The typical six-year graduation rate for most public institutions in the United States ranges between 50 – 56% (Crosling, Thomas, & Heagney, 2008; Mortenson, 2005) and student employment could also have its own impact on graduation rate.

Public institutions of higher education must produce accountability reports that not only contain information regarding retention and graduation, but various other data that include measures of academic achievement and levels of student satisfaction. Another indication of the importance of measures of academic achievement and student satisfaction can be found in the accreditation self-study process, where much information regarding student satisfaction and academic achievement is gathered and reported (Elliott & Healy, 2001). So, student satisfaction is of compelling interest to colleges and universities as they seek to continually improve the learning environment for students, meet the expectations of their constituent groups and legislative bodies, and demonstrate their institutional effectiveness. Unlike service industries, which hold satisfaction as a goal in and of itself, colleges and universities typically perceive satisfaction as a means to an end (Bryant, 2006). Higher education tends to care about student satisfaction because of its potential impact on student motivation, retention, recruitment efforts, and fundraising. With the increased emphasis on accountability and assessment, combined with a student body that is comprised of more and more non-traditional students, there is increased pressure on faculty to improve student learning outcomes and their college satisfaction (Pascarella & Terenzini, 2005).

While considerable research has been conducted to assess the effects of work on part-time job (number of working hours) on many college outcomes such as GPA as measured by cumulative grade point average, the findings have been mixed as will be discussed later. Besides, previous research has given little attention to the effect of part-time job (working hours) on students' satisfaction. This study therefore intends to assess the effect of part-time job on both students' satisfaction and academic achievement (GPA) using a large sample size (N=5223).

The paper has five sections. After the introduction, section one provides a literature review of the relationship between work and college student satisfaction and GPA. This is followed by the conceptual framework and hypotheses to be tested. The study's methodology is presented in section three, and the results of the study are analyzed and discussed in section four. Finally, conclusion and possible future research directions are discussed in section five.

2. Literature Review

Student employment is not a recent phenomenon, but it has risen sharply in recent years, especially in American colleges and universities. Several studies reveal the increasing proportion of students working since the 1960s in most developed countries, including the U.S. (e.g., King, 2006; Pascarella & Terenzini, 2005; Kalenkoski & Pabilonia, 2008), Great Britain (e.g., Bradley, 2006; Callender, 2008), and Australia (e.g., Hall, 2010; James et al. 2007). King's study (2006) shows that about 80 percent of American undergraduates worked while attending college in 2003-2004, and one-third of working students describe themselves as employees who are taking classes. The above statistics are indicative of the increase in student employment and the corresponding rise in working hours on American campuses (U.S. Dept. of Labor, 2013). As underscored by Pascarella and Terenzini (2005), working while enrolled is perhaps the single most common major activity among America's diverse undergraduate population. It has become common to think of work when it comes to the issues of college life. Callender (2008: 359) concludes that “student employment is likely to remain part of the higher education landscape,” with more students increasingly reliant on their wage. Hence, student employment is not uniquely an American issue; it is global in scope.

As previously indicated, in this study, while student employment (number of working hours) is considered as independent variable; students' satisfaction and academic achievement as measured by cumulative GPA are considered as dependent variables as shown in Figure 1.

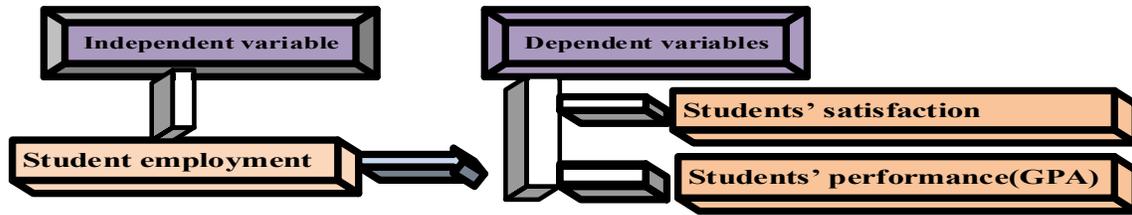


Figure 1. Student employment-student satisfaction/GPA relationship

Satisfaction is a well-researched topic in both academic and non-academic (workplace) settings. Interest in satisfaction has increased. This is mainly due to the fact that satisfaction (motivation) affects both individual and organizational performance (Cranny et al., 1992; Decenzo, Robbins, & Verhulst, 2013). In the workplace, scholars have defined satisfaction in a number of ways (e.g., Locke, 1976: 1300; Robbins & Judge, 2008: 83). The central theme across studies involves a positive feeling of one's job resulting from an evaluation of its characteristics. In the academic setting, student satisfaction refers to a short-term attitude based on an evaluation of their experience with the education service supplied and college experience in general (Elliott & Healy, 2001).

As Pike (1991) noted, interest in student satisfaction emerged during the late 1960s and early 1970s as a direct result of the unrest that was prevalent on America's college campuses at that time. Although this work had more to do with establishing levels of satisfaction rather than investigating the causes of satisfaction among undergraduates, work in this area did contribute to more recent efforts relating student satisfaction with student performance (Judge, Thoresen, Bono & Patton, 2001) and persistence (Bryant, 2009; Elliott & Healy, 2001). Numerous researchers have investigated issues related to students' satisfaction (e.g., Bryant, 2006; Elliott & Healy, 2001; Pascarella & Terenzini, 2005; Tessema, Ready, & Yu, 2012) and most of them agree that highly satisfied students are more likely to remain in, and ultimately, successfully graduate from college. Students' satisfaction surveys are important in ascertaining whether colleges and universities are fulfilling their mission. Researchers have assessed students' satisfaction for many reasons: Several researchers have measured the levels of student satisfaction in order to examine accountability reporting and self-improvement purposes across departments and colleges; others have examined student satisfaction to determine if satisfaction ratings of college programs and services are associated with the satisfaction of the overall college experience. Still others have investigated student satisfaction items related to issues such as student retention and attrition.

Work [having a job while in college] can positively affect satisfaction. This is because part-time job can help college students cover expenses for basic essentials, relieve financial burden of their parents, improve employability after graduation, offer opportunities to gain practical (transferable) skills, improve network with supervisors, colleagues and customers, and provide an additional dimension to their social lives (Callender, 2008; Pinto, Parente, & Palmer, 2001; Wang et al., 2010). It could also be argued that student employment can negatively influence students' satisfaction. This is because student employment or time spent on working may lead to reduced time spent on studying, school activities and gathering with family members and friends as underlined by the Coleman's (1961) zero-sum time-allocation model. As a result, students' satisfaction of those who work is likely to be adversely affected. Put it differently, many researchers have provided explanations for these negative effects of working while attending college can likely lead to spending less time on studying, missing classes, being late for classes, having difficulty concentrating in classes, making less use of university facilities including libraries and computer labs, and feeling exhausted (Curtis, 2007; Moreau & Leathwood, 2006). Based on the above discussions and research findings, the following three hypotheses are proposed:

H1a: Students who work will more likely have lower college satisfaction than those who do not work.

H1b: The college satisfaction among students will vary significantly depending on working hours (0, 1-10, 11-20, 21-30, and above 30).

H1c: The number of working hours will negatively impact college students' satisfaction.

The second dependent variable included in our model is academic achievement or cumulative GPA. Previous studies have tried to answer questions such as "Why do some college students do better than others? These studies indicate that academic/cognitive and non-academic factors affect college success or academic achievement (GPA) (Noble,

2001; Callender, 2008; Chee et al., 2005, Russell & Lehman, 2008). One of the non-academic factors that influence college GPA is work or student employment. Work can adversely affect college GPA. According to Coleman's (1961) zero-sum time-allocation model, time spent on working may lead to reduced time spent on studying, school activities and gathering with family members and friends. Thus, working student's GPA's may be lower than GPA's of students not working. Many researchers have provided explanations for these negative effects, such as students: spending less time on studying (Hall, 2010; Moreau & Leathwood, 2006), missing classes (Curtis, 2007), being late for classes (Metcalf, 2003), having difficulty concentrating in classes (Curtis & William, 2002), making less use of university facilities including libraries and computer labs (Lundberg, 2004), and feeling exhausted (Curtis, 2007). For instance, some studies reveal the negative effects of student employment on GPA in that unemployed students were found to have higher GPA's than working students (Humphery 2006; Hunt, Lincoln, and Walker 2004; Tuttle, McKinney, & Rago, 2005; Metcalf, 2003; Callender, 2008).

It could also be argued that work can positively affect college GPA. This is because part-time job can help students cover expenses for basic essentials, relieve financial burden of their parents, improve employability after graduation, offer opportunities for students to gain practical (transferable) skills and learn new knowledge, improve their network with supervisors, colleagues and customers, and provide an additional dimension to their social lives (Callender, 2008; Curtis, 2007; King, 2006). So, the above mentioned benefits of working while attending college can improve students' college satisfaction and happiness, which in turn boost their academic performance (GPA). For instance, some studies show positive effects of student employment on GPA in that, students who worked (part-time) were found to have (slightly) higher GPA's than those who didn't (Astin, 1982; Kalenkoski & Pablonia, 2008; Manthei & Gilmore, 2005).

From the above discussion, we can therefore realize that the findings regarding the effect of student employment on GPA are inconclusive. If student employment results are inconclusive as to their impact on GPA, the question is: How many hours can college students work without negatively impacting their GPA's? According to the threshold model, there is a threshold beyond which negative effects will occur and below which positive effectives will result (Warren, LePore, & Mare, 2000). The threshold model posits that student employment is harmful only if a student works an excessive number of hours. However, what constitutes excessive hours varies in the existing literature. For instance, while some scholars suggest that 10-15 hours a week could be the threshold beyond which the negative consequences of student employment on academic performance (GPA) are realized (Lundberg, 2004; Orszag, Orszag, & Whitmore, 2001; Manthei & Gilmore, 2005); others suggest 20 hours (Cermak & Filkins, 2004; Kalenkoski & Pablonia, 2008). Based on the above discussions and research findings, the following three hypotheses are proposed:

H1a: Students who work will more likely have lower GPA's than those who do not work.

H1b: The GPA among students will vary significantly depending on working hours (0, 1-10, 11-20, 21-30, and above 30).

H1c: The number of working hours will negatively impact GPA.

3. Research Methodology

The data used in this study were collected from the Institutional Planning, Assessment and Research (IPAR) Office at a midsized, Midwestern public university between 2001 and 2009. In collecting the data, the IPAR Office conducted an electronic survey once a year each spring from senior students with 90 or more credits hours. The dataset used in this study has 5223 respondents. Table 1 reports a selective profile of the sample including response rates. As shown, approximately 30 percent of the respondents were male and 70 percent were female. (At the university, about 40 percent of the students are male and 60 percent are female). Response rates ranged between 25 percent and 59 percent for female respondents and between 18 percent and 45 percent for male respondents during the survey period (2001-2009). Almost 20 percent of the students completed the survey in 2009, which is considerably higher than in previous years. Moreover, the student response rate was the highest in 2006 (response rate 57 percent) and the lowest in 2001 (response rate 23 percent) as shown in Table 1.

Student satisfaction is assessed with 11 items (e.g., "How satisfied are you with the required course availability for major," "How satisfied are you with the major course content," "How satisfied are you with variety of courses," "How satisfied are you with quality of instruction," "How satisfied are you with overall college experience," "How satisfied are you with preparation for career or graduate school, etc.) and, a four-point Likert scale ranging from 1, "Very dissatisfied," to 4, "Very satisfied" was used. Academic achievement is accessed with cumulative college GPA. Data regarding the students' college GPA were extracted from the student database at the university and matched to survey responses by the IPAR Office. Students working hours per week and other student demographics were also

collected from the IPAR Office. Researchers were provided with anonymous data. Our findings show that students worked an average of 15.6 hours per week, had an average of 3.13 overall college satisfaction (in a four point Likert scale), and possessed a college GPA of 3.29 (GPA is a continuous variable that is measured on a 0.0-4.0 scale) and about 70 percent of the respondents were female.

Table 1. Selected profile of sample

Variables		N	%	Response rate %	Av. weekly working hours
Gender	M	1553	30.0	18-45 [‡]	16.17
	F	3670	70.0	25-59	15.33
	Total	5223	100		15.6
Year	2001	261	5.0	23	
	2002	367	7.0	28	
	2003	482	9.2	NA	
	2004	664	12.7	55	
	2005	610	11.7	50	
	2006	635	12.2	57	
	2007	633	12.1	52	
	2008	562	10.8	47	
	2009	1009	19.3	49	
	Total	5223	100		
Colleges	Business	1078	20.6	22.5-60 ^{**}	
	Education	793	15.2	23-53	
	Liberal Arts	1498	28.7	21-52	
	Nursing/Health Sciences	1094	20.9	14-76	
	Science/Engineering	760	14.6	18-61	
	Total	5223	100		

[‡] The highest response rates for the male students was 45% in 2004 and the lowest response rate of 18.5% was reported in 2002; whereas for female students, the highest response rate was 58% recorded in 2006, but in 2001 the response rate was only 25%. ^{**}The highest and lowest response rates for College of Business were recorded in 2007 (60%) and 2001 (22.5%), for College of Education in 2006 (53%) and 23% (2002), for College of Liberal Arts in 2004 (52%) and 2001 (21%), for College of Nursing/Health Sciences in 2006 (76%) and 2001 (14%), for College of Science/Engineering in 2009 (61%) and 2002 (18%), respectively.

4. Findings

Table 2 shows the correlation between working hours (average number of hours worked) and the two dependent variables: student satisfaction and GPA. As indicated in Table 2, the correlation between working hours and the above two dependent variables ranges between $r = -.05$ (satisfaction) and $r = -.13$ (GPA), which is generally low. Thus, the findings showed that working hours was negatively correlated with students' satisfaction and GPA.

Table 2. Correlation matrix

N	Variables	1	2	3
1	Working hours			
2	Satisfaction	-.05 ^{**}		
3	GPA	-.13 ^{**}	.11 ^{**}	

Notes: ^{**}Correlation is significant at the 0.01 level (2-tailed); N=5223.

As shown in Table 3, we conducted an independent samples t-test to see the effect of work on student satisfaction and GPA. In this case, we divided the students into two groups: working students and non-working students. First, we tested for the assumption of equal variances by using Levene's F-test. The results in the study are reported under the assumption of equal variances. Table 3 (t-test results) indicates that the average satisfaction of those students who do not work ($M=3.14$, $SD=.44$) was found to be slightly higher than those who do work ($M=3.13$, $SD=.47$), although statistically is not significant. That is, the difference in satisfaction between the two groups was 0.01. On the other hand, the average GPA of those students who do not work was found to be statistically higher than those who do work ($t_{4846}=3.75$, $p<0.001$). That is, the difference in GPA between the two groups was 0.06. It could be argued that although the difference is significant, practically it is minimal.

Table 3. The mean satisfaction and GPA of working and non-working students and t-test result

Status	%	Student satisfaction					GPA				
		Mean	SD	t-test			Mean	SD	t-test		
				t	df	Sig.			t	df	Sig.
Working	79.1	3.13	.47	1.07	4,869	.284	3.23	.45	3.75	4,846	.00
Non-working	20.9	3.14	.44				3.34	.46			0

We also assessed the effect of average hours worked on student satisfaction and GPA by grouping college students into 5 categories: those who worked for 0 hours (unemployed), 1- 10 hours, 11-15 hours, 16-20, 21-30, and 31 hours or more. ANOVA tests were conducted to see if these groups have significantly different college satisfaction and GPAs. ANOVA tests results reveal that students in different workgroups have statistically significant differences in both satisfaction ($F(4, 4866) = 3.02$, $p < 0.001$) and GPA ($F(4, 4846) = 27.17$, $p < 0.001$). For instance, students working 1-10 hours were found to have the highest satisfaction averaging 3.16, whereas students working 31 hours or more exhibited the lowest satisfaction (Table 4). As students worked more hours, average satisfaction declined. However, non-working students had a mean GPA of 3.14, slightly lower than students working 1-10 hours. Thus, Hypothesis H1a is rejected. Likewise, students working 1-10 hours were found to have the highest GPA's averaging 3.39, whereas students working 31 hours or more exhibited the lowest GPA's (3.24). As students worked more hours, average GPA's declined. However, non-working students had a mean GPA of 3.34, slightly lower than students working 1-10 hours. Hence, Hypothesis H2a is rejected.

Table 4. The mean satisfaction and GPA of students with varying working hours and ANOVA tests

Status	%	Student satisfaction					GPA				
		Mean	SD	ANOVA test			Mean	SD	ANOVA test		
				df	F	Sig.			df	F	Sig.
0	20.9	3.14	.44	4,866	3.02	.017	3.34	.45	4,4846	27.2	.000
1-10	19.87	3.16	.44				3.39	.42			
11-20	31.12	3.12	.48				3.28	.45			
21-30	17.13	3.11	.47				3.25	.46			
31 & above	10.98	3.09	.51				3.24	.50			

In addition to ANOVA and t-tests, we also conducted the regression analysis (Table 5). We ran the regression using student satisfaction and GPA as dependent variables and the average number of hours worked as independent variable. The results of regression analysis show that working hours had a negative impact on students' satisfaction ($\beta = -.05$). Working hours explains .2% of variation in the students' satisfaction ($R^2 = .002$). Similarly, Table 5 also indicates that working hours had a statistically significant negative impact on students' GPA ($\beta = -.13$). It must be noted that although the contribution of part-time job to explaining the variance in cumulative GPA is statistically significant, this is largely attributable to the relatively large sample size. As sample size increases, the likelihood that a statistically significant R Square change would be found also increases, even when the effect size of that change is negligible. Working hours explains 1.7% of variation in the student GPA ($R^2 = .017$), which suggests that 98.3 percent of GPA is influenced by other factors. Regression analysis results further indicate that as hours worked increases, students' satisfaction and GPA fall. Thus, hypothesis 1c and 2c are supported.

Table 5. Results of regression analyses on “average hours worked”^a

Variables	<i>Satisfaction</i>	<i>GPA</i>
Standardized coefficient (β)	-.05**	-.13***
R	.05	.13
R ²	.002	.017

^a Standardized Regression Coefficients are reported; *** $p < .001$; N=5223

5. Discussions

This study intends to determine the effect of work (number of working hours) on both students' satisfaction and GPA in different ways. First, we grouped the respondents into two categories: working and non-working and then grouped them into 5 categories: those who worked for 0 hours (unemployed), 1- 10 hours, 11-15 hours, 16-20, 21-30, and 31 hours or more. To that end, we conducted a number of analyses as presented in Tables 2-5.

T-tests results show that the average satisfaction of those students who did not work was found to be slightly higher than those who did work (Table 3). However, examining the effect of work on satisfaction by grouping college students as working and non-working may lead to unrealistic conclusions. Hence, we examined the effect of work on satisfaction by grouping students into 5 categories: those who worked for 0 hours (unemployed), 1- 10 hours, 11-15 hours, 16-20, 21-30, and 31 hours or more. According to our results, work has positive effect on students' satisfaction, when students did work fewer than 10 hours (Table 4). Thus, part-job may not always be detrimental to students' satisfaction. The findings of the current study reveal that work has positive effect satisfaction, when students do work fewer than 10 hours. However, when students work for more than 11 hours a week, students satisfaction was found to decline for each additional category of work, although the change is very small (Tables 4 & 5).

We also follow the same procedure in examining the effect of work on college GPA. T-tests results show that the average GPA of those students who did not work was found to be slightly higher than those who did work (Table 3). According to our results, student employment impacts GPA positively, when students do work fewer than 10 hours. Thus, student employment may not always be detrimental to academic performance, as measured by GPA. However, when students work for more than 11 hours a week, GPAs were found to decline for each additional category of work, although the change is very small. This finding is consistent with most of the prior studies (Humphery, 2006; Hunt et al., 2004; Tuttle et al., 2005; Curtis, 2007; Metcalf, 2003; Curtis, 2007). That is, the more hours students work, the greater the likelihood of negative effects on student satisfaction and GPA. That is, as working hours per week increases (beyond 11 hours a week), students' satisfaction and GPA decreases. Thus, the finding in Table 4 partly contradicts the conclusions drawn from Coleman's zero-sum time-allocation theory that assumes that time spent on working may lead to reduced time spent on studying, which subsequently reduces GPA.

As clearly revealed in Table 4, about 79 percent of the respondents were working while studying. The high percentage of students working also reflects the national trend of 80 percent of American undergraduates working while attending college (King, 2006). Thus, an important implication of the current study is that if the overwhelming majority of college students are working, knowing the effect of work (the number of working hours) on students' satisfaction and GPA is critical for different stakeholders such as counselors, academic advisors, administrators, students, and parents. The results of our empirical study indicate that work had a negative impact on students' satisfaction and academic performance (GPA), although practically was very minimal.

It must be noted that higher students satisfaction is crucial for both college students and higher institutions in that satisfied students are more likely to be committed and continue their studies (as measured by a higher retention rate) than unsatisfied students, who are likely to be less willing to regularly attend classes, and are more likely to quit their studies (Jamelske, 2009). Satisfaction is a relevant measure because many studies have demonstrated that other factors being equal, satisfied individuals are likely to be willing to exert more effort than unsatisfied individuals (Bryant, 2006; Özgüngör, 2010). Thus, satisfied students are likely to exert more effort in their educational studies by taking actions such as regularly attending their classes and becoming more involved in their coursework and institution. As previously indicated, student satisfaction is also important in order to examine accountability reporting and self-improvement purposes across departments and colleges (Elliott & Healy, 2001; Bryant, 2006). This suggests that student satisfaction is critical to both students and higher educational institutions.

Given the advantages of working while attending college (e.g., covering expenses for basic essentials, relieving financial burden of their parents, improving employability after graduation, gaining practical/transferable skills, and

improving network with supervisors, colleagues and customers, etc.) on the one hand, and the negative, but very small effect of work on students' satisfaction and GPA (Table 5) on the other hand, one can argue that college students should be encouraged to work for some hours. As shown in Table 4, students' satisfaction and GPA were actually higher for students working 1-10 hours than the GPA's of the other 4 categories (non-working students, and those who work 11-20, 21-30, and 31 and above). However, it could be further argued that college students could work more hours each week given a small satisfaction and GPA difference between those who worked 1-10 hours a week and those who worked more hours. Although students could work more hours, there is a need to balance work and study, so that work does not impinge on a student's educational experiences (Tuttle et al., 2005).

It should be pointed out although that the above suggestions are general, counselors, academic advisors, and students need to take into account the unique situation of the student (e.g., degree of discipline, cumulative GPA, time management, health issues, and maturity level) when deciding how many hours to work. For example, if working interferes with completing schoolwork, participating in extracurricular activities, spending time with family and friends or getting enough rest or a student does not have a good GPA (e.g., 2.0), is not in good health, is not well disciplined, or is unable to accommodate both work and study), then working may not be in his/her best interest (Pascarella & Terenzini, 2005). In other words, college students have to answer the following questions before they decide whether to work or not, or how many hours to work: Am I flexible and willing to make sacrifices? Am I open to cutting down on some of the things I like to do to fulfill my school and work commitments? How does my family feel about me working? Do I make effective use of my time? Can I fit in work, maintain my grades and still get enough sleep? Will the job be flexible around study and exam commitments? It must be noted that we are not suggesting that college students should work for many hours (e.g., more than 30 hours per weeks). This is because, as discussed earlier, working long hours can limit opportunities to build friendships and explore interests that enhance intellectual and emotional development, which in turn can lead to lowering their satisfaction and GPA as well as dropping out entirely.

Another implication of this study is that if the number of college students who work while studying has increased, higher institution should support this process by providing a well staffed and funded career services office and by establishing strong partnerships with the surrounding business community. Career services should play an important role in assisting students with part-time jobs through training in resume writing, interviewing skills, and providing access to job vacancies. It should be noted that the satisfaction and success of students (before and after graduation) is also a measure of the institution's effectiveness (Tessema et al. 2012).

This study extends previous research on work and students satisfaction/GPA relationships by conducting several different analyses (Tables 2-5). While this study is an important step in understanding the extent to which college student employment affects satisfaction and GPA, it also leaves some questions open for future research. First, this study was conducted in only one U.S. mid-sized, state university using large sample size (5223). That is, this study is based on data derived from a single university, which may not reflect the experiences of a nationally representative sample of students. Hence, in order to generalize and validate the findings of this study, we suggest that a similar study be conducted in other universities both in the U.S. and in other parts of the world. Second, although the sample size is large and conducted over a nine year period, only senior students were surveyed. The results provide guidance for senior college students relative to work experiences, but may not be a realistic guide for students earlier in their college careers. That is, it may not be a good idea for freshman to work at all. Further studies need to examine the robustness of the findings and generalizations with different college population groups.

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