# BALANCING WORK AND ACADEMICS IN COLLEGE: WHY DO STUDENTS WORKING 10 TO 19 HOURS PER WEEK EXCEL?

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#### **ABSTRACT**

Given that 74% of undergraduates work an average of 25.5 hours per week while going to school, we know surprisingly little about how off-campus employment affects undergraduates and to what extent its impact varies by the number of hours worked. Our survey of undergraduates at a small liberal arts college found that the academic performance of students who worked off-campus was comparable to nonworkers. Notably, the academic performance (greater hours studied and higher grades) of students who worked 10-19 hours per week was superior to all other students, working and nonworking. We suggest that the increase in performance is due to an optimal work-college balance that establishes structure and discipline not achieved by working too few or too many hours. Yet students must balance the benefits of organization and efficiency with increased stress and reduced time for socializing (noted among students working 10+ hours per week off-campus).

Given that 74% of undergraduates work an average of 25.5 hours per week while going to school (NPSAS, 2000), we know surprisingly little about how off-campus employment affects undergraduates and to what extent its impact varies by the number of hours worked. As anxiety rises about escalating tuition costs and loan amounts (Boehner & McKeon, 2003; College Board, 2003), there are mounting concerns about whether fiscal pressures drive more students to work, which could adversely affect their performance in college. Intuitively, since time and energy are finite resources, one might expect off-campus jobs to detract from academic achievement and persistence to graduation (outcomes which are highly

correlated [Pascarella & Terenzini, 1991]). The literature in this area indicates that this is indeed the case, but only when students' work schedules exceed a threshold ranging from 15 to 20 hours per week. In fact, students who work fewer than 15-20 hours often have *higher* grade point averages (GPA) and graduation rates than their nonworking counterparts.

According to King's study of 12,000 undergraduates, students who work more than 15 hours per week are less likely to graduate in four years. Interestingly, however, she also found that those who work fewer than 15 hours are actually *more* likely to graduate in four years than those who do not work at all (King, 2002). Similarly, Ehrenberg and Sherman (1987) discovered that working off-campus for an average of 23 hours per week was associated with lower rates of graduating on-time, but had no significant impact on GPA. Hood, Craig, and Ferguson's data (1992) revealed that students working up to 5 hours per week earned grades close to the average GPA (which was 2.9), and that those who worked 5-10 hours per week achieved the highest average GPA (3.2). Students working 10-20 hours also earned average grades, while those working 20+ hours had slightly depressed GPAs (2.8). Gleason (1993) found that students working up to 20 hours/week, especially those who work 1-10 hours/week, earned higher GPAs than nonworkers.

There has been greater attention to the impact of jobs among high school students for whom working 20+ hours a week is associated with lower grades (Ruscoe, Morgan, & Peebles, 1996; Steinberg, Fegley, & Dornbusch, 1993). Generalizing from pre-college data, however, requires caution; high school students commonly are in class most of the day while college students spend less time in class and frequently have blocks of unstructured time (allowing some to arrange a 2- or 3-day-a-week class schedule).

Because there appear to be advantages to working some, but not too many, hours, we feel further clarification of at what point work either helps or hinders a student's academic performance is needed. We designed this study to help determine at what point the number of hours worked helps or hinders students (assuming an element of causality and that selection bias alone does not drive any relationship we uncovered between hours on the job and academic performance). We also intended to learn more about what factors might contribute to the successful balancing of work and college, e.g., are higher-performing employed students better organized or more studious (or both)? In addition, we wished to gain a sense of the potential costs of mixing employment and college, such as a diminished attention span in class, perceived job-related stress, and reduced time spent socializing with peers.

#### **Methods**

Four student volunteers (two males and two female) collected half the data from student dormitories and the other half from physics and sociology classes at a

mostly residential private, liberal arts campus of 1,600 undergraduate students in the mid-Atlantic region of the United States in May 2003. Students typically take 4 four-credit classes and must maintain at least a 2.0 in order to graduate (hence the lack of students whose GPA falls below that).

Surveyors approached students regardless of whether or not they worked, since demographic data and three survey questions were applicable to all students. We did not define students who worked only during summers and/or vacations or who had worked off-campus for less than one month as working students. Two hundred fifty-six students (out of 300 students approached) completed the one-paged anonymous survey (giving us a response rate of 85%). Data were entered and analyzed using SPSS.

#### **RESULTS**

## **Demographics**

The study population attends a college where most (96%) of the undergraduate students are of traditional age (17-23 years old), enrolled full-time (98%); 80% are white and 57% are women. The cost of tuition, room and board, and fees was about \$27,000 (and \$21,700 for nonresidential students) in 2003. To help pay for school-related expenses, 80% of students obtain grants, scholarships, loans, or work-study employment, while about 60% of students receive need-based awards. Demographic characteristics of the sample can be found in Table 1. The survey did not contain items regarding race, but the student-researchers collecting the data noted the sample's racial composition mirrored the college's. Most students worked (n = 164/256: 64%), equivalent to 62% of males and 68% of females. Students were more likely to work as they progressed through college: 56% of freshmen, 58% of sophomores, 66% of juniors, and 76% of seniors. We found no difference in rates of working by major.

## **GPA Data**

We collapsed GPAs into three approximately equal groups such that 31% had GPAs of 3.5 or above, 36% achieved GPAs of 3.0-3.4, and 33% earned GPAs of 2.0-2.9. Students self-reported GPA data. The lack of students with GPS lower than 2.0 results largely from the college's policy of requiring students to leave when they fall below this level (required for graduation), though they can re-apply for admission after proving themselves at a community college. Overall, students who work have similar (if not slightly higher) GPAs than nonworkers (see Table 2).

Consistent with nationwide trends (Sommers, 2000), the high GPA group was disproportionately female: 43% of females and 15% of males, undoubtedly related to both the greater number of hours females study and the larger proportion who put maximal effort into their classes: 44% of females and 18% of males (see Table 3).

Table 1. Demographics

	Table I	. Demographics		
	Male	Female		
Sex:	40% 38%	60% total 62% workers	only	
	Freshmen	Sophomores	Juniors	Seniors
Year in school:	20% 18%	22% 20%	33% 34%	24% total 29% workers
Areas of study:	Social sciences	Business	Humanities	Sciences
	46% 47%	10% 8%	18% 20%	26% total 25% workers
No. of off-campus jobs worked in last year:	1: 67%	2: 30%	3: 3%	
Hours worked at a job/week	Up to 10 hours 10-14 hours 15-19 hours 20-24 hours 25+ hours	20% 17% 18% 28% 28%		
Job involved evening hours:	80%			
Of students working nights, % who finish by:	6-7 p.m: 8-9 p.m.: 10 p.m12 a.m.: After midnight:	11% 25% 56% 8%		

When we examined GPA based on whether students worked less or more than fifteen hours (the work-hours threshold that affected graduation rates according to research by King [2002]), there appeared to be no difference between the groups. Yet when we looked at students working fewer than 10 hours per week as a separate group, the superior academic performance of those working 10-19 hours became apparent, particularly in the proportion whose GPA is between 2.0-2.9. Only 19% of this group was in this lowest GPA category versus 42% of those working fewer than 10 hours and 39% of those working 20+ hours. Differences in the distribution of GPAs by hours worked did not vary significantly by year in school. Dividing work-hours into three categories reveals that the 10- to 19-hours-per-week group excels, but also shows that working relatively few

Table 2. GPA

# Student-workers divided into two groups: Fewer than 15 hours or 15+ hours

	Total sample	Non- workers	Light hrs (<15 hrs)	Heavy hrs (15+ hrs)
2.0-2.9	36%	40%	32%	33%
3.0-3.4	33%	28%	38%	36%
3.5+	31%	32%	30%	31%
	100%	100%	100%	100%

Student-workers divided into three groups: <10 hours, 10-19 hours, 20+ hours

GPA	Total sample	Non- workers	Works	Works <10 hrs	Works 10-19 hrs	Works 20+ hrs
2.0-2.9	36%	40%	34%	42%	19%	39%
3.0-3.4	33%	28%	35%	29%	44%	35%
3.5+	31%	32%	31%	29%	37%	26%
	100%	100%	100%	100%	100%	100%

Table 3. Gender Differences

	Males	Females
Hours studied		
1-10	51%	32%
16-20	40%	49%
21+	9%	19%
Effort toward studies		
Minimal	47%	27%
Medium	35%	29%
Maximal	18%	44%
GPA		
2.0-2.9	54%	23%
3.0-3.4	31%	34%
3.5+	15%	43%
Hours worked		
Fewer than 10	16%	24%
10-19 hours	33%	33%
20+ hours	51%	43%

hours (<10/week) fails to provide a GPA benefit. As both GPA tables indicate, working many hours (20+) does not seem to lower GPA. In other words, working limited or many hours does not appear to hurt GPA, while working 10-19 hours per week is associated with a benefit (see Table 2). Compared to those working 10-19 hours per week, students working 20+ hours are twice as likely to have low GPAs (in the 2.0-2.9 category), comparable to both those working the fewest hours and nonworkers.

The group that excelled academically (working 10-19 hours/week) included 33% of both males and females and was not characterized by a high concentration of a particular type of major or class: 30% of social science majors were in this group, 42% of business/computer majors, 30% of humanities majors, and 44% of science majors. By class, 28% of freshmen and sophomores and 38% of juniors and seniors fell in this group.

The 10-19 hours/week work group were also the most studious: approximately 75% of them studied 11+ hours, compared to 53% of the <10 hours work group, and 62% of those working 20+ hours all of which contrasts with 49% of non-workers who studied more than 11 hours per week. Notably, those with the most onerous work schedule (10+ hours per week) studied more hours than either those with the lightest work schedule or nonworkers (see Table 4).

Students with the highest GPAs were more apt to have jobs that related to their post-graduate plans, their college studies, and to be employed for the purpose of gaining job experience. Nevertheless, relatively few students in any category had jobs linked to their studies or future plans (see Table 5).

### **Effort and Fatigue**

Student-workers on the job fewer than 10 hours/week were most likely to report that they make minimal effort to apply themselves in their classes. This group, however, also had a high proportion that claimed to be making high effort. Those

Table 4. Relationship of Hours Worked at Job per Week to Hours Spent Studying

	1-10 hours studying	11+ hours studying
Total sample	41%	59%
Non-workers	51%	49%
Hours worked per week		
Up to 10	47%	53%
10-14	24%	76%
15-19	26%	74%
20-24	38%	62%
25+	38%	62%

working 20+ hours per week were least likely to identify themselves as applying themselves fully. Workers were more likely than nonworkers to feel tired midday (54% versus 37%), although the number of hours worked was independent of reported fatigue levels (see Table 6). Only 20% of the sample labeled themselves as 1-4 out of 8 levels of effort applied to their classes. Therefore, the variable was trisected by percent (low effort = levels 1-5; medium effort = level 6; high effort = levels 7-8).

## **Estimated Impact of Work**

Most student-workers believed that employment forced them to become more efficient (74%) while also increasing their level of stress (64%), which was particularly frequent among those who worked more than 10 hours/week (see Table 7). Interestingly, despite the improved performance of those working 10-19 hours per week, the majority believed that working resulted in their spending

Table 5. Proportion Whose Job Relates to Post-Graduate Plans, College Studies, Who Selected a Job to Gain Experience and Who Enjoy Job by GPA

GPA	Job relates to post-graduate plans	Job relates to college studies	Works for job experience	Enjoys job
2.0-2.9	31%	19%	15%	56%
3.0-3.4	23%	18%	19%	60%
3.5+	40%	31%	31%	65%

Table 6. Effort Applied in Class

	Total	Non-	Hours worked off-campus per week			
	sample	workers	<10 hrs	10-19 hrs	20+ hrs	
Low effort	36%	32%	41%	30%	37%	
Medium effort	32%	32%	22%	36%	36%	
High effort	32%	36%	38%	34%	27%	
Generally feels tired at mid-day (energy levels 1-4 out of an 8-level scale)	47%	37%	53%	55%	52%	

Table 7. Estimated Impact of Work

	Total	Extent of work			
% who agree:	workers	< 10 hrs	10-19 hrs	20+ hrs	
Work increased my organization/ efficiency	74%	58%	81%	74%	
Work increased my stress level	64%	19%	70%	80%	
My job is enjoyable	60%	53%	59%	63%	
Work reduced time I spent on assignments	57%	16%	57%	76%	
Work made me study fewer hours for tests	53%	9%	57%	73%	
My job involved skilled work	48%	25%	47%	58%	
Work reduced social activities	46%	16%	43%	64%	
with other students*  *If yes, those for whom it was a positive influence	18%	18%	17%	18%	
Work impaired my attention span in class	33%	3%	30%	51%	

fewer hours on assignments and studying for tests (see Table 7). In contrast, most of those working fewer than 10 hours per week believed that working did not impair their study or social time.

## **Why Students Work**

The most commonly indicated reason for working was to earn spending money (80%), followed by the need to pay basic living expenses (65%) and to pay tuition (29%). The latter two reasons for working were much more commonly cited by those working 20+ hours/week (see Table 7). Fewer students were working to please their parent/s (13%) and even fewer (8%) viewed working as a means to fill extra time in their schedules (see Table 8).

## **DISCUSSION**

One might predict that students who do not work or those who work fewer than 10 hours per week off-campus would devote more time to their studies and

Table 8. Why Students Work

	Hours worked			
	Total	< 10	10-19	20+
For spending money	80%	84%	83%	82%
For basic living expenses	65%	36%	64%	82%
To pay tuition	29%	23%	23%	38%
For job experience	21%	13%	23%	25%
Because parent/s wanted them to	13%	7%	17%	14%
To fill extra time	8%	3%	7%	11%
Job was related to target job after graduation	31%	19%	38%	30%
Job related to their studies in college	23%	28%	27%	17%

therefore earn better grades than those whose greater job commitments presumably impinge on time they could dedicate to academics. Our data mirror earlier findings that refute this seemingly logical expectation. Students who work perform at least as well academically as their non-working counterparts, bringing to mind the old maxim, "If you want something done, give it to a busy person."

Unlike previous research, however, our data suggest that there may be a minimal number of hours worked to trigger the advantages of off-campus employment. While those working fewer than 10 hours per week are generally similar to nonworkers, it is those working 10-19 hours who are most likely to earn the best grades (see Table 2), a result perhaps due, in part, to these students allocating more time for studying (as shown in Table 4).

### **Effects of Working**

## Organization and Efficiency

We found that students working 10+ hours per week appear compelled to manage their time well, perhaps involving a routine in which they set aside time for both their job and their studies. Although over half of students (58%) who worked up to 10 hours per week believed that working had increased their organization, a much greater proportion of those who worked more hours believed they had become more efficient. Interestingly, it was those working 10-19 hours per week who were most likely to agree (albeit by a small margin) that they had become more organized (81% versus 74% of those working 20+ hours per week),

which may help explain their higher GPA. While those working 20+ hours per week also had become more organized, more individuals in this group claimed their work made them spend less time on assignments (76% versus 57% of the 10–19 hours per week group), study fewer hours for tests (74% versus 57% of the 10-19 hours per week group), and forced them to curtail socializing with fellow students (64% versus 43% of those working 10-19 hours per week) which may have depressed their academic performance (see Table 7).

Although most of these students believe that their employment commitment reduces time devoted to completing assignments, they may in fact be compensating for those concerns by reserving specific time to study and/or by engaging in more concentrated study time. Their time constraints may motivate them like deadlines, resulting in increased efficiency. Without such pressures, nonworkers and light workers may, for example, procrastinate.

#### **Stress**

Not only GPA, but also stress, correlates with working; a greater proportion of students working 10+ hours per week experienced stress (70-80% versus 19% of those working fewer hours: see Table 7). Yet these results are not surprising given that in the stress-performance literature, the "inverted-U" pattern between stress and job performance reflects that low to moderate stress may stimulate the body to improve performance (Ivancevich & Matteson, 1981).

### Socializing

Because working at least 10 hours per week decreased time spent socializing with other students (applicable to 43% of those employed 10-19 hours per week and 64% of those employed 20+ hours per week), we must consider the possibility that working at this level impaired interpersonal bonds, which may make students feel less connected to the college, a factor believed to be connected to graduation rates (Pascarella & Terenzini, 1991). The finding that on-campus work may enhance social integration may explain why such work is associated with higher graduation rates (Pascarella & Terenzini, 1991). On the other hand, for students who work a significant number of hours per week (10+), participation in social activities may also serve as a luxury, which they permit themselves after working and studying. For students without time constraints, however, adhering to a schedule or avoiding procrastination offers no immediate reward; they do not need to be efficient to have time to socialize.

### **Exposure to the "Real World"**

Factors related to their connection to life outside the realm of college also likely played a role in explaining the superior performance of those who work, particularly those employed 10-19 hours per week. First, students who work gain

exposure to the "real world," which may make them more mature and responsible. Seeing the value of their studies may also be important since twice as many students working 10-19 hours per week, as compared to those working fewer than 10 hours per week, held jobs related to their post-graduate plans (38% versus 19%), though there was no significant difference in whether they enjoyed the work or whether the work related to their college studies (see Table 8).

They may also see the drudgery involved in many jobs, especially since fewer than half of students' jobs (48%) involved skilled work. Although those working under 10 hours per week were even less likely than the average worker to have skilled work (25% versus 48%), the relatively limited hours they were employed also may have prevented them from gaining a true sense of what it would be like to have such a job full-time. Whether students working 10+ hours per week do in fact realize the value of their studies in improving their chances to secure more meaningful work should be studied in future research (see Table 8).

#### Motivation to Work

The 10- to 19-hour-per-week workers also were much more likely than those working fewer hours to be employed in order to pay for living expenses and to accommodate parental desires. Factors such as more pressing financial burdens, plus a greater likelihood that they were working partly to gain job experience may also have contributed to the superiority of this group's academic performance (see Table 8). In particular, with nearly two-thirds of this group working to finance living expenses necessary to attend college, they may have a greater appreciation for what they must pay for themselves. Although nearly all workers are motivated by their desire for spending money (82-84%), this factor alone—rather than a compelling need—explains why most of those working <10 hours per week sought employment.

### CONCLUSION

In sum, working part-time, between 10-19 hours per week is not only compatible with being a full-time student, it is also associated with greater time spent studying and a higher GPA, possibly due to increased discipline and appreciation for the value of an education. While students who work fewer or more than 10-19 hours per week do not appear to gain the same benefits, their GPAs do not appear to be depressed, either. Students working 10+ hours per week, however, must be aware of costs manifested in increased stress and reduced socializing, as well as other possible influential factors not assessed in this study, such as scheduling difficulties and choice of classes (as discussed by Orszag, Orszag, & Whitmore, 2001).

### Limitations

In this study we only examined associations between hours worked, GPA, and other variables and then hypothesized as to why those working 10-19 hours excel. However, we feel interviewing students about their study habits would also lead to speculative answers from respondents. Furthermore, we cannot rule out the possibility that those working 10-19 hours have a higher GPA because students who chose to work this number of hours are already better students rather than because they have benefited from the need to balance work and school.

Our results are based on a small sample of traditionally-aged students from a single, private four-year liberal arts college and thus may not be generalizable to all academic environments. Nevertheless, our findings of benefits from limited employment, as well as the gender gap in academic performance, are consistent with previous research and therefore support the validity and generalizability of our results. In addition, although non-random sampling could have resulted in a sample population that is not representative of even the college where we conducted our research, the distribution of our sample by gender and majors reflects the college as a whole. We also benefitted from the high response rate (85%), likely due to the close-knit nature of the campus community and our decision to devise a questionnaire limited to a single page.

We must also consider the possibility that students who do not work or work few hours may have other unknown commitments as time-consuming as jobs. Other obligations, though, probably have less impact given that working off-campus generally does not allow much flexibility in terms of attendance or involvement. Future studies, however, should take into account other ways in which students spend their time such as television, video games, sports, and clubs. In addition, it would have been helpful for us to gather data assessing the impact of financial aid and scholarships (see e.g., Braunstein, McGrath, & Pescatrice, 2000-2001).

## Suggestions for Future Research

Future studies should also include data about on-campus jobs. Our omission of these data could have confused students who overlooked our definition of work as off-campus only. Although we targeted off-campus work because it is more like the post-graduate world in its flexibility, on-campus jobs often include responsibilities with a substantial academic component (versus off-campus jobs that rarely assist students in their studies), future research could attempt to distinguish between academic and non-academic on-campus jobs and employment that does and does not permit students to study on the job.

#### **SUMMARY OF FINDINGS**

Students occupied with off-campus employment may be spurred to develop good study habits, discipline and an appreciation for their education. Although most students working 10+ hours per week believe that off-campus work causes them to spend less time on their assignments, studying, and socializing and results

in an increased stress level, those working 20+ hours per week seem to develop compensatory skills that allow them to perform roughly equivalent academically to both those working fewer than 10 hours per week, as well as non-working students. Furthermore, those working 10-19 hours per week actually have higher grades than all other students, working and nonworking. This finding suggests that perhaps this level of employment helps students focus and prioritize their responsibilities, without triggering the detrimental forces that can result from too many hours committed to employment. More research that replicates and explains this phenomenon is warranted.

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