

CONDITIONAL CASH TRANSFERS AND COLLEGE PERSISTENCE:  
EXPERIMENTAL EFFECTS OF A RANDOMIZED  
NEED-BASED GRANT PROGRAM

APPENDICES

### A. Description of Wisconsin Public Higher Education

The University of Wisconsin System (UW) and the Wisconsin Technical College System (WTCS) form Wisconsin public higher education. The UW includes 13 universities and 13 two-year branch campuses, and the WTCS has 16 technical college districts (many with multiple campuses). More than 80 percent of the state's undergraduate enrollment is in the public sector (nearly 45% attend public four-year colleges, while another 39% attend public two-year and technical colleges). In 2008, Wisconsin's total undergraduate enrollment in public four-year institutions was approximately 136,000 students.

## B. FFWS Award Letter



October 22, 2008

Dear Student,

Congratulations! We are delighted that you were selected to receive a grant from the Fund for Wisconsin Scholars, Inc. (FFWS) for the 2008-2009 academic year. The FFWS was established by John P. and Tashia F. Morgridge to provide grants to graduates of Wisconsin public high schools to attend colleges and universities of the University of Wisconsin and Wisconsin Technical College Systems. You can view more information about the FFWS at [www.ffws.org](http://www.ffws.org). The recipients of the FFWS grants were chosen from a group of eligible students through a random selection process completed at the office of the Wisconsin Higher Educational Aids Board (HEAB). The amount of your grant is \$3500/year if you are a four year student and \$1800/year if you are a two year student; you will receive half of the grant in the fall semester and half in the spring semester. The grant is available to you for up to ten semesters, if you continue to meet the eligibility criteria. We hope to maintain active communication with you throughout your college experience and beyond. Our dream for you is that you will successfully complete a degree and leave college with less debt than you might have otherwise had and with the skills, knowledge and willingness to contribute to our society.

There are a few steps that you need to take to accept and receive this grant.

1. Complete and sign the attached Student Response Form in which you:
  - verify your eligibility
  - acknowledge and accept the grant and
  - consent to the release of your high school and college academic and financial information to the FFWS from:
    - i. your current school,
    - ii. the Department of Public Instruction (DPI) and
    - iii. the HEAB.
2. Return the completed Form in the envelope provided.

Once I receive your completed and signed document, I will send you instructions to enroll in our *secure*, recipient information system on the web. This will be the means by which I communicate with you most often and by which you can communicate with other recipients. It will also be the system where your academic and financial data will be stored. Once you are enrolled, your school will be notified of your receipt of the FFWS grant and the money will be sent to your school for distribution to you. We wish you the best in your college endeavors and look forward to meeting you.

### C. Financial Aid Packaging

The WSG was subject to all federal and state laws regarding packaging of privately funded aid. All students in the sample were enrolled in college at the time they were awarded the new grant, and so their aid packages had to be recalculated. During that process, federal law dictates that if the new monies result in an over-award (e.g., the amount of aid exceeds calculated costs of attendance), federal and state need-based aid (with the exception of the Pell, which is an entitlement) must be reduced.<sup>1</sup> The Fund for Wisconsin Scholars stipulates via legal contracts that universities cannot supplant institutional aid. Aid in students' initial packages was usually crowded out in the following sequence: (1) subsidized federal loans, (2) unsubsidized federal loans, (3) federal work-study, (4) federal grants other than Pell, and (5) state grants. This is consistent with prior experiments where repackaging of financial aid occurred when a new private scholarship was added (for example see, Cha and Patel 2010).<sup>2</sup> However, it is relatively uncommon for researchers to observe aid packaging pre and post-treatment so that effects of packaging can be examined—to our knowledge, this was not possible in many of the quasi-experimental studies to date, which instead had to assume that students received the full amount of grant aid allocated in those programs.

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<sup>1</sup> Aid eligibility requires completing and submitting the FAFSA—a lengthy application that includes questions about student and family income and assets, family size, and number of children in college. A college financial aid officer enters this information into a federally prescribed formula to calculate the student's expected family contribution (EFC). The difference between the EFC and the cost of attendance (COA) at that college represents the student's "demonstrated financial need." The officer follows federal guidelines in crafting an aid package to meet that need, using a combination of federal (Pell, other grants, loans, and work-study), state, institutional, and private resources. Thus, the composition of students' aid packages varies according to several factors, including their EFC, how much aid is available when the award is made, whether the officer made an offer of loans upfront, and whether the students accepted or declined any part of the offered package.

<sup>2</sup> Since the WSG is awarded to only a small fraction of students at a given college, there is little potential for it to affect state or institutional decisions about tuition. This makes it different from the Pell Grant or state grants, which some analysts suggest may be diminished in their redistributive effects because it is sometimes met with corresponding increases in tuition (Long 2002, 2003, 2004; Singell and Stone 2003).

To assess the change in students' aid packages resulting from the packaging of the WSG we collected screenshots of students' financial aid packages directly from financial aid officers at each university. The first screenshot was taken just prior to when the WSG was awarded, and the second screenshot was taken just after. We used data from 10 of the 13 universities; two did not submit screenshots and one had data of insufficient quality. We also have some missing data because obtaining this data required consent.<sup>3</sup>

We measured students' aid packages with records from the UW System Administration, from 2008-2009 through 2010-2011. Aid is reported at the end of each year and records all types and amounts obtained during the year. Again, we observe these data for Subsample 2, described in more detail in Section VII. In Appendix Table A.2, we report changes in students' aid packages between the 2008-2009 and 2009-2010 years (Panel 1), and changes in packages between 2009-2010 and 2010-2011 (Panel 2). In Panel 3 we summarize the aid packages over three years. Appendix Tables A.3 and A.4 provide the actual aid packages for each year.

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<sup>3</sup> This limitation is due to administrative interpretation of FERPA. We observe this information for just under 50% of study participants and there is a slight differential in observations by treatment status favoring the control group. We therefore treat these results with caution and perform additional sensitivity checks.

#### D. National Student Clearinghouse Data

Establishing whether or not a student is enrolled in college requires submitting a file of students' names and dates of birth to the National Student Clearinghouse (NSC), which then executes a fuzzy matching process to search for enrollment records. By law, students may opt to block their enrollment information, resulting in the absence of their records in the NSC database. Just one student in the sample blocked his or her records. Colleges are also allowed to block records, but none of the colleges attended by students in this sample did so.

If the NSC does not identify an enrollment record for a student, then this is supposed to mean that the student is not enrolled. However, it could also mean that the NSC matching process was unable to match the student to his/her enrollment record. Matching problems could under- or over-state overall enrollment rates and introduce measurement error in the dependent variables. In order to reduce the chance of either error, we took steps to obtain high match rates. Specifically, we cross-checked students' names and dates of birth across several sources of information, including several types of administrative records and students' self-reports.<sup>4</sup> In addition, we also submitted multiple requests for the same sample to NSC in an effort to detect whether we could improve the match rate. Since we knew the entire sample was enrolled in college during the first term, we were able to calculate a match rate for that term and use it to benchmark later terms (Goldrick-Rab and Harris 2010). In the first term, the NSC identified college enrollment for 98.1 percent of the 1,500 students in the sample. Given that high rate, we coded the NSC records such that the absence of a record in a given term denotes non-enrollment in that term (this is consistent with other studies using NSC; for example, see Bettinger et al.

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<sup>4</sup> We had more sources with which to verify names for students who completed surveys and consented to administrative data linkages. This may have resulted in a differential ability to detect NSC records—however as later discussed, the overall treatment differential in rates of ever locating an NSC record for a student is small and not statistically significant.

2009). As a check on whether that assumption threatened the estimates of treatment impacts, we performed additional sensitivity analyses. Specifically, since the treatment could conceivably affect the ability to match students and records (Goldrick-Rab and Harris 2010), we tested for equivalence by taking advantage of the prevalence of pre-fall 2008 (e.g., pre-treatment) enrollment among students in the sample. According to NSC data, 21 percent of students attended college for at least one term prior to fall 2008. As data in the bottom of Table II indicate, the treatment and control groups do not exhibit statistically significant differences in their rates of enrollment or number of terms of enrollment prior to fall 2008.

### E. Cost-Benefit Analysis of Impacts

As of spring, 2011, we observed a roughly 16 percentage point increase in four-year college graduation. Assuming a constant return to four-year degrees of eight percent (Krueger and Whitmore 2001), and a discount rate of 3.5 percent (Moore et al. 2004), then the return would be about \$91,000 per person, or \$1.5 million for 16 new graduates out of a cohort of 100 students. For simplicity, assume a control group graduation rate of 40 percent, that all eventual graduates receive their degrees after exactly five years, and the remainder dropout after exactly two years. This yields a budgetary program cost of \$1.2 million, somewhat lower than the benefit calculation. This excludes the additional direct and opportunity costs of keeping students in college longer, although this is partly offset, on the benefit side, by excluding external and nonmarket benefits of college education, which could be as large as the private benefits from productivity and wages (Wolfe and Haveman 2003). Also, this standard cost-benefit analysis may not be the best approach as it ignores possible alternative educational investments (Harris 2009). Based on the results from Harris and Goldrick-Rab (2010) for programs ranging from college access to adjunct faculty, a 16 percentage point increase would place the Wisconsin Scholars Grant at about the average for financial aid programs, which are collectively in the middle of the pack among the other types of programs considered. (The comparisons across financial aid programs are complicated by the fact that most other studies focus on effects on entry rather than persistence. See Harris and Goldrick-Rab (2010) for a discussion of this issue.)



## References

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**Appendix A.1. Initial Financial Aid Packages and Impacts by Treatment Status.**

	T	C	Impact	SE
<u>Panel 1. Pre-treatment snapshot (September 2008)</u>				
Total financial aid received (\$)	10401.9	10532.5	-130.6	243.4
Wisconsin Scholars Grant (%)	0.0	0.0	0.0	0.0
Federal Pell Grant (%)	99.2	98.1	1.1	1.0
Avg. amount of Pell (\$)	3258.2	3323.1	-64.9	118.7
Wisconsin Higher Ed. Grant (%)	98.1	96.4	1.7	1.5
Avg. amount of WHEG (\$)	2212.6	2200.7	11.9	66.4
Supp. Ed. Opportunity Grant (%)	55.3	52.0	3.3	4.2
Avg. amount of SEOG (\$)	349.6	327.6	22.0	32.9
Acad. Competitiveness Grant (%)	56.9	57.9	-1.0	4.2
Avg. amount of ACG (\$)	424.7	434.3	-9.6	31.3
Other grants and scholarships (%)	26.7	26.6	0.1	3.7
Avg. amount of other grants (\$)	348.8	456.8	-108.0	96.7
Any grants or scholarships (%)	99.2	99.1	0.1	0.8
Avg. amount of grant aid (\$)	6594.0	6742.7	-148.7	214.1
Subsidized federal loan (%)	79.4	81.1	-1.7	3.3
Avg. amount of sub. (\$)	2719.3	2738.3	-19.0	116.7
Unsubsidized federal loan (%)	25.6	23.7	1.9	3.6
Avg. amount of unsub. (\$)	508.1	508.4	-0.3	79.7
Non-federal loans (%)	0.4	0.4	0.0	0.6
Avg. amount of non-fed. loan (\$)	33.5	16.6	16.9	37.3
Any loans (%)	79.8	81.2	-1.4	3.3
Avg. amount of loans (\$)	3281.3	3298.7	-17.4	164.2
Federal Work-Study (%)	28.6	28.0	0.6	3.8
Avg. amount of work study (\$)	526.7	491.1	35.6	71.2
Sample Size	262	376		

**Appendix A.1. Initial Financial Aid Packages and Impacts by Treatment Status (Continued)**

	T	C	Impact	SE	
<u>Panel 2. Post-treatment snapshot one (2008-2009 academic year)</u>					
Total financial aid received (\$)	13419.1	11569.9	1849.2	268.8	***
Wisconsin Scholars Grant (%)	92.4	0.0	92.4	1.6	***
Avg. amount of WSG (\$)	3132.6	0.0	3132.6	61.1	***
Federal Pell Grant (%)	100.0	99.8	0.2	0.2	
Avg. amount of Pell (\$)	3164.3	3264.5	-100.2	114.8	
Wisconsin Higher Ed. Grant (%)	96.6	98.8	-2.2	1.3	*
Avg. amount of WHEG (\$)	2037.6	2205.6	-168.0	66.1	**
Supp. Ed. Opportunity Grant (%)	52.7	58.7	-6.0	4.2	
Avg. amount of SEOG (\$)	329.4	370.6	-41.2	33.4	
Acad. Competitiveness Grant (%)	79.8	77.3	2.5	3.4	
Avg. amount of ACG (\$)	575.6	559.3	16.3	26.0	
Other grants and scholarships (%)	54.6	51.1	3.5	4.2	
Avg. amount of other grants (\$)	996.3	982.2	14.1	137.4	
Any grants or scholarships (%)	100.0	100.0	0.0	0.0	
Avg. amount of grant aid (\$)	10235.8	7382.2	2853.6	249.8	***
Subsidized federal loan (%)	74.8	79.5	-4.7	3.5	
Avg. amount of sub. (\$)	2155.7	2879.3	-723.6	143.1	***
Unsubsidized federal loan (%)	37.8	38.6	-0.8	4.1	
Avg. amount of unsub. (\$)	683.8	822.3	-138.5	94.1	
Non-federal loans (%)	1.9	3.4	-1.5	1.3	
Avg. amount of non-fed. loan (\$)	123.2	129.3	-6.1	70.5	
Any loans (%)	76.3	80.0	-3.7	3.5	
Avg. amount of loans (\$)	3030.0	3987.8	-957.8	222.7	***
Federal Work-Study (%)	13.7	16.9	-3.2	3.1	
Avg. amount of work study (\$)	138.8	183.3	-44.5	36.7	
Sample Size	262	376			

Notes:

(1) This table includes only students with both data reports in the 2008-09 academic year. It excludes all students at three of 13 campuses, as well as small numbers of students at the other ten campuses.

(2) \* signifies  $p < .10$ , \*\* signifies  $p < .05$ , and \*\*\* signifies  $p < .01$ .

(3) Panel 1 comes directly from financial aid offices, while Panel 2 comes from the UW System's central administrative database.

(4) The sample reported here is a subsample of subsample 2. The treatment and control groups are baseline equivalent; results available upon request.

(5) The WHEG is the Wisconsin equivalent of the Pell Grant, but is not an entitlement.

**Appendix A.2. Change in Financial Aid Package by Treatment Status and Academic Preparation.**

	Subsample 2				Modestly-prepared students				Well-prepared students				Diff. in
	T	C	Impact	SE	T	C	Impact	SE	T	C	Impact	SE	p-value
<u>Panel 1. Change between 2008-09 and 2009-10.</u>													
Total financial aid received (\$)	-2109.8	-1372.6	-737.2	403.6 *	-1426.7	-2471.1	1044.4	916.2	-2277.1	-1111.1	-1166.0	447.0***	0.030
Wisconsin Scholars Grant (%)	-24.4	0.0	-24.4	2.3 ***	-20.0	0.0	-20.0	4.8 ***	-25.5	0.0	-25.5	2.6 ***	0.310
Avg. amount of WSG (\$)	-885.1	0.0	-885.1	74.7 ***	-774.3	0.0	-774.3	161.1 ***	-912.2	0.0	-912.2	84.2 ***	
Federal Pell Grant (%)	-24.4	-24.3	-0.1	3.2	-20.0	-30.1	10.1	7.0	-25.5	-22.9	-2.6	3.5	0.106
Avg. amount of Pell (\$)	-296.5	-290.7	-5.8	142.1	-166.6	-836.4	669.8	314.7 **	-328.3	-160.8	-167.5	158.0	0.017
Wisconsin Higher Ed. Grant (%)	-25.8	-30.8	5.0	3.6	-17.1	-35.7	18.6	9.2 **	-28.0	-29.6	1.6	3.9	0.090
Avg. amount of WHEG (\$)	-507.7	-651.9	144.2	89.0	-363.1	-932.4	569.3	218.7 **	-543.1	-585.2	42.1	96.4	0.027
Supp. Ed. Opportunity Grant (%)	-17.4	-24.9	7.5	4.4 *	-5.7	-24.4	18.7	10.2 *	-20.3	-25.0	4.7	4.8	0.214
Avg. amount of SEOG (\$)	-118.6	-166.0	47.4	34.0	-80.0	-106.1	26.1	75.8	-128.1	-180.2	52.1	37.9	0.758
Acad. Competitiveness Grant (%)	-54.8	-57.2	2.4	3.9	10.0	5.8	4.2	4.3	-70.6	-72.2	1.6	3.8	0.641
Avg. amount of ACG (\$)	-301.3	-326.3	25.0	38.9	101.5	69.1	32.4	47.9	-399.9	-420.5	20.6	43.6	0.854
Other grants and scholarships (%)	-11.8	-6.2	-5.6	4.0	4.3	-3.3	7.6	8.9	-15.7	-6.9	-8.8	4.4 **	0.099
Avg. amount of other grants (\$)	-243.1	-102.7	-140.4	106.7	-353.9	-58.7	-295.2	314.1	-216.0	-113.2	-102.8	108.7	0.562
Any grants or scholarships (%)	-20.2	-19.4	-0.8	2.9	-18.6	-26.6	8.0	6.9	-20.6	-17.7	-2.9	3.2	0.150
Avg. amount of grant aid (\$)	-2352.4	-1537.7	-814.7	315.4 **	-1636.5	-1864.5	228.0	695.7	-2527.6	-1459.8	-1067.8	352.7***	0.096
Subsidized federal loan (%)	-12.4	-11.3	-1.1	3.5	-12.9	-17.2	4.3	8.0	-12.2	-9.8	-2.4	3.9	0.452
Avg. amount of sub. (\$)	-17.8	-55.3	37.5	145.4	-167.8	-255.5	87.7	293.7	18.9	-7.6	26.5	165.9	0.856
Unsubsidized federal loan (%)	1.4	5.4	-4.0	4.1	-2.9	-12.8	9.9	8.7	2.4	9.7	-7.3	4.6	0.082
Avg. amount of unsub. (\$)	192.7	150.6	42.1	109.5	171.8	-314.0	485.8	264.7 *	197.8	261.2	-63.4	118.6	0.058
Non-federal loans (%)	0.8	-0.5	1.3	1.4	2.9	-0.7	3.6	2.1 *	0.3	-0.4	0.7	1.6	0.298
Avg. amount of non-fed. loan (\$)	-21.5	-17.5	-4.0	63.3	85.7	-35.3	121.0	69.6 *	-47.7	-13.3	-34.4	76.6	0.133
Any loans (%)	-11.5	-10.3	-1.2	3.4	-10.0	-17.6	7.6	8.3	-11.9	-8.5	-3.4	3.7	0.231
Avg. amount of loans (\$)	181.4	78.9	102.5	227.4	118.5	-657.8	776.3	498.9	196.8	254.4	-57.6	253.8	0.136
Federal Work-Study (%)	-1.1	1.2	-2.3	2.7	2.9	1.7	1.2	4.9	-2.1	-1.8	-0.3	3.1	0.807
Avg. amount of work study (\$)	37.8	16.9	20.9	35.0	72.4	51.2	21.2	53.8	29.4	8.7	20.7	41.5	0.994
Financial aid application (if enrolled)													
Eligible for Pell Grant (%)	-11.5	-12.5	1.0	2.6	-6.5	-6.1	-0.4	4.0	-12.8	-13.8	1.0	3.0	0.788
Expected family contribution (\$)	767.1	800.6	-33.5	334.8	304.7	631.4	-326.7	354.2	880.9	835.0	45.9	403.8	0.488
Zero EFC (%)	6.5	5.9	0.6	3.1	8.2	-0.8	9.0	8.4	6.0	7.3	-1.3	3.3	0.256
Sample Size	356	470			70	110			286	360			

**Appendix A.2. Change in Financial Aid Package by Treatment Status and Academic Preparation (Continued).**

	Subsample 2				Modestly-prepared students				Well-prepared students				Diff. in impacts			
	T	C	Impact	SE	T	C	Impact	SE	T	C	Impact	SE		p-value		
<u>Panel 2. Change between 2009-10 and 2010-11.</u>																
Total financial aid received (\$)	-1428.5	-688.4	-740.1	451.3	-1476.5	-1323.6	-152.9	1060.1	-1416.8	-561.2	-855.6	501.4	*	0.548		
Wisconsin Scholars Grant (%)	-20.3	0.0	-20.3	2.5	***	-21.3	0.0	-21.3	5.3	***	-20.0	0.0	-20.0	2.9	***	0.827
Avg. amount of WSG (\$)	-646.8	0.0	-646.8	80.6	***	-718.0	0.0	-718.0	164.8	***	-629.5	0.0	-629.5	91.8	***	0.638
Federal Pell Grant (%)	-13.5	-12.9	-0.6	3.7		-13.1	-20.1	7.0	7.9		-13.6	-11.5	-2.1	4.2		0.309
Avg. amount of Pell (\$)	-255.7	-182.9	-72.8	163.6		-101.2	-492.2	391.0	371.2		-293.4	-121.0	-172.4	182.2		0.173
Wisconsin Higher Ed. Grant (%)	-18.3	-14.0	-4.3	4.1		-21.3	-15.6	-5.7	9.5		-17.6	-13.7	-3.9	4.6		0.858
Avg. amount of WHEG (\$)	-466.2	-438.8	-27.4	88.6		-460.6	-429.5	-31.1	210.7		-467.5	-440.7	-26.8	98.0		0.985
Supp. Ed. Opportunity Grant (%)	-15.4	-7.2	-8.2	3.9	**	-16.4	-5.7	-10.7	8.5		-15.2	-7.5	-7.7	4.4	*	0.754
Avg. amount of SEOG (\$)	-116.4	-60.5	-55.9	28.5	*	-89.7	-59.1	-30.6	57.5		-122.9	-60.8	-62.1	32.3	*	0.633
Acad. Competitiveness Grant (%)	-28.6	-23.6	-5.0	3.8		-11.5	-1.8	-9.7	6.4		-32.8	-28.0	-4.8	4.3		0.523
Avg. amount of ACG (\$)	-311.8	-277.0	-34.8	43.5		-116.5	-33.4	-83.1	71.9		-359.4	-325.7	-33.7	49.7		0.571
Other grants and scholarships (%)	-5.8	-8.2	2.4	3.6		-8.2	-16.4	8.2	8.0		-5.2	-6.5	1.3	4.0		0.443
Avg. amount of other grants (\$)	165.3	236.7	-71.4	112.4		247.8	133.3	114.5	281.5		145.2	257.4	-112.2	120.4		0.458
Any grants or scholarships (%)	-13.8	-13.4	-0.4	3.4		-9.8	-24.2	14.4	7.2	**	-14.8	-11.2	-3.6	3.8		0.028
Avg. amount of grant aid (\$)	-1427.3	-566.3	-861.0	336.9	**	-1128.5	-862.0	-266.5	744.4		-1500.3	-507.1	-993.2	377.7	***	0.383
Subsidized federal loan (%)	-12.2	-9.0	-3.2	3.9		-9.8	-19.4	9.6	8.5		-12.8	-6.9	-5.9	4.4		0.106
Avg. amount of sub. (\$)	84.2	93.1	-8.9	185.3		-214.6	-390.4	175.8	386.3		157.1	189.9	-32.8	208.8		0.634
Unsubsidized federal loan (%)	-7.7	-8.5	0.8	4.2		-3.3	-4.4	1.1	10.7		-8.8	-9.3	0.5	4.5		0.953
Avg. amount of unsub. (\$)	-151.2	-158.1	6.9	124.2		-381.5	-3.9	-377.6	324.3		-94.9	-189.0	94.1	132.4		0.178
Non-federal loans (%)	1.0	1.2	-0.2	1.7		0.0	0.0	0.0	4.0		1.2	1.5	-0.3	1.8		0.954
Avg. amount of non-fed. loan (\$)	40.7	84.1	-43.4	74.0		36.4	0.0	36.4	150.5		41.8	101.0	-59.2	82.2		0.576
Any loans (%)	-11.6	-8.9	-2.7	3.9		-9.8	-18.4	8.6	8.5		-12.0	-7.0	-5.0	4.3		0.155
Avg. amount of loans (\$)	18.3	-62.8	81.1	271.5		-253.8	-507.8	254.0	688.0		84.6	26.3	58.3	293.0		0.793
Federal Work-Study (%)	-2.3	-5.3	3.0	3.0		-4.9	-4.8	-0.1	4.4		-1.6	-5.3	3.7	3.5		0.495
Avg. amount of work study (\$)	-22.3	-25.1	2.8	44.2		-71.2	12.1	-83.3	74.1		-10.3	-32.6	22.3	51.4		0.241
Financial aid application (if enrolled)																
Eligible for Pell Grant (%)	-2.6	-1.9	-0.7	3.2		-5.7	4.6	-10.3	5.2	**	-1.9	-3.0	1.1	3.7		0.072
Expected family contribution (\$)	284.3	130.6	153.7	355.3		433.2	-304.5	737.7	476.6		246.9	209.9	37.0	423.8		0.271
Zero EFC (%)	1.5	-2.9	4.4	3.2		-1.9	-2.1	0.2	8.4		2.4	-3.0	5.4	3.4		0.563
Sample Size	311	401			61	85				250	316					

**Appendix A.2. Change in Financial Aid Package by Treatment Status and Academic Preparation (Continued).**

	Subsample 2				Modestly-prepared students				Well-prepared students				Diff. in
	T	C	Impact	SE	T	C	Impact	SE	T	C	Impact	SE	p-value
<u>Panel 3. Total FFWS and loans between 2008-09 and 2010-11.</u>													
Wisconsin Scholars Grant (%)	92.4	0.0	92.4	1.4 ***	90.0	0.0	90.0	3.6 ***	93.0	0.0	93.0	1.5 ***	
Total amount of WSG (\$)	7088.2	0.0	7088.2	191.2 ***	7050.7	0.0	7050.7	442.7 ***	7097.4	0.0	7097.4	212.0 ***	
Any loans (%)	83.7	88.5	-4.8	2.5 *	77.1	81.2	-4.1	6.6	85.3	90.2	-4.9	2.7 *	0.905
Total amount of loans (\$)	8836.9	11988.1	-3151.2	563.5 ***	9023.2	9240.7	-217.5	1333.0	8791.3	12642.4	-3851.1	615.6 ***	0.013
Any subsidized federal loans (%)	82.9	88.2	-5.3	2.6 **	74.3	80.8	-6.5	6.8	85.0	89.9	-4.9	2.7 *	0.827
Total amount of sub. (\$)	6209.0	8615.9	-2406.9	371.9 ***	5514.3	6327.1	-812.8	807.9	6379.1	9160.9	-2781.8	412.5 ***	0.030
Any unsubsidized fed. loans (%)	53.7	65.9	-12.2	3.6 ***	60.0	62.7	-2.7	8.0	52.1	66.7	-14.6	4.0 ***	0.181
Total amount of unsub. (\$)	2091.8	2680.9	-589.1	220.5 ***	2703.0	2454.3	248.7	497.0	1942.2	2734.8	-792.6	245.0 ***	0.060
Sample Size	356	470			70	110			286	360			

Notes:

(1) Panels 1 and 3 are conditional on enrollment in 2008-09, while panel 2 is conditional on 2009-10 enrollment.

(2) \* signifies p<.10, \*\* signifies p<.05, and \*\*\* signifies p<.01.

(3) The p-value represents a test for differences in T-C impacts between modestly and well-prepared students.

(4) "Modestly-prepared" students did not receive the Academic Competitiveness Grant (ACG) in 2008-09, while "well-prepared" students received the grant.

(5) The WHEG is the Wisconsin equivalent of the Pell Grant, but is not an entitlement.

**Appendix A.3. Initial Financial Aid Packages and Impacts by Treatment Status and Academic Preparation.**

	Modestly-prepared students				Well-prepared students				Diff. in impacts by Acad. Prep.
	T	C	Impact	SE	T	C	Impact	SE	
<u>Panel 1. Pre-treatment snapshot (September 2008)</u>									
Total financial aid received (\$)	10345.9	10938.3	-592.4	491.5	10416.1	10413.3	2.8	279.3	0.292
Wisconsin Scholars Grant (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.000
Federal Pell Grant (%)	100.0	97.4	2.6	1.9	99.0	98.2	0.8	1.2	0.432
Avg. amount of Pell (\$)	3367.4	3973.1	-605.7	240.3	** 3230.5	3132.2	98.3	133.8	0.011
Wisconsin Higher Ed. Grant (%)	96.2	93.1	3.1	4.1	98.6	97.3	1.3	1.5	0.661
Avg. amount of WHEG (\$)	2202.5	2424.2	-221.7	155.8	2215.1	2135.1	80.0	72.6	0.079
Supp. Ed. Opportunity Grant (%)	49.1	48.5	0.6	9.1	56.9	53.1	3.8	4.8	0.751
Avg. amount of SEOG (\$)	284.9	274.9	10.0	66.3	366.0	343.1	22.9	37.7	0.866
Acad. Competitiveness Grant (%)	9.4	0.8	8.6	4.1	** 68.9	74.7	-5.8	4.2	0.015
Avg. amount of ACG (\$)	70.8	6.3	64.5	30.9	** 514.5	560.1	-45.6	32.0	0.013
Other grants and scholarships (%)	20.8	27.5	-6.7	7.6	28.2	26.4	1.8	4.2	0.322
Avg. amount of other grants (\$)	766.0	729.4	36.6	335.0	243.0	376.8	-133.8	82.4	0.621
Any grants or scholarships (%)	100.0	100.0	0.0	0.0	99.0	98.9	0.1	1.0	0.863
Avg. amount of grant aid (\$)	6691.5	7407.9	-716.4	506.9	6569.2	6547.2	22.0	234.8	0.186
Subsidized federal loan (%)	71.7	73.7	-2.0	8.0	81.3	83.3	-2.0	3.6	0.998
Avg. amount of sub. (\$)	2478.2	2519.6	-41.4	280.4	2780.4	2802.5	-22.1	127.1	0.950
Unsubsidized federal loan (%)	32.1	27.3	4.8	8.3	23.9	22.7	1.2	4.0	0.704
Avg. amount of unsub. (\$)	747.4	662.4	85.0	212.4	447.4	463.2	-15.8	83.1	0.658
Non-federal loans (%)	0.0	0.0	0.0	0.0	0.4	0.5	-0.1	0.7	0.950
Avg. amount of non-fed. loan (\$)	0.0	0.0	0.0	0.0	42.0	21.0	21.0	47.1	0.662
Any loans (%)	71.7	74.1	-2.4	7.9	81.8	83.3	-1.5	3.6	0.916
Avg. amount of loans (\$)	3283.9	3220.6	63.3	421.4	3280.6	3321.6	-41.0	175.6	0.819
Federal Work-Study (%)	18.9	15.5	3.4	6.9	31.1	31.7	-0.6	4.5	0.626
Avg. amount of work study (\$)	370.5	309.8	60.7	137.7	566.3	544.4	21.9	81.9	0.808
Sample Size	53	98			209	278			



**Appendix A.3. Initial Financial Aid Packages and Impacts by Treatment Status and Academic Preparation (Continued).**

	Modestly-prepared students				Well-prepared students				Diff. in impacts by Acad. Prep.		
	T	C	Impact	SE	T	C	Impact	SE			
<u>Panel 2. Post-treatment snapshot one (2008-2009 academic year)</u>											
Total financial aid received (\$)	13028.9	11413.8	1615.1	566.2	***	13518.1	11615.7	1902.4	304.1	***	0.654
Wisconsin Scholars Grant (%)	94.3	0.0	94.3	3.2	***	91.9	0.0	91.9	1.9	***	
Avg. amount of WSG (\$)	3202.8	0.0	3202.8	121.6	***	3114.8	0.0	3114.8	70.0	***	0.530
Federal Pell Grant (%)	100.0	99.2	0.8	0.9		100.0	100.0	0.0	0.0		0.317
Avg. amount of Pell (\$)	3134.0	3790.3	-656.3	239.9	***	3172.0	3110.0	62.0	129.3		0.009
Wisconsin Higher Ed. Grant (%)	88.7	94.8	-6.1	5.3		98.6	100.0	-1.4	0.8	*	
Avg. amount of WHEG (\$)	1858.7	2367.4	-508.7	170.6	***	2082.9	2158.1	-75.2	69.8		0.019
Supp. Ed. Opportunity Grant (%)	41.5	57.6	-16.1	8.9	*	55.5	59.0	-3.5	4.7		0.210
Avg. amount of SEOG (\$)	256.3	339.2	-82.9	70.0		347.9	379.8	-31.9	38.0		0.521
Acad. Competitiveness Grant (%)	0.0	0.0	0.0	0.0		100.0	100.0	0.0	0.0		1.000
Avg. amount of ACG (\$)	0.0	0.0	0.0	0.0		721.5	723.7	-2.2	9.7		0.826
Other grants and scholarships (%)	45.3	50.4	-5.1	9.1		56.9	51.4	5.5	4.8		0.296
Avg. amount of other grants (\$)	1382.6	1198.3	184.3	409.7		898.3	918.7	-20.4	134.5		0.634
Any grants or scholarships (%)	100.0	100.0	0.0	0.0		100.0	100.0	0.0	0.0		1.000
Avg. amount of grant aid (\$)	9834.5	7695.2	2139.3	556.1	***	10337.5	7290.2	3047.3	278.5	***	0.144
Subsidized federal loan (%)	69.8	71.3	-1.5	8.2		76.1	81.9	-5.8	3.9		0.634
Avg. amount of sub. (\$)	2147.0	2396.3	-249.3	302.2		2157.9	3021.2	-863.3	161.6	***	0.073
Unsubsidized federal loan (%)	43.4	43.7	-0.3	9.0		36.4	37.1	-0.7	4.6		0.971
Avg. amount of unsub. (\$)	917.8	993.7	-75.9	229.0		624.4	772.0	-147.6	102.0		0.775
Non-federal loans (%)	1.9	0.8	1.1	2.1		1.9	4.2	-2.3	1.6		0.207
Avg. amount of non-fed. loan (\$)	75.5	41.7	33.8	85.8		135.3	155.1	-19.8	86.4		0.660
Any loans (%)	69.8	71.7	-1.9	8.2		78.0	82.4	-4.4	3.8		0.784
Avg. amount of loans (\$)	3187.5	3674.0	-486.5	520.3		2990.0	4080.1	-1090.1	245.0	***	0.293
Federal Work-Study (%)	1.9	5.8	-3.9	3.4		16.7	20.2	-3.5	3.7		0.929
Avg. amount of work study (\$)	7.0	44.6	-37.6	22.0	*	172.3	224.0	-51.7	45.6		0.781
Sample Size	53	98				209	278				

Notes:

- (1) This table includes only students with both data reports in the 2008-09 academic year. It excludes all students at three of 13 campuses, as well as small numbers of students at the other ten campuses.
- (2) \* signifies  $p < .10$ , \*\* signifies  $p < .05$ , and \*\*\* signifies  $p < .01$ .
- (3) The p-value represents a test for differences in T-C impacts between modestly and well-prepared students.
- (4) "Modestly-prepared" students did not receive the Academic Competitiveness Grant (ACG) in 2008-09, while "well-prepared" students received the grant.
- (5) The sample reported here is a subsample of subsample 2. The treatment and control groups are baseline equivalent; results available upon request.
- (6) The WHEG is the Wisconsin equivalent of the Pell Grant, but is not an entitlement.

**Appendix A.4. Impacts on Financial Aid Packages by Treatment Status and Academic Preparation.**

	Subsample 2				Modestly-prepared students				Well-prepared students				Diff.		
	T	C	Impact	SE	T	C	Impact	SE	T	C	Impact	SE	by Acad. Prep		
<u>Panel 1. Post-treatment snapshot two (2009-2010 academic year).</u>															
Total financial aid received (\$)	11175.3	10463.2	712.1	443.1	11528.3	9162.5	2365.8	1053.2	**	11088.9	10772.9	316.0	485.2	0.077	
Wisconsin Scholars Grant (%)	68.0	0.0	68.0	2.5	***	70.0	0.0	70.0	5.5	***	67.5	0.0	67.5	2.8	***
Avg. amount of WSG (\$)	2256.1	0.0	2256.1	85.3	***	2300.7	0.0	2300.7	189.4	***	2245.2	0.0	2245.2	95.6	***
Federal Pell Grant (%)	75.3	75.6	-0.3	3.2	78.6	69.2	9.4	7.1	74.5	77.1	-2.6	3.5	0.131		
Avg. amount of Pell (\$)	2880.0	3047.6	-167.6	158.7	3001.4	2976.2	25.2	360.1	2850.3	3064.6	-214.3	176.8	0.550		
Wisconsin Higher Ed. Grant (%)	69.7	68.1	1.6	3.4	68.6	58.4	10.2	7.9	69.9	70.4	-0.5	3.8	0.225		
Avg. amount of WHEG (\$)	1504.6	1602.7	-98.1	91.1	1475.3	1448.3	27.0	208.4	1511.8	1639.5	-127.7	101.1	0.504		
Supp. Ed. Opportunity Grant (%)	38.5	39.1	-0.6	3.6	38.6	30.2	8.4	7.7	38.5	41.2	-2.7	4.1	0.198		
Avg. amount of SEOG (\$)	234.4	251.4	-17.0	25.8	212.6	227.1	-14.5	54.7	239.8	257.2	-17.4	29.1	0.961		
Acad. Competitiveness Grant (%)	25.6	23.6	2.0	3.2	10.0	5.8	4.2	4.3	29.4	27.8	1.6	3.8	0.641		
Avg. amount of ACG (\$)	277.8	264.5	13.3	37.3	101.5	69.1	32.4	47.9	321.0	311.1	9.9	44.0	0.728		
Other grants and scholarships (%)	42.7	48.6	-5.9	3.7	51.4	51.3	0.1	8.2	40.6	48.0	-7.4	4.1	* 0.406		
Avg. amount of other grants (\$)	835.2	971.6	-136.4	122.4	1223.5	1367.9	-144.4	365.3	740.2	877.2	-137.0	123.3	0.985		
Any grants or scholarships (%)	79.5	80.6	-1.1	2.9	80.0	73.4	6.6	7.0	79.4	82.3	-2.9	3.2	0.215		
Avg. amount of grant aid (\$)	7988.2	6137.9	1850.3	368.5	***	8315.1	6088.6	2226.5	854.8	**	7908.2	6149.7	1758.5	408.5	*** 0.621
Subsidized federal loan (%)	60.1	68.6	-8.5	3.5	**	52.9	53.6	-0.7	8.2	61.9	72.2	-10.3	3.9	*** 0.291	
Avg. amount of sub. (\$)	2028.7	2822.7	-794.0	154.1	***	1833.8	2118.6	-284.8	337.1	2076.4	2990.3	-913.9	171.8	*** 0.096	
Unsubsidized federal loan (%)	34.8	45.3	-10.5	3.6	***	35.7	33.2	2.5	7.8	34.6	48.1	-13.5	4.1	*** 0.068	
Avg. amount of unsub. (\$)	802.7	988.6	-185.9	106.9	*	1064.3	711.4	352.9	257.8	738.7	1054.6	-315.9	116.2	*** 0.018	
Non-federal loans (%)	2.2	2.2	0.0	1.1	4.3	0.0	4.3	2.4	*	1.7	2.8	-1.1	1.2	0.051	
Avg. amount of non-fed. loan (\$)	69.2	92.7	-23.5	43.9	142.9	0.0	142.9	81.8	*	51.2	114.7	-63.5	50.6	0.032	
Any loans (%)	62.6	69.9	-7.3	3.5	**	55.7	53.6	2.1	8.2	64.3	73.8	-9.5	3.8	** 0.196	
Avg. amount of loans (\$)	2987.4	4035.6	-1048.2	240.0	***	3105.5	2982.2	123.3	558.4	2958.5	4286.5	-1328.0	263.4	*** 0.019	
Federal Work-Study (%)	12.4	15.7	-3.3	2.6	7.1	7.0	0.1	4.0	13.6	17.8	-4.2	3.0	0.388		
Avg. amount of work study (\$)	159.8	203.9	-44.1	38.0	87.7	91.7	-4.0	54.0	177.5	230.6	-53.1	45.1	0.48		
Financial aid application (if enrolled)															
Eligible for Pell Grant (%)	88.1	87.4	0.7	2.6	91.9	93.4	-1.5	4.3	87.2	86.2	1.0	3.0	0.64		
Expected family contribution (\$)	2239.8	2118.4	121.4	351.0	1712.0	1222.9	489.1	419.8	2369.6	2300.3	69.3	420.2	0.48		
Zero EFC (%)	32.0	39.5	-7.5	3.8	*	37.7	61.5	-23.8	8.8	***	30.6	35.0	-4.4	4.2	0.05
Sample Size	356	470			70	110			286	360					

<b>Appendix A.4. Impacts on Financial Aid Packages by Treatment Status and Academic Preparation (Continued).</b>														Diff. by		
	Subsample 2				Modestly-prepared students				Well-prepared students				Acad.			
	T	C	Impact	SE	T	C	Impact	SE	T	C	Impact	SE	Prep.			
<u>Panel 2. Post-treatment snapshot three (2010-2011 academic year).</u>																
Total financial aid received (\$)	10010.4	9889.2	121.2	544.5	10338.2	8199.3	2138.9	1256.3	*	9930.2	10291.6	-361.4	601.5	0.073		
Wisconsin Scholars Grant (%)	50.3	0.0	50.3	2.7	***	51.4	0.0	51.4	6.0	***	50.0	0.0	50.0	3.0	***	
Avg. amount of WSG (\$)	1691.0	0.0	1691.0	90.9	***	1675.0	0.0	1675.0	201.9	***	1694.9	0.0	1694.9	101.8	***	
Federal Pell Grant (%)	64.0	64.5	-0.5	3.6		68.6	54.4	14.2	7.9	*	62.9	67.0	-4.1	4.0	0.039	
Avg. amount of Pell (\$)	2689.0	2904.5	-215.5	184.3		2947.5	2615.4	332.1	415.8		2625.8	2973.5	-347.7	205.2	*	0.142
Wisconsin Higher Ed. Grant (%)	53.9	56.3	-2.4	3.7		51.4	47.1	4.3	8.2		54.5	58.6	-4.1	4.1	0.359	
Avg. amount of WHEG (\$)	1106.2	1228.3	-122.1	83.7		1089.8	1129.1	-39.3	192.2		1110.2	1251.9	-141.7	92.9	0.631	
Supp. Ed. Opportunity Grant (%)	25.0	32.9	-7.9	3.3	**	24.3	25.9	-1.6	7.0		25.2	34.6	-9.4	3.8	**	0.323
Avg. amount of SEOG (\$)	132.7	199.0	-66.3	21.3	***	134.4	182.5	-48.1	49.8		132.3	202.9	-70.6	23.6	***	0.683
Acad. Competitiveness Grant (%)	0.8	3.1	-2.3	1.0	**	0.0	4.5	-4.5	2.7		1.0	2.7	-1.7	1.1	0.336	
Avg. amount of ACG (\$)	7.3	23.6	-16.3	8.9	*	0.0	43.9	-43.9	30.6		9.1	18.7	-9.6	8.2	0.280	
SMART Grant (%)	5.9	3.8	2.1	1.6		4.3	0.7	3.6	2.5		6.3	4.5	1.8	1.8	0.564	
Avg. amount of SMART (\$)	178.4	135.9	42.5	52.8		95.7	14.2	81.5	56.6		198.7	164.8	33.9	64.0	0.577	
Other grants and scholarships (%)	37.6	41.4	-3.8	3.6		44.3	39.2	5.1	8.0		36.0	42.0	-6.0	4.0	0.221	
Avg. amount of other grants (\$)	979.6	1163.8	-184.2	151.0		1439.4	1469.1	-29.7	408.8		867.1	1091.1	-224.0	158.8	0.657	
Any grants or scholarships (%)	68.0	69.1	-1.1	3.4		72.9	55.5	17.4	7.7	**	66.8	72.3	-5.5	3.8	0.008	
Avg. amount of grant aid (\$)	6784.3	5655.2	1129.1	407.2	***	7381.8	5454.2	1927.6	963.5	**	6638.0	5703.1	934.9	448.5	**	0.350
Subsidized federal loan (%)	50.3	61.0	-10.7	3.7	***	45.7	39.3	6.4	8.1		51.4	66.1	-14.7	4.0	***	0.019
Avg. amount of sub. (\$)	2133.9	2915.3	-781.4	187.2	***	1679.0	1834.5	-155.5	366.9		2245.2	3172.6	-927.4	211.8	***	0.068
Unsubsidized federal loan (%)	28.7	37.6	-8.9	3.5	**	34.3	30.3	4.0	7.6		27.3	39.4	-12.1	3.9	***	0.060
Avg. amount of unsub. (\$)	679.1	854.3	-175.2	102.4	*	746.1	717.4	28.7	195.0		662.7	886.9	-224.2	117.9	*	0.267
Non-federal loans (%)	3.1	3.3	-0.2	1.2		4.3	0.0	4.3	2.4	*	2.8	4.1	-1.3	1.4	0.048	
Avg. amount of non-fed. loan (\$)	104.8	165.9	-61.1	59.6		174.6	0.0	174.6	98.9	*	87.7	205.4	-117.7	69.8	*	0.016
Any loans (%)	53.4	62.3	-8.9	3.6	**	48.6	40.1	8.5	8.1		54.5	67.6	-13.1	4.0	***	0.017
Avg. amount of loans (\$)	3043.4	3995.8	-952.4	273.1	***	2930.7	2618.4	312.3	613.5		3071.0	4323.8	-1252.8	301.9	***	0.022
Federal Work-Study (%)	10.4	11.2	-0.8	2.3		2.9	3.3	-0.4	2.7		12.2	13.0	-0.8	2.8	0.934	
Avg. amount of work study (\$)	140.4	182.0	-41.6	38.6		25.7	100.8	-75.1	61.5		168.5	201.4	-32.9	45.3	0.580	
Financial aid application (if enrolled)																
Eligible for Pell Grant (%)	84.8	85.5	-0.7	3.1		88.9	96.3	-7.4	4.6		83.7	83.6	0.1	3.5	0.199	
Expected family contribution (\$)	2618.2	2149.4	468.8	345.2		1884.7	942.7	942.0	485.2	*	2803.3	2366.8	436.5	405.7	0.424	
Zero EFC (%)	31.9	37.4	-5.5	4.1		39.6	61.4	-21.8	9.6	**	30.0	33.1	-3.1	4.4	0.077	
Sample Size	356	470				70	110				286	360				

Notes:

- (1) Both panels are unconditional on enrollment. Results conditional upon enrollment in a given academic year are available upon request from the authors.
- (2) \* signifies  $p < .10$ , \*\* signifies  $p < .05$ , and \*\*\* signifies  $p < .01$ .
- (3) The p-value represents a test for differences in T-C impacts between modestly and well-prepared students.
- (4) "Modestly-prepared" students did not receive the Academic Competitiveness Grant (ACG) in 2008-09, while "well-prepared" students received the grant.
- (5) The WHEG is the Wisconsin equivalent of the Pell Grant, but is not an entitlement.

**Appendix A.5. Selected Characteristics of University Students at Baseline By Assignment to Treatment and Academic Preparation.**

Characteristic	Subsample 2				Modestly-prepared students				Well-prepared students				Diff. by acad. prep
	Full	T	C	p	Full	T	C	p	Full	T	C	p	
Gender (%)													
Male	38.6	37.3	40.3	0.404	36.5	38.0	34.2	0.625	39.0	37.1	41.7	0.253	0.571
Female	61.4	62.7	59.7	0.404	63.5	62.0	65.8	0.625	61.0	62.9	58.3	0.253	0.571
Race/ethnicity (%)													
Targeted minority	20.2	20.4	19.9	0.848	34.7	33.8	35.9	0.784	16.7	17.1	16.1	0.723	<0.001
Non-targeted group	79.8	79.6	80.1	0.848	65.3	66.2	64.1	0.784	83.3	82.9	83.9	0.723	<0.001
Average age (years)	18.2	18.2	18.2	0.536	18.5	18.5	18.4	0.490	18.1	18.1	18.1	0.935	<0.001
Married (%)	0.8	1.1	0.3	0.196	2.5	4.3	0.0	0.079	0.4	0.4	0.4	0.960	0.139
Has child(ren) (%)	0.9	0.8	1.0	0.817	2.8	2.9	2.6	0.894	0.5	0.4	0.6	0.665	0.082
Highest level of parental education (%)													
No high school diploma	7.7	7.7	7.5	0.923	9.2	6.0	13.7	0.106	7.3	8.2	6.1	0.324	0.446
High school diploma or GED	33.4	36.4	29.4	0.046	31.2	32.8	28.9	0.611	34.0	37.2	29.5	0.050	0.527
Some college or associate's degree	36.6	33.2	41.3	0.026	38.8	35.8	42.7	0.394	36.1	32.6	40.9	0.040	0.566
Bachelor's degree or higher	22.3	22.6	21.8	0.782	20.8	25.4	14.6	0.104	22.6	22.0	23.5	0.656	0.645
Number of siblings	3.2	3.3	3.1	0.176	3.3	3.1	3.6	0.241	3.2	3.4	3.0	0.027	0.756
Financially dependent on parents (%)	97.3	97.7	96.8	0.422	93.7	94.2	92.9	0.733	98.2	98.6	97.7	0.442	0.025
Average expected family contribution (\$)	1,360	1,413	1,286	0.199	1,054	1,341	646	0.001	1,434	1,431	1,438	0.949	0.002
Zero expected family contribution (%)	31.0	28.1	34.9	0.047	45.1	32.9	62.4	<0.001	27.5	26.9	28.4	0.694	<0.001
Parent(s)' adjusted gross income (\$)	30,142	31,257	28,587	0.049	27,155	31,649	20,808	<0.001	30,831	31,167	30,365	0.594	0.043
Parent(s)' investment net worth (\$)	5,293	4,969	5,744	0.462	2,799	2,813	2,778	0.983	5,868	5,470	6,421	0.441	0.003
1st year student, no prior enrollment (%)	96.2	95.8	96.9	0.401	87.7	87.0	88.8	0.743	98.3	97.9	98.9	0.340	<0.001
NSC indicates no prior enrollment (%)	77.9	78.7	76.8	0.534	70.1	66.2	75.7	0.201	79.8	81.8	77.0	0.156	0.022
Terms of prior enrollment, if not 1st time	1.7	1.8	1.7	0.815	2.0	2.1	1.9	0.398	1.6	1.6	1.7	0.704	0.016
High school GPA	3.3	3.3	3.3	0.384	3.1	3.2	3.0	0.017	3.3	3.3	3.4	0.771	<0.001
ACT composite score	21.8	21.8	21.8	0.901	20.3	20.2	20.5	0.561	22.1	22.2	22.1	0.650	<0.001
Value of global f-test		0.294				0.009				0.112			
Maximum sample size	828	357	421		182	71	111		646	286	360		

SOURCES: University of Wisconsin System (race, gender, EFC), ACT (ACT score and high school GPA), National Student Clearinghouse (prior enrollment), fall 2008 survey (parental education), FAFSA (all others)

NOTES:

- (1) Targeted minority groups include: African-Americans, Latinos, Southeast Asian, Native American, and multiracial. "Targeted" refers to a policy of the University of Wisconsin System, in which all sample participants began college.
- (2) Parent income and investments (dependent students only) had few extreme values with undue influences and were therefore trimmed (Winsorized) at the 95th percentile (Tukey, 1962).
- (3) The p-value in the rightmost column compares the overall mean of modestly-prepared students to the overall mean of well-prepared students.
- (4) The global F-test includes all above measures except terms of prior enrollment.
- (5) "Modestly-prepared" students did not receive the Academic Competitiveness Grant (ACG) in 2008-09, while "well-prepared" students received the grant.

### Appendix A.6. Predicting Educational Outcomes Based on Baseline Characteristics.

Outcome	Subsample 2				Modestly-prepared students				Well-prepared students				
	T	C	Impact	SE	T	C	Impact	SE	T	C	Impact	SE	
<u>Fall 2008</u>													
Enrolled (NSC)	98.2	98.3	-0.1	0.2	100.4	99.3	1.1	0.5	**	98.0	98.0	0.0	0.2
Attempted credits	14.5	14.4	0.1	0.1	13.9	14.0	-0.1	0.2		14.6	14.5	0.1	0.1
Completed credits	14.2	14.1	0.1	0.1	14.2	14.0	0.2	0.5		14.2	14.2	0.0	0.1
1-11 credits (%)	9.4	10.0	-0.6	0.9	17.0	20.6	-3.6	4.0		7.8	7.4	0.4	0.9
12+ credits (%)	90.0	89.5	0.5	0.9	81.0	77.5	3.5	3.9		92.1	92.4	-0.3	0.9
Cumulative GPA	2.7	2.7	0.0	0.1	2.4	2.2	0.2	0.1	**	2.8	2.8	0.0	0.1
<u>Spring 2009</u>													
Enrolled (NSC)	96.5	96.3	0.2	0.3	96.7	92.5	4.2	1.8	**	97.2	97.3	-0.1	0.3
Attempted credits	14.2	14.1	0.1	0.1	12.8	12.8	0.0	0.3		14.5	14.4	0.1	0.1
Completed credits	12.9	12.9	0.0	0.1	11.0	10.7	0.3	0.4		13.4	13.4	0.0	0.1
1-11 credits (%)	15.0	14.9	0.1	1.0	27.0	25.9	1.1	3.2		12.8	12.2	0.6	1.0
12+ credits (%)	80.6	80.5	0.1	1.0	65.3	61.4	3.9	4.0		84.5	85.1	-0.6	1.0
Cumulative GPA	2.6	2.6	0.0	0.1	2.3	2.2	0.1	0.1		2.7	2.7	0.0	0.1
<u>Fall 2009</u>													
Enrolled (NSC)	90.1	89.9	0.2	0.6	81.1	77.7	3.4	3.6		92.6	92.8	-0.2	0.5
Attempted credits	12.5	12.4	0.1	0.1	9.9	9.8	0.1	0.7		13.0	13.0	0.0	0.1
Completed credits	11.5	11.4	0.1	0.1	8.5	8.5	0.0	0.6		12.0	12.0	0.0	0.2
1-11 credits (%)	13.0	12.8	0.2	0.8	17.6	17.0	0.6	3.9		11.8	11.8	0.0	0.8
12+ credits (%)	70.4	69.8	0.6	1.2	51.5	50.7	0.8	4.6		74.1	74.5	-0.4	1.3
Cumulative GPA	2.6	2.6	0.0	0.1	2.2	2.1	0.1	0.1		2.7	2.7	0.0	0.1



**Appendix A.6. Predicting Educational Outcomes Based on Baseline Characteristics (Continued).**

Outcome	Subsample 2				Modestly-prepared students				Well-prepared students				
	T	C	Impact	SE	T	C	Impact	SE	T	C	Impact	SE	
<u>Spring 2010</u>													
Enrolled (NSC)	86.8	87.0	-0.2	0.6	71.8	73.6	-1.8	3.8	90.0	90.2	-0.2	0.7	
Attempted credits	11.5	11.4	0.1	0.1	8.7	9.1	-0.4	0.7	12.0	12.0	0.0	0.2	
Completed credits	10.7	10.7	0.0	0.1	7.2	7.8	-0.6	0.6	11.3	11.4	-0.1	0.2	
1-11 credits (%)	10.8	10.2	0.6	0.5	17.2	16.7	0.5	2.9	9.8	8.6	1.2	0.6	**
12+ credits (%)	67.8	68.2	-0.4	1.0	42.7	46.2	-3.5	3.5	71.7	73.5	-1.8	1.2	
Cumulative GPA	2.6	2.6	0.0	0.1	2.3	2.2	0.1	0.1	2.7	2.7	0.0	0.1	
<u>Fall 2010</u>													
Enrolled (NSC)	83.3	83.5	-0.2	0.8	65.0	73.1	-8.1	4.9	85.8	86.1	-0.3	0.8	
Attempted credits	10.8	10.7	0.1	0.1	7.0	8.3	-1.3	0.7	* 11.3	11.3	0.0	0.1	
Completed credits	9.9	9.9	0.0	0.2	6.3	7.1	-0.8	0.8	10.5	10.5	0.0	0.2	
1-11 credits (%)	13.0	13.5	-0.5	0.9	16.7	18.2	-1.5	2.6	11.2	12.4	-1.2	1.0	
12+ credits (%)	59.9	59.1	0.8	1.4	33.0	37.1	-4.1	4.9	65.1	64.4	0.7	1.5	
Cumulative GPA	2.6	2.6	0.0	0.1	2.3	2.2	0.1	0.1	2.7	2.7	0.0	0.1	
<u>Spring 2011</u>													
Enrolled (NSC)	81.6	82.3	-0.7	0.9	61.8	65.7	-3.9	4.8	85.7	86.3	-0.6	0.8	
Attempted credits	10.4	10.4	0.0	0.1	6.4	7.5	-1.1	0.7	11.0	11.1	-0.1	0.1	
Completed credits	9.5	9.6	-0.1	0.2	5.6	6.5	-0.9	0.7	10.2	10.3	-0.1	0.2	
1-11 credits (%)	10.6	10.4	0.2	0.6	15.8	17.1	-1.3	2.9	9.0	8.8	0.2	0.5	
12+ credits (%)	60.7	61.3	-0.6	1.1	32.2	37.0	-4.8	4.4	66.3	67.2	-0.9	1.2	
Cumulative GPA	2.6	2.6	0.0	0.1	2.3	2.2	0.1	0.1	2.7	2.7	0.0	0.1	

**Appendix A.6. Predicting Educational Outcomes Based on Baseline Characteristics (Continued).**

Outcome	Subsample 2				Modestly-prepared students				Well-prepared students			
	T	C	Impact	SE	T	C	Impact	SE	T	C	Impact	SE
<u>Cumulative Outcomes (2008-2011)</u>												
Completed credits	70.2	70.0	0.2	0.7	54.3	55.9	-1.6	2.8	73.1	73.4	-0.3	0.7
1-71 credits (%)	35.0	34.8	0.2	1.2	65.5	58.4	7.1	5.1	30.1	29.0	1.1	1.3
72+ credits (%)	64.9	65.1	-0.2	1.2	34.0	41.2	-7.2	5.1	69.9	71.0	-1.1	1.3
Number of semesters	5.4	5.4	0.0	0.1	4.8	4.8	0.0	0.1	5.5	5.5	0.0	0.1
Cumulative GPA	2.6	2.6	0.0	0.1	2.3	2.2	0.1	0.1	2.7	2.7	0.0	0.1
Ever transferred (%)	22.5	22.6	-0.1	0.8	26.8	24.8	2.0	4.2	22.6	22.1	0.5	1.0
Sample Size	348	462			66	110			282	352		

SOURCES: Enrollment measures come from the National Student Clearinghouse and includes enrollment anywhere. Completed credits and grades are from the University of Wisconsin System; credits and grades attained elsewhere are not observed.

NOTES:

- (1) All GPA and credit outcomes are for GPA-bearing credits only and are trimmed to remove unlikely or impossible reports.
- (2) \* signifies  $p < .10$ , \*\* signifies  $p < .05$ , and \*\*\* signifies  $p < .01$ .
- (3) All outcomes are estimated using the control group and then predicted out-of-sample to the treatment group.
- (4) Outcomes are predicted using parental education, race, gender, age, EFC, and college fixed effects.
- (5) "Modestly-prepared" students did not receive the Academic Competitiveness Grant (ACG) in 2008-09, while "well-prepared" students received the grant.
- (6) The number of semesters refers to fall and spring semesters only.

**Appendix A.7. Covariate-Adjusted Change in Financial Aid Package by Treatment Status and Academic Preparation.**

	Subsample 2		Modestly-prepared		Well-prepared		Diff.			
	Impact	SE	Impact	SE	Impact	SE	p-value			
<u>Panel 1. Change between 2008-09 and 2009-10.</u>										
Total financial aid received (\$)	-828.9	329.0	**	27.5	718.2		-926.8	357.0	**	0.233
Wisconsin Scholars Grant (%)	-15.2	2.0	***	-11.3	3.8	***	-15.4	2.2	***	0.358
Avg. amount of WSG (\$)	-651.3	71.2	***	-517.1	141.5	***	-653.0	78.9	***	0.401
Federal Pell Grant (%)	0.2	2.6		0.7	3.8		-0.4	3.0		0.824
Avg. amount of Pell (\$)	-115.4	128.9		176.3	273.1		-146.4	142.4		0.294
Wisconsin Higher Ed. Grant (%)	4.7	3.4		3.1	9.2		2.4	3.6		0.936
Avg. amount of WHEG (\$)	81.7	85.9		263.5	238.7		19.1	91.5		0.338
Supp. Ed. Opportunity Grant (%)	6.8	4.6		25.1	12.0	**	4.1	5.0		0.104
Avg. amount of SEOG (\$)	44.0	36.9		80.4	93.0		49.7	40.7		0.762
Acad. Competitiveness Grant (%)	3.4	4.1		2.3	4.4		2.5	4.0		0.963
Avg. amount of ACG (\$)	26.2	42.7		23.8	54.4		21.3	47.1		0.972
Other grants and scholarships (%)	-4.4	4.1		8.1	9.7		-6.4	4.4		0.174
Avg. amount of other grants (\$)	-93.7	112.5		-277.3	431.6		-3.3	107.2		0.537
Any grants or scholarships (%)	-0.6	2.2		-2.9	3.2		-0.2	2.5		0.501
Avg. amount of grant aid (\$)	-708.4	291.6	**	-250.3	666.6		-712.6	315.4	**	0.530
Subsidized federal loan (%)	-2.6	3.2		-8.7	6.0		-1.5	3.6		0.305
Avg. amount of sub. (\$)	-95.5	140.6		-252.6	264.3		-59.0	162.2		0.532
Unsubsidized federal loan (%)	-7.2	4.1	*	-0.8	9.1		-8.7	4.5	*	0.438
Avg. amount of unsub. (\$)	-34.9	116.3		264.0	308.6		-109.4	126.4		0.262
Non-federal loans (%)	1.4	1.5		4.4	2.8		0.9	1.8		0.296
Avg. amount of non-fed. loan (\$)	3.0	73.4		170.7	109.3		-31.4	89.8		0.153
Any loans (%)	-2.6	3.0		-5.8	6.4		-2.6	3.3		0.650
Avg. amount of loans (\$)	-105.8	215.9		298.8	506.7		-193.4	242.9		0.380
Federal Work-Study (%)	0.6	3.0		0.5	4.4		0.3	3.3		0.978
Avg. amount of work study (\$)	26.6	39.8		-21.0	53.4		27.5	45.6		0.489
Financial aid application (if enrolled)										
Eligible for Pell Grant (%)	2.0	2.5		1.4	3.1		1.1	2.9		0.940
Expected family contribution (\$)	-46.5	335.0		-161.4	299.2		4.7	400.1		0.740
Zero EFC (%)	-0.1	3.1		8.1	8.8		-2.0	3.2		0.281
Sample Size	698			142			556			

**Appendix A.7. Covariate-Adjusted Change in Financial Aid Package by Treatment Status and Academic Preparation (Cont)**

	Subsample 2		Modestly-prepared		Well-prepared		Diff.			
	Impact	SE	Impact	SE	Impact	SE	p-value			
<u>Panel 2. Change between 2009-10 and 2010-11.</u>										
Total financial aid received (\$)	-725.9	448.7		471.8	1083.1		-857.3	493.2	*	0.263
Wisconsin Scholars Grant (%)	-21.2	2.6	***	-23.6	6.0	***	-20.3	2.9	***	0.617
Avg. amount of WSG (\$)	-667.3	80.2	**	-825.5	167.7	***	-630.5	91.3	***	0.306
Federal Pell Grant (%)	-2.4	3.7		12.2	7.7		-3.5	4.2		0.071
Avg. amount of Pell (\$)	-124.6	164.5		344.9	357.1		-203.7	181.2		0.170
Wisconsin Higher Ed. Grant (%)	-4.8	4.2		5.4	8.8		-4.7	4.7		0.307
Avg. amount of WHEG (\$)	-41.0	90.0		12.0	190.1		-32.8	98.8		0.834
Supp. Ed. Opportunity Grant (%)	-8.2	4.0	**	-9.8	8.8		-7.5	4.5	*	0.816
Avg. amount of SEOG (\$)	-58.1	29.2	**	-49.4	60.7		-62.6	33.1	*	0.848
Acad. Competitiveness Grant (%)	-6.1	3.7		-7.6	5.5		-5.5	4.2		0.762
Avg. amount of ACG (\$)	-45.1	42.5		-78.4	67.2		-40.3	48.5		0.646
Other grants and scholarships (%)	3.1	3.6		7.1	7.7		2.5	4.0		0.587
Avg. amount of other grants (\$)	-61.7	109.3		192.7	227.8		-112.1	112.9		0.230
Any grants or scholarships (%)	-2.1	3.3		19.0	7.4	**	-5.0	3.8		0.004
Avg. amount of grant aid (\$)	-954.8	339.2	***	-335.1	657.0		-1043.2	375.0	***	0.349
Subsidized federal loan (%)	-2.9	3.9		19.9	8.2	**	-6.4	4.4		0.005
Avg. amount of sub. (\$)	48.8	182.2		511.5	373.9		-21.0	207.5		0.213
Unsubsidized federal loan (%)	3.0	4.0		15.3	11.6		3.0	4.3		0.322
Avg. amount of unsub. (\$)	61.0	124.2		-52.6	314.7		145.1	135.4		0.563
Non-federal loans (%)	-0.3	1.6		0.9	3.2		-0.6	1.8		0.689
Avg. amount of non-fed. loan (\$)	-50.0	78.3		61.4	117.8		-71.9	87.8		0.364
Any loans (%)	-2.3	3.8		19.0	8.1	**	-5.4	4.3		0.008
Avg. amount of loans (\$)	197.6	266.9		842.0	706.9		121.8	293.9		0.346
Federal Work-Study (%)	3.0	2.9		3.6	3.5		3.6	3.4		1.000
Avg. amount of work study (\$)	2.9	43.3		-13.8	61.6		18.2	49.6		0.685
Financial aid application (if enrolled)										
Eligible for Pell Grant (%)	-2.1	3.2		-8.8	4.3	**	0.4	3.7		0.104
Expected family contribution (\$)	187.8	378.3		825.9	424.9	*	76.7	433.1		0.217
Zero EFC (%)	3.5	3.0		-9.6	9.2		4.6	3.3		0.144
Sample Size	698			142			556			

**Appendix A.7. Covariate-Adjusted Change in Financial Aid Package by Treatment Status and Academic Preparation (Cont)**

	Subsample 2			Modestly-prepared			Well-prepared			Diff.
	Impact	SE		Impact	SE		Impact	SE		p-value
<u>Panel 3. Total FFWS and loans between 2008-09 and 2010-11.</u>										
Wisconsin Scholars Grant (%)	92.5	1.4	***	90.4	3.5	***	92.7	1.5	***	0.550
Total amount of WSG (\$)	7132.0	188.7	***	7163.7	427.5	***	7128.7	211.4	***	0.942
Any loans (%)	-5.5	2.6	**	-11.0	6.8		-5.4	2.7	**	0.445
Total amount of loans (\$)	-3233.2	546.2	***	-795.8	1291.5		-3731.5	595.3	***	0.039
Any subsidized federal loans (%)	-6.0	2.6	**	-12.0	7.0	*	-5.4	2.7	**	0.379
Total amount of sub. (\$)	-2419.3	360.8	***	-1003.2	836.0		-2689.5	396.6	***	0.068
Any unsubsidized fed. loans (%)	-12.3	3.5	***	-5.0	7.3		-14.3	4.0	***	0.262
Total amount of unsub. (\$)	-615.9	213.7	***	-20.5	464.2		-754.6	237.5	***	0.159
Sample Size	810			176			634			

Notes:

- (1) Panels 1 and 2 are conditional on enrollment in 2009-10, while panel 3 is conditional on 2008-09 enrollment.
- (2) \* signifies  $p < .10$ , \*\* signifies  $p < .05$ , and \*\*\* signifies  $p < .01$ .
- (3) The p-value represents a test for differences in T-C impacts between modestly and well-prepared students.
- (4) "Modestly-prepared" students did not receive the Academic Competitiveness Grant (ACG) in 2008-09, while "well-prepared" students received the grant.
- (5) Regression estimates are adjusted for parental education, race, gender, age, EFC, and college fixed effects.
- (6) The WHEG is the Wisconsin equivalent of the Pell Grant, but is not an entitlement.

**Appendix A.8. Covariate-Adjusted Impacts on Educational Outcomes Over Three Years by Treatment Status and Academic Preparation.**

Outcome	Subsample 2		Modestly-prepared		Well-prepared		Diff. p-value	
	Impact	SE	Impact	SE	Impact	SE		
<u>Fall 2008</u>								
Enrolled (NSC)	-0.2	1.0	0.2	0.7		-0.1	1.1	0.837
Attempted credits	0.1	0.1	0.0	0.3		0.2	0.1	0.676
Completed credits	0.2	0.2	0.5	0.6		0.1	0.2	0.558
1-11 credits (%)	-0.9	1.9	-3.4	5.7		0.3	2.0	0.543
12+ credits (%)	0.9	2.0	5.5	5.7		-0.8	2.0	0.298
Cumulative GPA	0.0	0.1	0.3	0.2	*	-0.1	0.1	0.040
<u>Spring 2009</u>								
Enrolled (NSC)	-0.1	1.3	4.7	3.5		-1.3	1.4	0.112
Attempted credits	0.0	0.2	1.1	0.7		-0.3	0.2	0.054
Completed credits	-0.1	0.3	1.1	0.8		-0.4	0.3	0.097
1-11 credits (%)	1.1	2.5	-2.9	7.0		1.6	2.7	0.552
12+ credits (%)	-2.8	2.8	5.0	7.3		-5.1	3.0	* 0.202
Cumulative GPA	0.0	0.1	0.4	0.1	**	0.0	0.1	0.009
<u>Fall 2009</u>								
Enrolled (NSC)	-0.6	2.2	12.2	5.6	**	-3.5	2.3	0.010
Attempted credits	0.0	0.4	2.0	1.0	**	-0.3	0.4	0.028
Completed credits	0.1	0.4	2.0	1.0	*	-0.1	0.4	0.055
1-11 credits (%)	-1.3	2.4	-5.0	6.4		-0.4	2.6	0.512
12+ credits (%)	1.8	3.3	19.0	8.0	**	-1.1	3.5	0.022
Cumulative GPA	0.0	0.1	0.4	0.1	***	-0.1	0.1	0.003
<u>Spring 2010</u>								
Enrolled (NSC)	-0.5	2.5	21.0	6.1	***	-4.2	2.6	<0.001
Attempted credits	-0.1	0.4	2.2	1.1	**	-0.4	0.5	0.031
Completed credits	-0.7	0.5	2.0	1.1	*	-1.0	0.5	** 0.009
1-11 credits (%)	4.9	2.4	** 4.2	6.7		4.3	2.6	* 0.981
12+ credits (%)	-7.8	3.5	** 13.0	8.3		-10.3	3.8	*** 0.011
Cumulative GPA	0.0	0.1	0.3	0.1	**	-0.1	0.1	0.005
<u>Fall 2010</u>								
Enrolled (NSC)	-2.1	2.8	15.4	6.8	**	-4.0	3.0	0.009
Attempted credits	-0.4	0.5	2.5	1.2	**	-0.8	0.5	0.011
Completed credits	-0.1	0.5	2.4	1.2	**	-0.6	0.5	0.020
1-11 credits (%)	-2.4	2.4	-2.2	5.8		-1.7	2.6	0.934
12+ credits (%)	0.4	3.5	20.7	7.9	**	-3.5	3.9	0.006
Cumulative GPA	0.0	0.1	0.3	0.1	**	-0.1	0.1	0.008

**Appendix A.8. Covariate-Adjusted Impacts on Educational Outcomes Over Three Years by Treatment Status and Academic Preparation (Continued).**

Outcome	Subsample 2		Modestly-prepared			Well-prepared		Diff. p-value	
	Impact	SE	Impact	SE		Impact	SE		
<u>Spring 2011</u>									
Enrolled (NSC)	-2.9	2.9	20.4	7.1	***	-6.8	3.1	**	0.001
Attempted credits	-0.6	0.5	2.3	1.1	**	-1.1	0.5	**	0.006
Completed credits	-0.8	0.5	1.6	1.1		-1.1	0.5	**	0.031
1-11 credits (%)	-0.6	2.2	3.3	6.6		-0.9	2.2		0.547
12+ credits (%)	-5.7	3.6	9.2	8.3		-8.2	3.9	**	0.057
Cumulative GPA	0.0	0.1	0.3	0.1	**	-0.1	0.1		0.010
<u>Cumulative Outcomes (2008-2011)</u>									
Completed credits	-1.3	1.9	10.0	4.4	**	-3.3	2.0		0.006
1-71 credits (%)	6.8	3.5	**	-9.8	7.9	9.2	3.8	**	0.031
72+ credits (%)	-7.0	3.5	**	10.2	7.9	-9.6	3.8	**	0.024
Number of semesters	-0.1	0.1	0.7	0.2	***	-0.2	0.1	*	<0.001
Cumulative GPA	0.0	0.1	0.3	0.1	**	-0.1	0.1		0.010
Ever transferred (%)	0.3	3.1	-2.3	8.2		-0.4	3.4		0.829
Sample Size	810		176			634			

SOURCES: Enrollment measures come from the National Student Clearinghouse and includes enrollment anywhere. Completed credits and grades are from the University of Wisconsin System; credits and grades attained elsewhere are not observed.

NOTES:

- (1) All GPA and credit outcomes are for GPA-bearing credits only and are trimmed to remove unlikely or impossible reports.
- (2) \* signifies  $p < .10$ , \*\* signifies  $p < .05$ , and \*\*\* signifies  $p < .01$ .
- (3) The p-value represents a test for differences in T-C impacts between modestly and well-prepared students.
- (4) "Modestly-prepared" students did not receive the Academic Competitiveness Grant (ACG) in 2008-09, while "well-prepared" students received the grant.
- (5) Regression estimates are adjusted for parental education, race, gender, age, EFC, and college fixed effects.
- (6) The number of semesters refers to fall and spring semesters only.

**Appendix A.9. Covariate-Adjusted Impacts on Work and Study Outcomes Over Two Years by Treatment Status and Academic Preparation.**

Outcome	Subsample 2		Modestly-prepared		Well-prepared		Diff. p-value			
	Impact	SE	Impact	SE	Impact	SE				
<u>Fall 2008</u>										
Worked (%)	-5.2	4.2	-15.2	10.4	-2.8	4.6	0.274			
Worked on campus (%)	-1.7	3.3	-3.7	5.4	-1.9	3.7	0.781			
Worked off campus (%)	-6.4	3.7	*	-11.1	10.3	-4.3	4.1	0.538		
Hours worked	-0.8	0.7	-2.2	1.7	-0.5	0.8	0.361			
Hours worked on campus	-0.1	0.3	-0.4	0.4	-0.1	0.4	0.657			
Hours worked off campus	-0.5	0.7	-1.5	1.7	-0.3	0.7	0.528			
Worked 20+ hours per week (%)	-3.5	2.6	-4.8	5.2	-3.4	2.9	0.815			
Hours studied in last 24 hours	0.1	0.2	0.4	0.5	0.1	0.2	0.598			
<u>Fall 2009</u>										
Worked (%)	-7.1	4.1	*	-8.4	10.6	-7.4	4.6	0.927		
Worked on campus (%)	0.3	3.3		3.9	7.0	-0.7	3.8	0.561		
Worked off campus (%)	-6.8	4.0	*	-11.7	10.1	-6.6	4.5	0.645		
Hours worked	-2.5	0.9	***	-6.7	2.4	***	-2.0	1.0	**	0.069
Hours worked on campus	-0.1	0.4		-0.4	0.9		-0.2	0.4		0.773
Hours worked off campus	-2.4	0.9	***	-6.3	2.4	***	-1.9	1.0	*	0.087
Worked 20+ hours per week (%)	-7.3	3.4	**	-23.3	8.4	***	-5.2	3.6		0.048
Hours studied in last 24 hours	0.2	0.2		0.6	0.5		0.2	0.2		0.495
<u>Change between fall 2008 and fall 2009</u>										
Worked (%)	-3.3	5.0		5.7	11.5	-5.6	5.6			0.378
Worked on campus (%)	2.9	3.5		10.9	7.8	1.8	3.9			0.299
Worked off campus (%)	-1.0	4.6		-2.2	9.2	-2.9	5.2			0.947
Hours worked	-2.0	1.0	**	-5.4	2.0	***	-1.8	1.1	*	0.101
Hours worked on campus	0.1	0.4		0.1	0.8		0.0	0.4		0.955
Hours worked off campus	-2.0	0.9	**	-5.9	1.9	***	-1.6	1.0		0.050
Worked 20+ hours per week (%)	-3.9	3.7		-22.4	8.4	***	-1.4	4.0		0.024
Hours studied in last 24 hours	0.2	0.2		0.2	0.7		0.1	0.2		0.843
Maximum sample size	661			128			533			

SOURCE: Fall 2008/2009 WSLs surveys

NOTES:

- (1) All outcomes are trimmed to remove unlikely or impossible reports.
- (2) \* signifies  $p < .10$ , \*\* signifies  $p < .05$ , and \*\*\* signifies  $p < .01$ .
- (3) The p-value represents a test for differences in T-C impacts between modestly and well-prepared students.
- (4) The sample includes only students who responded to both the fall 2008 and fall 2009 surveys.
- (5) "Modestly-prepared" students did not receive the Academic Competitiveness Grant (ACG) in 2008-09, while "well-prepared" students received the grant.
- (6) Regression estimates are adjusted for parental education, race, gender, age, EFC, and college fixed effects.
- (7) The sample reported here is a subsample of subsample 2. The treatment and control groups are baseline equivalent; results available upon request.