Academic Benefits of Living On Campus

Pedro de Araujo*
Department of Economics and Business
Colorado College

James Murray†
Department of Economics
University of Wisconsin - La Crosse

June 21, 2010

Abstract

This research examines the academic benefits to college students living on campus and investigates why they may perform better in school. This paper addresses two channels to explain why living on campus may improve academic performance. First we examine whether on-campus students are more likely to take advantage of university provided resources (libraries, tutors, computer technology, university sponsored extracurricular activities, etc) than off-campus students. Secondly, we examine wheterh peer influences and interactions, including collaborative studying with friends and/or classmates and engagement in drug and alcohol consumption. Instrumental variables are used to account for the likely endogeneity of students' living decisions. We find evidence that living on campus causes an increase in student performance while they are living on campus, and in subsequent semesters even if they later move off campus. We identify significant peer-effect channels to explain why students that have lived on campus in the past perform better than others, but largely fail to identify channels explaining why students should immediately perform better while they live on campus.

Keywords: Student performance, dormitory, cross-section analysis, regression, instrumental variables.
JEL classification: C13, C21, I21.

Mailing address: 14 E. Cache La Poudre Street, Colorado Springs, CO 80903. *Phone*: (719)389-6470. *E-mail*: Pedro.deAraujo@ColoradoCollege.edu.
†*Mailing address*: 1725 State St., La Crosse, WI 54601. *Phone*: (608)406-4068. *E-mail*: murray.jame@uwlax.edu.

1 Introduction

Does living on campus help college students perform better in school? It is so widely believed that there are academic benefits to living on campus, that many colleges and universities require their students to live on campus during part and sometimes all of their college career. Most often, colleges and universities require traditional degree seeking students to live on campus during their freshman year. There are a number of studies published in education and economics literature that addresses this issue, but the results are mixed. Thompson, Samiratedu, and Rafter (1993) finds freshman that live on campus are more likely to remain in school, make more progress in their program, and have higher academic performance. Pascarella, Bohr, Nora, Zusman, Inman, and Desler (1993) also examined freshman students, but focused specifically on measures of critical thinking, reading comprehension, and mathematical skills. They find freshman students that lived on campus made larger gains in critical thinking skills, but had similar gains to off-campus students when it came to reading comprehension and mathematical skills. de Araujo and Murray (2010) examine whether living on campus causes an improvement in academic performance, recognizing the decision to live on campus may endogenously depend on a student's academic ability or ambition. They find that living on campus does have an immediate positive effect on academic performance and a permanent effect evidenced from higher academic performance for students that lived on campus during any part of their college career. Not all studies agree that living on campus improves academic performance. Delucchi (1993) examined a school where most students that technically live off campus nonetheless live in close walking distance of their classes and university resources and found no evidence that living on campus positively influences student performance.

In this paper we use the same data as de Araujo and Murray (2010) with the purpose to identify differences in social and academic behaviors between students that live on campus and off campus that may explain why students that live on campus are able to achieve higher levels of academic performance. This is perhaps the most critical issue to address if a college or university considers requiring its students to live on campus. Schroeder and Maple (1994) conclude that residence life administrators' responsibilities are far greater than

simply managing facilities; they have an ability and responsibility to create an environment that is conducive to learning. Schrager (1986) makes similar conclusions with fraternity and sorority houses. He finds that freshman achievement was highest in communities that emphasized academic achievement and competition and lowest in groups that emphasized traditional social interactions.

We examine two broad channels for which living on campus may lead to better academic performance: utilization of university resources and positive or negative peer effects. Students that live on campus might easily and productively take advantage of a number of university resources when doing school work. Libraries and technology labs in close proximity give students a quite environment to study or the means to acquire information for their school work, or the technology tools to complete their assignments. Kuh and Hu (2001b) find when students devote more effort to learning communication and information technologies they devote more effort to their studies in general. They also find that students who benefit most from technology are those who use it in a variety of ways. On-campus students may be the most likely candidates to fall into this category due to their close proximity to university provided library and technology resources. In the analysis below, we examine how living on campus influences the total time students spend using these resources.

We also examine whether living on campus influences the frequency with which students meet faculty outside of class. Pascarella and Terenzini (1991), Astin (1993) and Kuh and Hu (2001a) all find that faculty/student interaction of an academic nature improves student performance and student satisfaction. Kuh and Hu further find that students' interaction with faculty out of class positively influences effort put forth by students.

Even non-academic university resources may help improve students performance. Toutkoushian and Smart (2001) find that increasing institutional spending leads to gains in students' learning as well as their interpersonal skills. However, they find that allocating more money specifically to academic support does not necessarily improve learning. Non-academic resources we consider in this paper include university sponsored clubs and organizations (admittedly, these do include some academic clubs, but there are also many that are social in nature and based on common interests and activities) and use of university provided fitness resources. In our analysis below, we consider the total time students spend using any fitness

resources, whether provided on campus or not, to determine if the availability and convenience of on-campus fitness resources leads to an increase in the amount students choose to exercise.

Besides providing food and shelter, residence hall administrators provide a variety of activities and services to create an environment that causes students to develop close relationships with each other and which encourages students to study and socialize together. The dynamics of social interactions and the influence of peers are likely to be different in on-campus dormitories than off-campus apartments.

A large literature has examined our second channel, the impacts peers have on students educational achievement, though most of the literature focuses on peer effects in primary and secondary school (see for example Coleman (1966), Henderson, Mieszkowski, and Sauvageau (1978), Epple and Romano (1998), and Hanushek, Kain, Markman, and Rivkin (2003)). Lately some authors are examining post-secondary education, such as Toutkoushian and Smart (2001), and Zimmerman (2003). The general finding in this literature is that peer influences do exist, but the extent to which these are positive or negative is somewhat mixed. Henderson, Mieszkowski, and Sauvageau (1978) find statistical evidence that positive peer effects are greater than negative peer effects. That is, the positive influence of students who have more academic success is likely to be larger than the negative influence of students who have lesser academic success. Betts and Morell (1999) find a somewhat contradictory result when following high school students through college. They find that negative influences of students' high school peers have persistent negative impacts on the students' college academic performance. Zimmerman (2003) finds that the college students who are most influenced by their peers, either positively or negatively, are those whose SAT scores were in the middle of the distribution.

In the analysis below, we do not specifically look at data on students' peers, but we examine how living on-campus influences a handful of activities that are influenced by one's peers including the amount students drink alcohol, the use of other illegal drugs, how much students study with other students in their same classes, and how much students study with their roommates.

2 Data and Methodology

Survey data was collected in Fall 2008 from undergraduate students at Indiana University Purdue University - Indianapolis (IUPUI) in their sophomore year and above. There were approximately 30,000 undergraduate students at the time, and about 19,700 students were under the age of 25 (the population of students most likely to consider living on campus). The university does not require students to live on campus during any part of their college career, and on-campus housing space is extremely limited with space for only 1,107 students. A survey that takes about 15 minutes to complete was sent to 6,000 students. The survey collected self-reported data on a variety of issues including students' academic performance, background characteristics, living situations, study habits, and social behavior. Of the students surveyed, 363 completed the questionnaire. Approximately 15% of the students who completed the survey had lived on campus during some part of their time at IUPUI, which is consistent with the population of IUPUI students.

To determine the impact of living on campus can have on academic performance, we proceed in two steps. In the first step we show that living on campus does cause an increase in academic performance as measured by cumulative and single semester GPA. Secondly we estimate a number of models that predict the peer effects and utilization of university resources channels that may influence academic performance. The peer effects we examine include the number of hours per week a student spends studying with roommates ($STUDROOM$), the number of hours per week a student spends studying with students in the same classes ($STUDCLASS$), the average amount of alcohol a student drinks each week ($DRINKS$), and whether or not a student engaged in drug use while a student at IUPUI ($DRUGS$). University resources we examine include the number of hours per week students see tutors ($TUTORS$); the number of hours students spend using libraries, university technology, or studying elsewhere on-campus besides their residence ($STUDCAMPUS$); whether or not students engage in extra-curricular activities ($EXTRACUR$); and the number of hours students spend using fitness resources ($FITNESS$). Finally, we also examine whether living on campus influences the average number of hours students spend studying each week ($STUDY$).

When showing that living on campus does positively influence student performance, our explanatory variables of primary interest are whether the student was living on campus during the Spring 2008 semester for which data the latest GPA is available ($DORM\_S08$), and whether the student had ever lived on campus ($DORM\_EVER$). The latter is used to identify whether there may be permanent academic benefits from living on campus. It may be the relatively high academic achievement while living on campus continues to motivate students in subsequent years in which they live off campus. Alternatively or additionally, study skills and/or social behaviors that are conducive to learning and which were developed while living on campus may have stayed with students through their academic career, even though students subsequently moved off campus.

We include a number of control variables in all the analysis below which might arguably influence student performance and the number of channels we investigate in this paper, including gender ($GENDER$); parent's income ($PINC$); SAT/ACT standardized test percentiles ($TEST$); the total number of semester the student has been enrolled at IUPUI ($TSEM$); a dummy if the student is over the age of 25, typically indicating the student is a non-traditional student (NTS);[1] and an interaction between TSEM and TEST, to allow for the possibility standardized test scores are weaker predictors the longer amount of time the student has been in college.

When measuring parents' combined income using a survey administered to students, the students were asked to identify one of several income range categories that described their parents income. Each category included a range of $20,000, and the final category was "More than $200,000". The PINC variable is coded using the midpoint from each category. In the event the student selected the final category, the midpoint from the second highest category was entered for PINC, and a dummy variable, $PINC\_d$ was set equal to 1.

[1] Only a dummy for being over the age of 25 and not actual age is included in the regressions for two reasons. First, any linear relationship coming from age likely diminishes by the time students reach the age of 25, an age which typically categorizes a person as a non-traditional student. Secondly, for students under the age of 25, the total number of semesters they have attended IUPUI ($TSEM$) is very highly correlated with age.

2.1 Student Achievement

The structural equation for the relationship between student performance and living arrangements is given by,

$$GPA_i = \alpha + \beta DORM_i + X_i'\Omega + \epsilon_i, \tag{1}$$

where subscript i denotes an individual student; GPA_i is an individual student's cumulative GPA or Spring 2008 semester GPA, each examined in turn; and $DORM_i$ is a dummy variable that is set equal to 1 to indicate a student lived on campus. The timing in which the student lived on campus will vary with two specifications of the model. In the first specification we use cumulative GPA as the dependent variable, and $DORM_i$ is set to 1 if a student lived on campus during any part of their time at IUPUI. This specification allows us to estimate permanent academic benefits from living on campus. In the second specification we use the GPA from only courses completed in the Spring 2008 semester (i.e. semester GPA), and $DORM_i$ is set to 1 only if a student lived on campus during the Spring 2008 semester. The vector X_i includes the controls discussed in the previous section.

An endogeneity problem occurs if $E(\epsilon_i|DORM_i) \neq 0$, that is when the student's choice to live on campus depends on characteristics that influence his or her academic success, like motivation, parental influence, and incoming ability. If the vector of control variables include all such influences, then the error term will be independent from whether or not a student lives on campus, and ordinary least squares (OLS) estimates will be unbiased and consistent (this method is referred to as the control function approach Cameron and Trivedi (2005)). A number of the control variables to aid in explaining students incoming ability and motivation such as the student's ACT/SAT test scores, his or her parent's incomes, and whether or not he or she is a non-traditional student.

In case these controls fall short of explaining the endogenous decision to live on campus, in addition to reporting OLS results, we estimate the model with two instrumental variables: the distance of IUPUI from the student's hometown ($DIST$) and a dummy variable for whether or not students were denied access to dormitories due to lack of space (DEN). With two instrumental variables and only one endogenous variable there are multiple estimation strategies to consider. de Araujo and Murray (2010) illustrate multiple modeling strategies

and show the result that living on campus leads to better GPA is quite robust. For this paper, we employ generalized method of moments procedure, which uses the condition $E(\epsilon_i|X_i) = 0$, where X_i is the vector that includes the exogenous regressors, X_i, and the two instrumental variables. This method involves the fewest assumptions, in that it does not require normality of error term as other methods based on maximum likelihood do.

2.2 Channels

We investigate how living on campus influences academic and social behaviors with the following structural equation,

$$y_i = \alpha + \beta DORM\_F08_i + \delta DORM\_PAST_i + X_i'\Omega + \epsilon_i, \tag{2}$$

where y_i is one of the channel variables (possibly a latent variable as discussed below); $DORM\_F08_i$ is a dummy variable equal to 1 if a student lived on campus during the Fall 2008 semester, the same semester that y_i applies to; and $DORM\_PAST_i$ is a dummy variable that is equal to 1 if a student lived on campus during any semester prior to Fall 2008. This specification allows us to determine what behaviors immediately change due to living on campus and what changes in behaviors are long lasting, even if a student subsequently moves off campus.

A number of the dependent variables we investigate as channels that lead to increased student performance are measured in terms number of hours per week, including how much does a student study, how much does a student study with roommates, how much does a student study with others in his or her same classes, how much time does a student spend using university provided academic resources, and how much does a student use fitness facilities. This data is both right-censored and left-censored, which means there is a lower boundary (left) and an upper boundary (right) that many of these variables can take. For example, many students in the sample spend zero hours studying with their roommate - especially true if the student doesn't have any roommates; others spend zero hours using fitness facilities. These example students are left-censored observations. Some of the data is also right-censored. To enforce responses that make sense, the online survey let the students

choose the number of hours per week from a drop down box that had a maximum response, "More than 20 hours per week". The students that do spend more than 20 hours with any of these activities are right-censored.

For our censored dependent variables, we run Tobit regressions that suppose the true value y_i above is unobservable, and the actual data we obtain, y_i^*, is generated according to,

$$y_i^* = \begin{cases} \underline{y}, & \text{if } y_i \leq \underline{y} \\ y_i & \text{if } 0 < y_i < \bar{y} \\ \bar{y}, & \text{if } y_i \geq \bar{y} \end{cases}, \tag{3}$$

where $\underline{y}$ is the smallest value the observable variable y_i^* can take, and $\bar{y}$ is the largest value the observable variable can take. The Tobit model uses the structure imposed by equations (2) and (3), with the assumption that ϵ_i is normally distributed, and estimates the parameters by maximum likelihood.

There are two other limited dependent variables, whether or not the student is involved in extra-curricular activities, and whether or not the student has ever engaged in illegal drug use while a student at IUPUI. For these we use Probit regressions. All other channels are estimated with OLS, using heteroskedastic robust standard errors.

3 Results

The results for how living on campus influences student performance are given in Table 1. We examine three specifications of the model to examine the possible short-run and long-run benefits of living on campus. The first two columns of Table 1 capture the long-run impact having ever lived on campus can have on students' cumulative GPA. The coefficients on having lived on campus are statistically significant under both OLS and IV/GMM indicating there is evidence that living on campus can lead to a permanent improvement in GPA. Control variables which are also found to be statistically significant include gender (women perform better than men) and ACT/SAT scores, although the coefficients on this variable is very small. The middle two columns are the regression results for having ever lived in a dorm impacting Spring 2008 Semester GPA. Again the coefficients on having lived on campus at

any time are statistically significant, indicating the benefits of having ever lived on campus can even be seen in a single semester's GPA. Other significant explanatory variables include gender and whether or not the student is over age 25. The last two columns estimate the immediate effect living on campus can have. For these regressions, the dependent variable is Spring 2008 Semester GPA and the explanatory variable is whether or not the student lived on campus during that same semester. The coefficients on living on campus are again statistically significant, indicating living on campus does immediately improve academic performance. Again, gender and being over the age of 25 are also significant explanatory variables.

Having established living on campus can lead to immediate and permanent improvements in academic performance, the question remains why. Are students that live on campus take more advantage of academic and heath (fitness)resources that are provided by the university? The results in Table 2 shed some light on this question. For all regressions, both living on campus during Fall 2008 Semester ($DORM\_F08$) and having ever lived on campus prior to that semester ($DORM\_PAST$) are included as explanatory variables, to determine whether the effect is immediate, long-lasting, or both. Some of the results have the opposite sign as expected. The first column indicates that students that currently live on campus are actually less to use fitness resources provided by the university, so this is not a channel for which on-campus students are able to perform better. The second column shows that students that have lived on campus in the past are actually less likely to see tutors for their courses. The coefficient for currently living on campus is not significantly different from zero, indicating students currently living on campus are no more or less likely to see tutors than students that live off campus. Finally, the coefficient on currently living on campus for the number of hours students spend studying in libraries, computer labs, or elsewhere on campus besides their dorm (fourth column) is negative and statistically significant, indicating students living on campus are actually using these resources less than students that live on campus. As the coefficient on currently living on campus for how much students study is not statistically significant, it is likely these are spending relatively more time doing school work in the facilities provided in their dormitory. The results in the third column show that students that live on campus, or have ever lived on campus, are more likely to participate in

extracurricular activities.

IUPUI is located near the center of downtown Indianapolis, and many students that live off campus are nonetheless in close walking distance of campus, so perhaps it is not surprising that students that live on campus are no more likely to use many of the university's resources than students that live off campus. However, living on campus may positively influence students' social relationships in a way that fosters learning. Dormitories are typically much more single room apartments. Campus housing administrators do a number of activities to create a community of college students that encourages studying, healthy relationships, and positive activities. The results in Table 3 answer whether students that have lived on campus are less likely to engage in unhealthy habits like drugs and alcohol, and whether they are more likely to involve their peers (roommates and classmates) when studying. With the exception of drug use, all other coefficients on having lived on campus in the past are statistically significant, and have the expected sign. Students that have lived on campus consume less alcohol on average, and study more with their classmates and with their roommates. It is interesting to note that these coefficients are only significant for whether students have lived on campus in the past, they are not significant for whether the student currently lives on campus. Therefore, these are long-lasting positive effects from living on campus that wouldn't immediately lead to an increase in student performance, but likely have a positive impact in the long-run.

4 Conclusion

We find evidence that living on campus causes college students to perform better in school. Not only is there an immediate effect (living on campus leads to an increase in GPA during the same semester), we find evidence for a permanent effect (having lived on campus at any time is shown to increase cumulative and semester GPA). To determine why students that live on campus perform better, we investigate whether students that live on campus are more likely to use university provided resources and whether they are more likely to have healthy social habits such as working on school work with roommates and classmates and refraining from drugs and alcohol. We find no evidence that students that live on campus use university

resources any differently than students that live off campus, except that students that live on campus are more likely to engage in extra curricular activities. However, we do find significant evidence of long-run benefits of living on campus on students' social behaviors. Students that have lived on campus in the past consume less alcohol on average than other students, and spend more time studying along with roommates and students in their same classes. We therefore are able to identify one channel for why students that live on campus have higher academic performance in the long-run, but largely fail to identify a channel to explain why students that live on campus are able to perform better immediately.

References

Astin, A. W. (1993): What Matters in College: Four critical Years Revisited. Jossey-Boss, San Francisco.

Betts, J. R., and D. Morell (1999): "The Determinants of Undergraduate Grade Point Average: The Relative Importance of Family Background, High School Resources, and Peer Group Effects," Journal of Human Resources, 34, 268–293.

Cameron, A. C., and P. K. Trivedi (2005): Microeconometrics: Methods and Applications. Cambridge University Press, New York.

——— (2009): Microeconometrics Using Stata. Stata Press, 1st edn.

Coleman, J. S. (1966): Equality of Educational Opportunity. U.S. Department of Health, Education, and Welfare, Office of Education, U.S. Government Printing Office.

de Araujo, P., and J. Murray (2010): "Estimating the Effects of Dormitory Living on Student Performance," Economics Bulletin, 30, 866–878.

Dellas, H., and P. Sakellaris (2003): "On the Cyclicality of Schooling: Theory and Evidence," Oxford Economics Papers, 55, 148–172.

Delucchi, M. (1993): "Academic Performance in a College Town," Education, 116.

Epple, D., and R. E. Romano (1998): "Competition Between Private and Public Schools, Vouchers, and Peer-Group Effects," American Economic Review, 88, 33–62.

Flowers, L. A. (2004): "Effects of Living on Campus on African American Students' Educational Gains in College," NASPA Journal, 41, 277–293.

Hanushek, E. A., J. F. Kain, J. M. Markman, and S. G. Rivkin (2003): "Does Peer Ability Affect Student Achievement?," Journal of Applied Econometrics, 18, 527–544.

Heckman, J. J. (1979): "Sample Selection Bias as a Specification Error," Econometrica, 47, 153–161.

Henderson, V., P. Mieszkowski, and Y. Sauvageau (1978): "Peer Group Effects and Educational Production Functions," Journal of Public Economics, 10, 97–196.

Kanoy, K. W., and J. W. Bruhn (1996): "Effects of a First-Year Living and Learning Residence Hall on Retention and Academic Performance," Journal of the Freshman Year Experience and Students in Transition, 8, 7–23.

Karemera, D., L. J. Reuben, and M. R. Sillah (2003): "The Effects of Academic Environment and Background Characteristics on Student Satisfaction and Performance: The Case of South Carolina State University School of Business," College Student Journal, 37, 298–308.

Kowack, K. W., and A. L. Hanson (1985): "Academic Achievement of Freshman as a Function of Residence Hall Housing," NASPA Journal, 22, 22–28.

Kuh, G. D., and S. Hu (2001a): "The Effects of Student-Faculty Interacation in the 1990s," Review of Higher Education, 24, 309–332.

——— (2001b): "The Relationship Between Computer and Information Technology Use, Selected Learning and Personal Development Outcomes, and Other College Experiences," Journal of College Student Development, 42, 217–232.

Kuh, G. D., C. R. Pace, and N. Vesper (1997): "The Development of Process Indicators to Estimate Student Gains Associated with Good Practices in Undergraduate Education," Research in Higher Education, 38, 435–454.

Lenning, O. T., L. A. Munday, O. B. Johnson, A. R. VanderWell, and E. J.

Brue (1975): The Many Faces of College Success and Their Nonintellective Correlates. American College Testing Program, Iowa City.

Pascarella, E., L. Bohr, A. Nora, B. Zusman, P. Inman, and M. Desler (1993): "Congnitive Impacts of Living on Campus versus Commuting to College," Journal of College Student Development, 34, 216–220.

Pascarella, E., and P. T. Terenzini (1991): How College Affects Students: Findings and Insights From Twenty Years of Research. Jossey-Bass, San Francisco.

Pike, G. R., and G. D. Kuh (2005): "First- and Second- Generation College Students: A Comparison of Their Engagement and Intellectual Development," Journal of Higher Education, 76, 276–301.

Sacerdote, B. (2001): "Peer Effects with Random Assignment: Results for Dartmouth Roommates," Quarterly Journal of Economics, 116, 681–704.

Sax, L. J., S. K. Gilmartin, and A. N. Bryant (2003): "Assessing Response Rates and Nonresponse Bias in Web and Paper Surveys," Research in Higher Education, 44, 409–432.

Schrager, R. H. (1986): "The Impact of Living Group Social Climate on Student Academic Performance," Research in Higher Education, 25, 265–276.

Schroeder, C. C., and P. Maple (1994): "Residence Halls and the College Experience: Past and Present," in Realizing the Educational Potential of Residence Halls, ed. by C. C. Schroeder, and P. Maple, pp. 107–132. Jossey-Bass, San Francisco.

Thompson, J., V. Samiratedu, and J. Rafter (1993): "The Effects of On-Campus Residence on First-Time College Students," NASPA Journal, 31, 41–47.

Toutkoushian, R. K., and J. C. Smart (2001): "Do Institutional Characteristics Affect Student Gains from College?," Review of Higher Education, 25, 39–61.

Wooldridge, J. M. (2002): Econometric Analysis of Cross Section and Panel Data. MIT Press, Cambridge, MA.

Zimmerman, D. J. (2003): "Peer Effects in Academic Outcomes: Evidence From a Natural Experiment," Review of Economics and Statistics, 85, 9–23.

Table 1: Impact of Living on Campus on Grade Point Average

Dependent Variable:	Cumulative GPA		Semester GPA		Semester GPA	
	OLS	IV/GMM	OLS	IV/GMM	OLS	IV/GMM
DORM_EVER	0.210**	0.448***	0.185*	0.416**	—	—
	[0.087]	[0.140]	[0.095]	[0.212]		
DORM_S08	—	—	—	—	0.303***	0.973*
					[0.096]	[0.526]
GENDER	-0.200**	-0.234***	0.247**	-0.262***	-0.261***	-0.297***
	[0.085]	[0.088]	[0.100]	[0.100]	[0.100]	[0.107]
PINC	-0.001	-0.001	-0.001	-0.0007	-0.0009	-0.0003
	[0.0009]	[0.0009]	[0.001]	[0.001]	[0.001]	[0.001]
PINC_d	0.065	-0.002	-0.006	-0.037	-0.010	-0.097
	[0.183]	[0.198]	[0.216]	[0.205]	[0.215]	[0.222]
NTS	0.027	0.078	0.216***	0.253*	0.199	0.239*
	[0.137]	[0.150]	[0.013]	[0.137]	[0.134]	[0.134]
TEST	0.004**	0.003*	0.002	0.001	0.002	0.0002
	[0.001]	[0.001]	[0.002]	[0.002]	[0.002]	[0.002]
TSEM	-0.010	-0.011	-0.017	-0.017	-0.017	-0.019
	[0.014]	[0.016]	[0.022]	[0.021]	[0.022]	[0.021]
TEST_TSEM	-0.0001	-0.00006	0.0001	0.0001	0.0001	0.0002
	[0.0002]	[0.0002]	[0.0002]	[0.0002]	[0.007]	[0.009]
CRED_S08	—	—	0.007	0.002	0.008	0.002
			[0.008]	[0.009]	[0.007]	[0.009]
N	227	226	217	216	217	216
Wald Chi	–	41.81***	—	24.5***	—	19.82***
F-stat	3.78***	—	2.59***	—	2.96***	—
R^2	0.122	0.088	0.096	0.068	0.107	0.099

Note: * significant at 10%; ** significant at 5%; *** significant at 1%. Standard errors in brackets.

Table 2: Impact of Living on Campus on Utilization of Campus Resources

Dependent Variable:	FITNESS	TUTORS	EXTRACUR	STUDCAMPUS	STUDY
Model:	Tobit	Robust OLS	Probit	Tobit	Tobit
DORM_F08	-3.687**	0.153	0.788*	-6.613***	-1.702
	[1.459]	[0.136]	[0.429]	[2.066]	[1.55]
DORM_PAST	0.023	-0.279**	0.937***	0.916	1.296
	[1.069]	[0.11]	[0.268]	[1.532]	[1.317]
GENDER	1.220	0.021	-0.355	3.400**	-0.219
	[0.887]	[0.183]	[0.215]	[1.427]	[0.992]
PINC	0.010	-0.002	0.000	0.0144	0.011
	[0.01]	[0.002]	[0.002]	[0.015]	[0.011]
PINC_d	-0.909	0.076	-0.416	-3.652	-0.954
	[1.736]	[0.289]	[0.475]	[2.338]	[2.18]
NTS	-1.665	-0.062	-0.278	-4.394***	1.041
	[1.126]	[0.298]	[0.311]	[1.554]	[1.557]
TSEM	0.136*	-0.015	-0.016	0.188	-0.123
	[0.077]	[0.012]	[0.024]	[0.181]	[0.129]
TEST	0.008	-0.001	0.006**	-0.0104	0.002
	[0.012]	[0.002]	[0.003]	[0.017]	[0.014]
N	207	225	232	231	225
F-stat	1.67	1.46	—	3.09***	1.46
Wald Stat	—	—	50.45***	—	—
R^2	0.0163[1]	0.0206	0.1663[1]	0.0228[1]	0.0025[1]

Note: * significant at 10%; ** significant at 5%; *** significant at 1%. Standard errors in brackets.
1. Pseudo R-squared statistics reported for Tobit and Probit models.

Table 3: Impact of Living on Campus on Behaviors with Peers

Dependent Variable:	DRINKS	DRUGS	STUDCLASS	STUDROOM
Model:	Robust OLS	Probit	Tobit	Tobit
DORM_F08	-0.186	0.200	0.051	2.077
	[0.183]	[0.389]	[1.156]	[1.803]
DORM_PAST	-0.341***	0.204	2.313***	2.467**
	[0.131]	[0.312]	[0.812]	[1.218]
GENDER	0.351**	0.687***	-1.023	-1.863
	[0.161]	[0.246]	[0.759]	[1.172]
PINC	0.005***	0.004	-0.002	0.007
	[0.002]	[0.003]	[0.009]	[0.011]
PINC_d	0.045	-0.101	0.350	-1.901
	[0.416]	[0.526]	[1.452]	[2.461]
NTS	-0.286	-1.053***	-0.881	-2.471
	[0.211]	[0.35]	[1.414]	[2.399]
TSEM	0.026	0.068**	-0.181*	-0.219
	[0.021]	[0.032]	[0.101]	[0.14]
TEST	-0.003	-0.004	0.006	0.024
	[0.003]	[0.004]	[0.013]	[0.016]
N	226	230	231	230
F-stat	4.58***	—	2.37**	3.50***
Wald Stat	—	26.98***	—	—
R^2	0.1322	0.1140[1]	0.0272[1]	0.0601[1]

Note: * significant at 10%; ** significant at 5%; *** significant at 1%. Standard errors in brackets.

1. Pseudo R-squared statistics reported for Tobit and Probit models.