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# Financial Decisions Among Undergraduate Students from Low-Income and Working-Class Social Class Backgrounds

By Krista M. Soria, Brad Weiner, and Elissa C. Lu

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*Low-income and working-class students face many challenges related to the costs and affordability of higher education; yet, little is known about the financial decisions made by these groups of students while they are enrolled in higher education and how their decisions might differ from middle/upper-class students. Using data from students enrolled at six large, public research universities in 2012, researchers examined 16 different financial decisions of undergraduate students. Results suggest that low-income and working-class students are more likely to make decisions that could negatively impact their immediate academic experience, serve as disruptive barriers to success, delay or prolong graduation, or lead to increased debt upon graduation.*

**Key Words:** *Social class, college students, financial decisions*

It is often acknowledged that low-income, working-class, and first-generation students face many challenges related to the increased costs and affordability of higher education (De La Rosa, 2012; Martinez, Bilges, Shabazz, Miller, & Morote, 2012). For example, Bozick (2007) discovered that low-income students were 74% more likely to state that they were working to pay for college and 73% more likely to forgo dormitory life to live with their parents compared with their peers from higher income families. McCormick, Moore, and Kuh (2010) found that first-generation students were more likely to work longer hours and to work off campus more frequently than other students. Students from low-income and working-class backgrounds can have vastly different college experiences from their more affluent peers and finances can exacerbate these differences on a day-to-day basis (Hurst, 2010; Stuber, 2011; Walpole, 2003, 2007).

The financial challenges encountered by low-income students can negatively impact their trajectory to graduation. While obtaining a college degree is often viewed as a critical component of social mobility, students from lower/working-class backgrounds are significantly less likely to attend college, persist, and graduate regardless of their academic ability than their peers from higher income families or those who are not the first in their families to graduate from college. Mortenson (2007) found that by age 24, only 12% of students from low-income families earned a baccalaureate degree compared with 73% of their higher-income peers. Furthermore, longitudinal data from the National Center for Education Statistics (2003)

suggests that only 7.5% of Pell grant recipients obtained a bachelor degree within six years and that first-generation students were three times less likely to graduate in six years compared with students who were not the first in their families to attend college.

Among higher education researchers, administrators, and policymakers, concerns that colleges and universities are “reproducing social advantage instead of serving as an engine of mobility” (Leonhardt, 2004, p. A1) are renewing calls for scholarship related to the role of social class in higher education. Several scholars have examined the effects of finances on students’ decisions about whether to attend college and in which college to enroll (Paulsen & St. John, 2011; Tierney & Venegas, 2009); yet, the extant research respective to students’ financial decisions typically focuses on only enrollment decisions. Few studies have investigated the financial decisions made by students who are currently enrolled in colleges and universities. Furthermore, the research focused on current college students’ financial decisions is primarily focused on understanding the factors attributed to increasing student loan or credit card debt (Hira, Anderson, & Peterson, 2000; Marriott, 2007; Perna, 2006; Seaward & Kemp, 2000; Taylor & Overbey, 1999). Therefore, the purpose of this paper is to examine differences in a greater variety of financial-related decisions of undergraduate college students from different social class backgrounds. As tuition and fees continue to increase, and costs for higher education are increasingly borne by families rather than the federal and state government, it is important to examine how finances might affect the undergraduate experience and academic behaviors related to degree completion. Furthermore, it is important to understand how the differences in social classes that existed prior to enrollment are perpetuated or exacerbated after enrollment.

### **Ongoing Financial Decisions in Higher Education**

While many low-income students qualify for federal grants, King (2002) found that tuition costs for low-income students fell between 42% and 61% of average family income after grants were deducted compared with 11% of average family income for middle- and upper-income students. Additionally, low-income students’ unmet financial need is typically three times higher than that of middle/upper-income students (King, 2002). The extra financial burdens imposed upon low-income students can lead them to make financial decisions that may compromise their success. While decades of research has suggested that college students who spend most of their time studying and developing connections with their campus community are most likely to persist (Pascarella & Terenzini, 2005; Tinto, 2012), the unfortunate reality is that many low-income and working-class college students make financial decisions which compromise their ability to remain closely connected to their institutions. For example, in a large national study, King (2002) found that low-income freshmen were less likely to study full time compared to middle-and upper-income freshmen across all institutional types. King (2002) also discovered that low-income students were more likely to borrow and accrue more debt than their middle/upper-income peers. The increased debt burdens are problematic because low-income students are significantly less likely to earn a degree than their middle/upper-income peers (King, 2002).

The financial choices students make while enrolled also extend to their decisions to remain enrolled or take a leave of absence (stop out) from higher education. Desjardins, Ahlburg, and McCall (2006) discovered that low-income students were more likely to stop out, less likely to return after stopping out, and more likely to have a second stop out compared with their middle/higher-income peers. Some financial choices, such as taking a semester off from school or incurring high levels of debt, negatively impact degree attainment (Dwyer, Hodson, & McCloud, 2013) and have other long-term implications in students' pursuit of graduate school (Choy & Carroll, 2000; Millett, 2003) and major purchases (Baum & O'Malley 2003). Simpson, Smith, Taylor, and Chadd (2012) noted that "concerns have been raised that undergraduate debt prevents students from buying homes, having children, or moving out of their parents' home after graduation" (p. 16). Among students from lower-social class backgrounds, the magnitude of these implications may be increased—especially if students leave college before attaining educational credentials (Gladieux & Perna, 2005).

**Perspectives/  
Theoretical  
Framework:  
Role of Social  
Capital and  
Habitus**

Although colleges and universities are often viewed as vehicles for opportunity, especially for low-income and working-class students, they are also criticized for being sites of social reproduction (Bourdieu, 1986; Bourdieu & Wacquant, 1992). While Bourdieu (1986, 1997) suggested three forms of capital are closely related to social class and structuring social advantage (Bourdieu, 1986; 1997)—social, cultural, and economic capital—we will discuss economic and social capital as it relates to students' financial decisions. Economic capital, or wealth, is at the root of all other types of capital (Bourdieu, 1997). Low-income, working-class, and first-generation students who lack economic capital necessary to afford the costs of higher education may need to make ongoing financial decisions that are substantially different from their peers who have sufficient economic capital to afford their education. Social capital consists of one's connections or networks that can assist in the acquisition of knowledge and resources (Winkle-Wagner, 2010). Prior researchers have established that students' social networks (e.g., school counselors, parents, peers, etc.) transmit valuable information (social capital) about college opportunities and funding options, which ultimately affects students' college-going decisions (McDonough, 1994; McDonough & Calderone, 2006; Tierney & Venegas, 2006; Trent, Lee, & Owens-Nicholson, 2006); yet, lacking many of these knowledgeable social networks, low-income, working-class, and first-generation students face many challenges when it comes to making sound financial decisions such as applying for financial aid and locating campus employment (Baum & O'Malley, 2003; Fentress & Collopy, 2011; Mendoza, 2012; Richardson & Skinner, 1992).

Bourdieu's concept of *habitus* offers another lens to examine how students make financial decisions while in college. One's social class habitus constitutes a "common set of subjective perceptions held by all members of the same group or class that shapes an individual's expectations, attitudes, and aspirations" (Bourdieu, 1986, p. 9). Habitus informs the meaning that individuals assign to money and structures individuals' financial decisions, including the financial decision to invest in higher

education (McDonough & Calderone, 2006). As they develop, young adults reproduce their cultural habitus through practices that conform to the dominant cultural habitus. Within the context of higher education, it is often acknowledged that students from lower/working-classes encounter challenges in the middle-class habitus of higher education that compromise their sense of belonging and integration, thus contributing to their lower persistence and graduation rates (Aries & Seider, 2005; Granfield, 1991; Lehmann, 2007; Ostrove, 2003; Ostrove & Cole, 2003).

Much research has examined low-income and working-class students' social class habitus and the vastly different set of norms that middle/upper-class-oriented colleges and universities impose (Hurst, 2010; Stuber, 2011). Colleges and universities aspire for students to be engaged inside and outside of the classroom; yet, low-income and working-class students are more likely to feel stressed by their finances and view college as a time they must work (Stuber, 2011; Walpole, 2003). College students from working-class backgrounds are also more likely to experience academic disengagement and a less welcoming campus climate for social class (Soria, 2012). In contrast, students who come from upper socioeconomic backgrounds tend to be more engaged in campus life (Stuber, 2011), may feel less inclined to manage their finances because of their parental resources (Serido, Shim, Mishra, & Tang, 2010), and are less likely to work while enrolled (Walpole, 2003).

Researchers have found that economic capital, social capital, and students' habitus inhibit low-income and working-class college students from participating in extracurricular activities (Barratt, 2012; Martin, 2012; Stuber, 2009, 2011; Walpole, 2003). Students from lower social class backgrounds often abstain from extracurricular activities due to cost and the need to work to pay for tuition and living expenses (Barratt, 2012; Walpole, 2003). McDonough and Calderone (2006) suggested that existing research fails to account for the different micro-situational and sociocultural contexts in which students from different social class backgrounds make decisions about spending, investment, and savings. Given that certain financially-motivated behaviors may detract from students' college experiences or lead to attrition, the present research study explores differences in financial decisions between low-income, working-class, and middle/upper-class students.

## **Methods**     *Instrument and Participants*

The Student Experience in the Research University (SERU) survey is based at the Center for Studies of Higher Education at the University of California-Berkeley and administered every year to several institutions that participate in the SERU consortium. The SERU survey sampling plan is a census scan of the undergraduate experience: all students eligible undergraduates were invited to participate in this web-based survey. In spring 2012, the survey was administered to 147,170 undergraduate students across six large, public universities classified by the Carnegie Foundation as having very high research activity.

As the present study is concerned with students' financial behaviors, it is important for readers to analyze the representativeness of the sample to students at other colleges and universities, especially with consideration of students' financial background. Table 1 provides additional information on the universities included in the sample, including unduplicated undergraduate headcount for 12 months, regional location, land-grant status, and the percent of students receiving types of financial aid. Data were derived from the National Center for Education Statistics using 2011-2012 statistics (U.S. Department of Education, 2013).

The institutional response rates on the survey ranged between 15% and 34%, with an average rate of 27% of students who completed the first pages of the survey ( $n = 39,736$ ). Of these students, we retained only those who responded to all items in the financial decisions section of the survey ( $n = 31,898$ ). Any missing data, which accounted for less than 5% in all cases, were deleted listwise in subsequent analyses. Table 2 provides details regarding the gender, racial, and social class composition of the sample, which was primarily female, White, and middle/upper-class students.

## Measures

One of the lengthier sections of the SERU survey asks students to respond to several questions regarding their financial concerns, financial background (e.g., social class, family income), and financial actions or decisions. The primary dependent variables analyzed in this study were derived from a survey item asking students to indicate, "Which of the following have you done in the past year to meet college expenses?" Students could respond to any of the 16 items offered in the survey and could choose more than one option (Table 2). Of all of the 16 financial decisions, students most frequently reported purchasing fewer books, buying cheaper used books, or reading books on reserve, with 70.16% of

**Table 1. Institutional Profiles**

Institution	Undergraduates Enrolled in 2011-2012	Percent Receiving Pell Grants	Percent Receiving Federal Loans	Land Grant	Region
A	35,000-40,000	29	55	Yes	Mid-East
B	40,000-45,000	22	36	Yes	Southwest
C	40,000-45,000	24	49	Yes	Plains
D	20,000-25,000	19	57	No	Mid-East
E	15,000-20,000	22	51	No	Far West
F	15,000-20,000	13	24	No	Southeast

*Note:* Enrollment is indicated as a range to obscure the identity of participating institutions.

**Table 2. Categorical and Continuous Variables Used in Analysis**

Categorical Variables Used in Analysis	Number	Percent	
<b><i>Financial Actions and Decisions</i></b>			
Bought fewer books, bought cheaper used books, read books on reserve ( <i>Books</i> )	22,381	70.16	
Have cut expenses overall / have been more frugal ( <i>Frugal</i> )	17,731	55.59	
Applied for financial aid for the first time ( <i>Applied</i> )	10,060	31.54	
Decided against study abroad ( <i>Abroad</i> )	9,567	29.99	
Took more courses per term ( <i>Courses</i> )	9,524	29.86	
Worked before but increased the number of hours worked ( <i>Worked</i> )	8,083	25.34	
Increased my annual student loan amount ( <i>Loan</i> )	8,036	25.19	
Took action to graduate more quickly ( <i>Graduate</i> )	6,325	19.83	
Skipped meals ( <i>Meals</i> )	6,162	19.41	
Took a job for the first time at college ( <i>First Job</i> )	6,143	19.26	
Took a community college course because it was cheaper ( <i>Community</i> )	5,688	17.83	
Asked financial aid office to reevaluate my application ( <i>Reevaluate</i> )	5,319	16.68	
Did not retake a class to improve grade ( <i>Grade</i> )	5,042	15.81	
Increased the debt I carry on my credit card ( <i>Credit</i> )	3,679	11.53	
None of the above: cost hasn't been a problem ( <i>None</i> )	3,554	11.14	
Took a leave of absence or a quarter/semester off ( <i>Leave</i> )	599	1.88	
<b><i>Demographic Variables</i></b>			
Wealthy	761	2.40	
Upper-middle or professional-middle-class	9,416	29.72	
Middle-class	13,857	43.74	
Working-class	5,941	18.75	
Low-income	1,709	5.39	
Female	18,885	59.21	
First-Generation	7,724	24.58	
International	1,412	4.43	
Hispanic	2,737	8.58	
Native American or American Indian	402	1.26	
Asian	6,521	20.44	
Black	1,763	5.53	
Pacific Islander	196	0.61	
Unknown racial identity	847	2.66	
White	21,769	68.25	
Transfer	6,183	20.19	
<hr/>			
Continuous Variables Used in Analysis	Mean	Standard Deviation	Range
Age	21.46	4.07	18.0 to 74.10
Cumulative GPA	3.19	.64	0.0 to 4.0
Academic level	2.90	1.10	1=freshman to 4=senior

students engaging in these behaviors to meet college expenses. Students were least likely to indicate that they took a leave of absence, took no actions because cost was not a problem, and increased their credit card debt. Between 25% and 32% of students indicated that they applied for financial aid for the first time, enrolled in more courses per term, decided against study abroad, and increased their work hours and annual student loan amounts. Less than 20% chose the remaining options (e.g., took a job for the first time, skipped meals, etc.).

Our primary independent variable—students’ social class background—was derived from a survey item in which students were asked to identify their social class background from one of five options: low-income/poor, working-class, middle-class, upper-professional/middle-class, and wealthy. For ease in interpretation, we combined the middle/upper-class categories for comparison against low-income and working-class students. Researchers have suggested the social class variable in the SERU survey has a strong, positive correlation with students’ family income and with parental education levels, suggesting that students are relatively credible in self-identifying social class (Soria & Barratt, 2012). We sought to examine whether students were accurate in identifying their social class background in the current sample; therefore, we developed a cross-tabulation of students’ family income and first-generation status by their social class background and examined correlations between the variables. Students reported their family income by answering the question, “To the best of your knowledge, which category includes the total annual combined income of your parent(s) before taxes in 2011?” Students could choose from one of eleven categories beginning with “less than \$10,000” up to “\$200,000 or more” in uneven increments ranging from \$10,000 to \$50,000. Additionally, students were asked to indicate their parents’ highest level of education attained in the United States or in a foreign country, ranging from no formal education to doctorate degree (nine different categories). We defined first-generation students as those whose parents had not earned a bachelor’s degree or higher and created this variable from the sample.

Table 3 provides the cross-tabulation of students’ self-identified social class background by family income and first-generation status. A descriptive analysis suggests differences in family income and parental education by students’ social class background; for example, 72.11% of wealthy students indicated family income of over \$200,000 compared with 26.64% of upper-middle and professional-middle, 3.15% of middle-class, 0.66% of working-class, and .48% of low-income students. Additionally, only 5.98% of wealthy students were first-generation compared with 52.95% of working-class and 68.37% of low-income students. The Spearman rho correlation between students’ social class and family income is positive and strong ( $r = .613, n = 29,380, p < .001$ ) and the correlation between social class background and first-generation status is negative and strong ( $r = -.427, n = 31,338, p < .001$ ).

Additional demographic variables (e.g., gender and race) and academic variables (e.g., academic level, transfer status, and GPA) were provided by

**Table 3. Differences in Parental Education and Self-Reported Family Income by Social Class Background**

	Wealthy		Upper-Middle		Middle-Class		Working-Class		Low-Income	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b><i>Self-Reported Income</i></b>										
Less than \$10,000	22	3.10	164	1.91	536	4.20	540	9.57	401	24.16
\$10,000 to \$19,999	7	0.99	136	1.58	515	4.03	641	11.36	402	24.22
\$20,000 to \$34,999	7	0.99	177	2.06	849	6.65	1,097	19.43	451	27.17
\$35,000 to \$49,999	16	2.25	202	2.35	1,090	8.53	1,015	17.98	185	11.14
\$50,000 to \$64,999	18	2.54	291	3.39	1,504	11.77	873	15.47	93	5.60
\$65,000 to \$79,999	4	0.56	419	4.88	1,860	14.56	548	9.71	41	2.47
\$80,000 to \$99,999	7	0.99	760	8.85	2,127	16.65	468	8.29	23	1.39
\$100,000 to \$124,999	33	4.65	1,705	19.84	2,392	18.73	294	5.21	33	1.99
\$125,000 to \$149,999	29	4.08	1,051	12.23	873	6.83	75	1.33	11	0.66
\$150,000 to \$199,999	55	7.75	1,398	16.27	625	4.89	57	1.01	12	0.72
\$200,000 or more	512	72.11	2,289	26.64	402	3.15	37	0.66	8	0.48
<b><i>First-Generation Status</i></b>										
Non-First-Generation	708	94.02	8,848	94.50	10,788	78.72	2,756	47.05	525	31.63
First-Generation	45	5.98	515	5.50	2,917	21.28	3,101	52.95	1,135	68.37

institutions. Academic levels were determined by the number of credits students had earned (including transfer credits). We selected these additional variables as controls for several reasons. Race and first-generation status are variables correlated with social class status, with students from lower social class backgrounds more likely to be first-generation and students of color (Soria & Barratt, 2011). Students often pay more for higher education as they advance through academic levels and tuition increases over time; consequently, students who have earned more academic credits may be forced to make financial decisions that are different from their peers who are new to their institutions. Additionally, students with higher grade point averages may be more eligible for scholarship opportunities, which may decrease their need to make certain financial decisions. Transfer students are more likely to live off campus and work more hours than their peers (Kodama, 2002)—factors that may lead to financial decisions related to employment or increased debts.

## Procedures

Given the dichotomous nature of the survey items, we employed forward entry binary logistic regression analyses to explore how various financial decisions were impacted by students' self-reported social class. Analyses were conducted using SPSS 21.0 (IBM Corp., 2012). Logistic regression models became popular in the late 1980s among education scholars largely due to “complex data and categorical outcomes measures” (Peng, So, Stage, & St. John, 2002, p. 260). Categorical variables are prevalent in higher education research because of predicting various outcomes like admissions enrollment, first-year retention, and in our study, a panel of financially-related decisions. Logistic regression models are also widely used because they are not bound by the strict assumptions of linear regression models calculated using ordinary least squares.

On a linear scale, predicted probabilities for a binary outcome would eventually fall outside of the range between 0 and 1, a condition that is theoretically impossible. Furthermore, the assumption of homoscedasticity (similar amounts of variance across every level of the  $x$  value) would be violated because most cases cluster around one option of the dependent variable (1) or the other (0). Logistic regression utilizes maximum likelihood estimations that iteratively fit the data to a sigmoidal, or S-shaped curve. This requires the data to be converted from its raw form, which in a linear model would increase by their natural units of measure, to a logarithmic scale that increases by *orders of magnitude*. This transformation to the log-odds ratio is called the logit transformation.

In our analysis, we developed a separate model for each of the 16 survey items relating to financial decisions. We subsequently tested each of those variables using the same group of 16 independent variables. Given our extremely large sample sizes, we assumed that goodness-of-fit measures would be a poor estimation of our data. For example, the Hosmer-Lameshow Chi-squared tests estimate whether the model with predictors is a statistically significant improvement over the null model ( $p < .01$ ). A common interpretation of this test suggests that our models were poorly fitted to the data. While this may be true, the differences between the predicted and the observed values will approach zero as the sample size increases.

Instead, we utilized a confusion matrix of predicted and observed classifications generated by the SPSS statistical package. This matrix measures the proportion of accurately classified events (e.g., financial decision = 1) as well as the proportion of accurately classified non-events (e.g., financial decision = 0). The classification is based on a specified cutoff, which we set to the actual proportion of the financial behavior within the data set. Some of the models had higher degrees of sensitivity while other models had higher levels of specificity. In all cases, the models correctly classified student financial decisions with greater accuracy than chance.

We also examined multicollinearity assumptions for the logistic regressions. We ran collinearity diagnostics for logistic regression using ordinary least squares regression, as SPSS does not have an option to produce collinearity diagnostics for logistic regression analysis (Field, 2009). The data suggested that multicollinearity assumptions were not violated (tolerance statistics were between .71 and .99 and variance inflation factors ranged from 1.01 to 1.40). Logistic regression makes no assumptions about the distribution of the independent variables, including assumptions of normality (Field, 2009). Standardized residual statistics were examined and there was no evidence of influential cases having an effect on the models (there were no unusually high values of Cook's distance, DFBeta, and leverage statistics) (Field, 2009). Within our models, we controlled for additional demographic characteristics that may influence students' financial actions and decisions, including gender, race, first-generation status, ethnicity, transfer status, age, academic level, and grade point average. For simplicity, we reported only the log-odds ratios in Table 4 (and sorted them according to the greatest log-odds for low-income students), although full models are available by request.

## Results

The results of the logistic regression analyses suggest that students who identify as low-income or working-class are more likely to indicate that they engaged in a variety of actions/behaviors that will likely have significant and negative immediate and long-term implications (Table 4). Compared with their middle/upper-class peers, the odds of skipping meals were 2.59 higher for low-income students and 2.11 higher for working-class students ( $p < .001$ ), controlling for additional variables including first-generation status, race and ethnicity, age, transfer status, grade point average, and academic level. Additionally, the odds of increasing credit card debt were 2.48 higher for low-income and 2.04 higher for working-class students compared with middle/upper-class students. The odds of low-income and working-class students increasing loan debt, working more hours, asking financial aid officers to reevaluate applications, taking a leave of absence, and being more frugal in general were significantly increased compared with middle/upper-class students—all findings that held controlling for the other variables in our model and holding them constant.

While the results above demonstrate barriers for successful degree attainment or financial stability upon completion, other financial behaviors minimize opportunities for student engagement or limit the co-curricular experience. For example, the odds of low-income and working-class

**Table 4. Log-Odds Ratios ( $e^{\beta}$ ) from Logistic Regression Analyses Predicting Undergraduate Students' Financial Actions and Decisions (n = 29,972)**

Predictor	Meals	Credit	Loan	Leave	Reevaluate	Frugal	Worked	Abroad
Low-Income	2.59 *	2.48 *	2.31 *	2.09 *	1.97 *	1.94 *	1.86 *	1.73 *
Working-Class	2.11 *	2.04 *	2.28 *	1.55 *	1.72 *	1.98 *	1.91 *	1.69 *
Female	0.92	1.13	1.20 *	0.80	1.20 *	1.30 *	1.53 *	1.45 *
First-Generation	1.07	1.22 *	1.61 *	1.04	1.15 *	1.13 *	1.29 *	1.15 *
International	1.16	0.50 *	0.14 *	1.71	0.22 *	0.48 *	0.37 *	0.55 *
Hispanic	1.32 *	1.36 *	1.13	0.79	1.38 *	1.09	0.89	1.06
Native American	1.25	1.15	0.92	1.69	1.34	1.18	0.97	1.27
Asian	1.25 *	0.97	0.72 *	1.23	1.19 *	0.84 *	0.64 *	1.00
Black	1.40 *	0.95	1.10	0.85	1.78 *	0.77 *	0.80	0.93
Pacific Islander	1.65	1.09	1.15	0.60	0.89	0.95	1.18	1.05
Unknown Race	0.86	0.81	0.75	0.84	0.78	0.84	0.48 *	0.81
Academic Level	1.08 *	1.43 *	1.19 *	1.23 *	0.95	1.04	1.45 *	1.25 *
Transfer	1.23 *	1.81 *	1.49 *	1.83 *	1.16	1.13 *	1.17 *	1.25 *
Age	0.98 *	1.03 *	1.00	1.05 *	0.99	1.00	0.96 *	0.97 *
Cumulative GPA	0.70 *	0.67 *	0.80 *	0.56 *	0.85 *	0.92 *	0.79 *	0.83 *
Constant	0.71	0.04 *	0.28 *	0.01 *	0.30 *	1.10	0.37 *	0.56 *
-2 Log Likelihood	27850.51	19071.99	31077.62	4520.29	25903.32	40006.43	31878.12	35505.39
Nagelkerke (pseudo- $R^2$ )	0.07	0.13	0.13	0.08	0.06	0.05	0.09	0.05
Cox & Snell (pseudo- $R^2$ )	0.04	0.06	0.08	0.01	0.03	0.04	0.06	0.04

*Note.* \*  $p < .001$ .

**Table 4. Log-Odds Ratios (e<sup>b</sup>) from Logistic Regression Analyses Predicting Undergraduate Students' Financial Actions and Decisions (n = 29,972) (continued)**

Predictor	Books	Grade	Courses	Applied	Graduate	First Job	None	Community
Low-Income	1.61 *	1.61 *	1.51 *	1.44 *	1.39 *	1.32 *	0.35 *	1.07
Working-Class	1.81 *	1.55 *	1.60 *	1.48 *	1.42 *	1.18 *	0.30 *	1.06
Female	1.80 *	1.07	1.12 *	1.06	1.12 *	1.16 *	0.64 *	1.50 *
First-Generation	1.23 *	1.18 *	1.07	1.31 *	1.13	1.06	0.57 *	1.21 *
International	0.51 *	1.72 *	1.62 *	0.12 *	1.47 *	1.29 *	1.75 *	0.67 *
Hispanic	1.31 *	1.17	0.95	1.40 *	0.96	1.38 *	0.72 *	1.46 *
Native American	1.20	1.27	1.22	0.82	0.91	1.21	1.12	1.24
Asian	1.08	1.12	1.28 *	1.57 *	0.90	1.32 *	0.81 *	0.89
Black	0.95	1.11	0.95	1.53 *	0.94	1.42 *	0.84	0.82
Pacific Islander	1.09	1.68	1.28	1.05	1.21	0.60	0.91	1.37
Unknown Race	0.86	0.73	0.62 *	1.00	0.69 *	0.89	1.29	1.28
Academic Level	1.01	1.23 *	1.09 *	0.48 *	1.18 *	1.07 *	1.11 *	1.06 *
Transfer	1.06	1.02	1.29 *	1.51 *	1.68 *	0.89	0.72 *	2.19 *
Age	0.97 *	0.98 *	0.96 *	0.99	0.98 *	0.91 *	1.02	0.99
Cumulative GPA	0.91 *	0.59 *	0.96	0.94	0.90 *	0.98	1.32 *	0.63 *
Constant	3.45 *	0.62 *	0.64 *	3.97 *	0.26 *	1.39	0.04 *	0.63 *
-2 Log Likelihood	35128.16	25155.05	35851.41	32451.17	29114.27	29018.80	19830.67	26629.68
Nagelkerke (pseudo-R <sup>2</sup> )	0.06	0.05	0.03	0.22	0.03	0.03	0.08	0.08
Cox & Snell (pseudo-R <sup>2</sup> )	0.04	0.03	0.02	0.15	0.02	0.02	0.04	0.05

*Note.* \*  $p < .001$ .

students taking more courses per term ( $e^{\beta} = 1.57, 1.64, p < .001$ ), taking action to graduate more quickly ( $e^{\beta} = 1.48, 1.46, p < .001$ ), and increasing the number of hours worked at existing jobs ( $e^{\beta} = 2.07, 2.07, p < .001$ ) were higher than for middle/upper-class students. The combined effect of these efforts and financial strain may result in fewer opportunities for meaningful engagement (Walpole, 2003, 2007). This was also noted in the increased odds of low-income and working-class students declining study abroad opportunities ( $e^{\beta} = 1.83, 1.78, p < .001$ ). Also compelling was the finding that the odds of low-income and working-class students reporting that none of the financial decisions were necessary to make ends meet were significantly less than the odds of middle/upper-class students reporting the same ( $e^{\beta} = 0.27, 0.25, p < .001$ ). It was also interesting that no statistically significant differences emerged in the model predicting enrollment at a community college—suggesting that students from all social class backgrounds are just as likely as middle/upper-class students to take classes at community colleges as a cost-saving measure.

## **Discussion and Recommendations**

In addition to the challenges they face upon entrance to college, low-income and working-class students face continued financial challenges while enrolled in college and are more likely to make decisions based on financial needs, rather than educational ones. The results lend some support to theories of social stratification, which suggest that low-income and working-class students' limited economic capital, lower social capital, and habitus of upbringing may influence their financial decisions. The findings also illustrate how colleges and universities may unintentionally serve as sites of social stratification (Bourdieu, 1986) with low-income and working class students having vastly different college experiences than their middle and upper-class peers (Hurst, 2010; Stuber, 2011; Walpole, 2003, 2007).

In contrast to prior research that suggests students from lower-income backgrounds are more debt and risk averse (Hu & St. John, 2001; Price, 2004), the results of this study suggest that low-income and working-class students were significantly more likely to rely on credit cards and take out loans as a result of their financial concerns. We hypothesize that these debt-related decisions may be derived from students' lower economic capital—having less available funds to pay for expenses. With undergraduates leaving college with an average of \$26,600 of debt (Project on Student Debt, 2012) and an average credit card balance of over \$3,000 (Sallie Mae, 2009), incurring more debt can place students in greater long-term financial risk. Prior polls have found that students carry an average of 4.6 credit cards; further, over half (60%) of students were surprised at their balance and nearly half described their credit card debt as a source of anxiety (Sallie Mae, 2009). Higher levels of debt relate to greater stress and can also contribute to future challenges in making loan repayments (Norvilitis, Merwin, Osberg, Roehling, Young, & Kamas, 2006). Indeed, several researchers have discovered that low-income students are more likely to default on their loans (Flint, 1997; Gross, Cekic, Hossler, & Hillman, 2009).

Additionally, the results suggest that students' decisions may impact their immediate academic experience, serve as disruptive barriers to success, or prolong graduation, including working more hours, taking a leave of absence, or not retaking classes. These findings confirm prior research suggesting that students from low-income backgrounds are more likely to increase the number of hours they work—a decision is likely to interfere with their academic progress and attainment (Mendoza, 2012). We hypothesize that the decision to work more hours or take a first job may be derived from students' habitus of upbringing. Longwell-Grice (2003) found that working-class students tended to frame their college experiences in career terms, with many believing that the purpose of college was preparation for the world of work rather than for personal or intellectual development; as a consequence, low-income and working-class students are more likely to seek degrees with immediate vocational benefits and are not as likely to continue their education beyond the first degree (Walpole, 2003). The salience of the world of work may lead college students from low-income and working-class backgrounds to prioritize employment over academic experiences (such as study abroad).

To help students make good decisions about employment, we recommend that financial aid and career services administrators connect students who are seeking employment for the first time to on-campus employment opportunities, such as work-study programs. We also echo Pusser's (2009) calls for universities to structure employment opportunities to promote critical intellectual development, and maximize life opportunities. For students who are currently employed but find it necessary to increase the number of hours they work, we recommend that financial aid administrators attempt to connect these students with scholarship and grant opportunities instead.

The findings underscore the importance of college and universities' financial literacy programs to build student understanding and awareness of debt and money management and support decision-making skills. These financial literacy programs may substitute for the lack of social capital low-income and working-class students possess in comparison to their middle/upper-class peers. Simpson, et al., (2012) suggested that institutions should provide ongoing educational programs related to responsible borrowing, which can be extended to making borrowing decisions appropriate for given academic majors. Because many of the financial decisions that students make are hidden from view, it is important for programs to reach students through multiple settings, such as student housing, the curriculum (e.g., first year seminar, senior capstones, exit counseling), online portals, and extracurricular activities throughout the academic year. Online portals can serve as on-demand resources that students can visit confidentially, find resources, engage in financial planning, and seek counseling. When financial literacy is embedded in the campus culture, students know how to access institutional support and resources that support their personal development and may be prevented from actions like taking a leave of absence before it is too late. Such financial literacy programs might be geared toward shifting students away from the most detrimental behaviors to ones that have less impact, such as encouraging students to eat afford-

able meals instead of skipping them altogether and encouraging groups of friends to keep watch over one another and point each other to resources.

Additionally, financial aid offices should consider developing systems to monitor students' financial concerns and decision-making. A tracking system that alerts administrators to sudden increases in loans, for instance, and relative to family income, can help identify students in need of intervention. Student services and financial aid offices might also think about implementing a student survey to understand how much average debt students are incurring outside of the office's purview and to better understand how finances are influencing students' college experience. Surveys, interviews, and focus groups can provide insights regarding the variety of resources financial aid offices and other student service offices might offer for students in need, such as food banks. After conducting a survey at the University of Hawai'i, for instance, administrators were surprised to find higher levels of food insecurity among their students than what had been found in the local population (Chaparro, Zaghoul, Holck, & Dobbs, 2009).

Prior researchers have found that students from low-income backgrounds are highly sensitive to even slight adjustments in tuition and fees (George-Jackson, Rincon, & Martinez, 2012); consequently, low-income and working-class students may not be prepared for increases in tuition and fees and may not have a strategy in place for handling these extra financial burdens. Additionally, low-income and working-class students may lack the financial and cultural capital of their peers from college-education families, who may have made preparations in advance for increased tuition and living expenses beyond the first year. Some of these challenges can be averted if students are informed of the possibility of increases in tuition that can occur when students take upper-division class, increases in fees (e.g., laboratory fees) as students progress in their majors, and changes in housing situations (e.g., moving off campus).

Finally, the findings highlight some of the more serious financial decisions in which students may engage, such as skipping meals and taking a leave of absence. Issues like food insecurity are often hidden from college administrators, but represent the many micro-decisions that students make on a daily basis that warrant greater awareness and monitoring in higher education (Hughes, Serebryanikova, Donaldson, & Leveritt, 2011). The cumulative effects of engaging in a variety of financial actions and decisions should be examined—students who skip meals, take more credits, work more hours, increase their credit card debt, and increase their student loan amounts may experience greater stress, may have a lower personal sense of health and well-being, and may be more at-risk to early attrition as a consequence.

There are several limitations in this study that represent areas for future scholars to explore; for example, our sample was derived from students who attended large, public, research-intensive universities. While these institutions represent some of the largest universities in the nation, the results may not be generalizable to all institutional types; consequently, we recommend that researchers seek to replicate this study at other institu-

tions of different sizes, scopes, and missions. Additionally, we were not able to verify whether students actually engaged in some of the financial actions or decisions (e.g., checking whether student loan amounts increased), a factor that introduces error to our analyses. We encourage researchers to seek innovative ways of tracking some of these financial actions (e.g., tracking students' on-campus employment through human resource time cards, etc.).

These data were only derived from one point in time and students were asked to report on their financial actions or decisions for one year of their enrollment; as a result, students may have engaged in these financial actions only once in their academic career, which correspondingly limits the potential implications of the results. As previously discussed, the available sample size enabled robust analyses, but also introduces challenges regarding overall model fit and specification. We were also limited by the available indicators, which might exclude other financial actions or decisions that are meaningful but not accounted for in our model. All of these limitations represent areas in which future researchers may be able to contribute to awareness of the ongoing financial decisions college students make; for example, interviews with college students might reveal additional financial decisions students make on an ongoing basis that were not asked in the SERU survey.

## **Conclusion and Future Directions**

The variety of financial behaviors measured in this survey yields results that are unique in scholarship related to social class, financial aid, and student success and help construct an understanding of how finances affect multiple facets of students' lives both inside and outside the classroom. The results of this study suggest differences between students' financial actions/decisions that can be partly attributed to their social class of origin. We specifically found that undergraduate students from low-income and working-class backgrounds were significantly more likely to engage in financial actions/decisions that are potentially harmful in the immediate and long-term. As state and federal funding for student financial aid continues to be cut, it is more important than ever to understand behaviors that students are taking to make college affordable while enrolled. Furthermore, it is important for institutions to understand the role they play in designing services to reduce barriers for low-income and working-class students' success. We recommend that scholars continue investigating students' financial decisions while enrolled in higher education, include financial behaviors in models predicting persistence to graduation, and seek to understand the role of resilience among students from lower social class backgrounds. Future researchers might also examine the cumulative effects of engaging in a variety of financial actions and decisions—students who skip meals, take more credits, work more hours, increase their credit card debt, and increase their student loan amounts may experience greater stress, may have a lower personal sense of health and well-being, and may be more at-risk to early attrition as a consequence.

### **Nexus: Connecting Research to Practice**

- By and large, undergraduate students are most likely to undertake reasonable actions to afford college expenses, including purchasing cheaper books, becoming more frugal, and applying for financial aid; however, one-quarter to one-third of students are likely to decide against studying abroad, take more courses per term, and increase the number of hours that they work—all factors that could compromise their collegiate experiences. Practitioners should help students to navigate these decisions to ensure students receive the most out of their college experiences and remain successful in pursuit of their educational goals.
- College students from low-income and working-class backgrounds are significantly more likely than their middle/upper-class peers to make financial decisions that could seriously compromise their ability to achieve bachelor degrees and negatively harm their future financial standing, including taking a leave of absence, skipping meals, and increasing the amount of credit card debt they incur. Campus administrators and practitioners should seek to provide assistance for low-income and working-class students, including increased educational programs, to help students make financial decisions to better ensure their short- and long-term well-being and success.
- College students' social class upbringing matters in terms of predicting their experiences in higher education. Social class habitus bears weight in the many microdecisions students make as they navigate higher education—decisions that often go unnoticed by administrators. Practitioners should therefore consider the significance of students' social class as an element of diversity that shapes students' ongoing collegiate experiences and decisions.

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