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## **College Students and Financial Literacy: What They Know and What We Need to Learn**

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### **Abstract**

Previous research focused on college students and their credit card usage. This study examines college students' overall financial management practices using quantitative and qualitative data from a multi-state research project. Specifically, the study investigates how college students acquire financial knowledge and behaviors and the factors that place some students at greater financial risk than others. The findings show that parents play a key role in their children's financial socialization. The results provide important insight into financial education opportunities for students, parents, campus administrators, and financial professionals and educators.

### **Introduction**

Financial literacy seems more important now than ever – and not just to family and consumer economics professionals. Financial institutions, the student loan community, financial professionals and educators, and others have identified personal financial management education as a priority. For example, the Federal Reserve Bank of Atlanta and the Georgia Council on Economic Education co-sponsored a day-long Georgia Summit on Economic and Financial Education in September 2003 featuring prominent speakers. Pat Barron, First Vice President and Chief Operating Officer of the Federal Reserve Bank of Atlanta, identified adult financial literacy as one of the Bank's top three priorities.

In addition to Georgia, several states have recognized the need for financial literacy in the classroom. According to the National Council on Economic Education (2005), 38 states now have personal finance standards built into their state education systems, and 21 of these states require explicitly that the standards be implemented. In seven states, personal finance is a requirement for high school graduation (Idaho, Illinois, Kentucky, New York, Georgia, and Alabama). Georgia is included in this group, because it requires that personal finance be part of the economics graduation requirement. Recently, Georgia revised its statewide curriculum for K through 12 to require that personal finance concepts be taught at every grade level effective Fall 2007 (for grades 6-12) and Fall 2008 (for grades K-5). At the high school level, personal finance will continue to be included in economics courses and will be one of five areas covered on the end-of-course test, which counts as 15% of the student's final grade in the course (<http://www.georgiastandards.org/>).

Several organizations also have demonstrated an interest in improving the financial literacy of college students, which is important for a number of reasons. Obviously, the financial decisions students make in college have an important influence on their financial situation after college. In addition, their financial situation in college can affect their academic performance. Lyons (2003) found that one in three students reported his/her financial situation was "likely" or "somewhat likely" to affect the ability to complete a college degree. Bodvarsson and Walker (2004) reported that, after controlling for a wide variety of factors that affect college performance, students receiving at least partial coverage from their parents for tuition and books were more likely than self-financed students to fail courses, to be placed on academic probation, and to earn lower GPAs.

While understanding the financial situations of college students is important, most of the research on college students and their finances has been focused almost exclusively on their credit card use. This paper uses a much broader definition of financial literacy to describe the financial management practices and attitudes of college students. The research is part of a multi-state study of students from Louisiana State University (LSU), University of Georgia (UGA), University of Illinois at Urbana-Champaign, and University of Illinois at Chicago. Findings from LSU and UGA students are presented in this paper. In addition to reporting research results, the paper discusses the implications of the findings for financial professionals, educators, and campus administrators.

### What Do We Know About College Students and Money? A Literature Review

What does it mean to say that one is “financially literate”? Researchers have only recently attempted to define the concept. Mason and Wilson (2000) defined financial literacy as a “meaning-making process” in which individuals use a combination of skills, resources, and contextual knowledge to process information and make decisions with knowledge of the financial consequences of that decision. Vitt et al. (2000) defined it as:

the ability to read, analyze, manage, and communicate about the personal financial conditions that affect material well-being. It includes the ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future, and respond competently to life events that affect everyday financial decisions, including events in the general economy (p. xii).

Despite the various differences in definitions, the consistencies are notable. Hogarth (2002, pp. 15-16) described the consistencies in behavioral terms, stating that individuals who are financially literate are: 1) knowledgeable, educated, and informed on the issues of managing money and assets, banking, investments, credit, insurance, and taxes; 2) understand the basic concepts underlying the management of money and assets; and 3) use that knowledge and understanding to plan and implement financial decisions.

Most of the attempts to directly measure the impact of financial literacy have focused on high school students. Every two years, the Jump\$tart Coalition for Personal Financial Literacy administers a written 45-minute exam to 12<sup>th</sup> graders in schools across the United States and reports the outcome. The test first was administered in 1997 and continued in 2000, 2002, and 2004. Each year, students average a failing grade; the mean score was 52.3% in 2004. While the Jump\$tart exam has not been administered to college students, Chen and Volpe (1998) assessed the financial literacy of 924 college students who scored 53% on average; non-business majors, women, students in the lower academic years, those under age 30, and those with little work experience had the lowest scores.

In recent years, educators, policy makers, and university officials have focused on one aspect of college students' financial practices – their use of credit, and most specifically credit cards. Increased use of credit cards by college students has generated a concern among many that credit card debt puts college students at greater risk for financial problems after graduation. Numerous researchers have examined college students' credit card use, finding in general that the majority now have credit cards (Allen & Jover, 1997; Armstrong & Craven, 1993; Baum & O'Malley, 2003; The Education Resources Institute and the Institute for Higher Education Policy, 1998; Hayhoe, 2002; Hayhoe, Leach, & Turner, 1999; Hayhoe et al., 2000; Jamba-Joyner, Howard-Hamilton, & Mamarchew, 2000; Joo, Grable, & Bagwell, 2001; Lawrence et al., 2003, 2005; Lyons, 2003, 2004; Staten & Barron, 2002; U.S. General Accounting Office, 2001; Xiao, Noring, & Anderson, 1995). The 2004 Nellie Mae Credit Card Study (Nellie Mae, 2005) reported that 76% of undergraduate students have credit cards and 47% have four or more cards. The average credit card debt is \$2,169. About one-fifth (21%) said they paid off their credit card balances in full each month and only 4% said their parents were responsible for the payments. Credit card debt is a special concern since it will likely be repaid at an 18% or higher interest rate while the interest rate on student loans is typically below market rates (currently less than 5%).

Several researchers have identified explanatory variables relevant to college students' use of credit cards. Gender (Armstrong & Craven, 1993; Hayhoe et al., 1999, 2000), attitudes toward credit (Hayhoe et al., 1999, 2000; Roberts & Jones, 2001), marital status (Hayhoe et al., 2000), income (Hayhoe et al., 2000; Zhou & Su, 2000), and parental involvement (Palmer, Pinto, & Parente, 2001) all have been found to explain credit card use in multivariate analyses. Female students, those with more positive attitudes about credit, those with higher individual and/or family incomes, and those whose parents co-signed for the credit card and had post-acquisition involvement all had more credit cards and/or higher balances. Davies and Lea (1995) suggested that students from relatively prosperous socioeconomic groups would perceive their relatively low student incomes as temporary and accept some level of debt to sustain their previous and anticipated lifestyle.

Lyons (2003, 2004) examined the credit card practices of college students using four different definitions of financial risk: \$1,000 or more in credit card debt, delinquent in credit card payments by two months or more, had reached credit card limit on at least one card, and paid credit card balances in full only some of the time or never. Across the four definitions, she found that gender, ethnicity, being financially independent, owing \$1,000 or more in other debt, and acquiring credit cards prior to or during the first year in college were just a few of the variables that significantly determined a student's level of financial risk.

While knowledge of college students and their use of credit cards exists, research has not yet been able to provide the information necessary to put this knowledge into context. How do young adults acquire the knowledge, skills, and attitudes necessary to make sound financial decisions? How do they learn financial behaviors? And from

whom do they learn them? This research set out to explore these issues and learn more about college students' financial management practices and their attitudes about financial management.

### Methodology

As noted earlier, this research was conducted as a multi-state project. An online survey was conducted at the University of Illinois at Urbana-Champaign in Fall 2004 and at Louisiana State University, University of Georgia, and the University of Illinois at Chicago in Spring 2005. This paper reports the preliminary results for Louisiana State University (LSU) and University of Georgia (UGA) -- 5,000 LSU undergraduate students and 3,266 UGA undergraduate students were invited to participate.

Students were asked to select the response that best described how often they engaged in 10 specific financial management practices. Eight other questions were asked, including: "Who has had the most significant influence in shaping what you know and think about money?"

To gain additional insights, in-depth focus groups also were conducted. At UGA, four focus groups were conducted with three to five students in each. At LSU, there were four focus groups with about 10 students per group. In addition, at LSU responses to the 10 survey items about the students' financial management practices were used to group students according to their use of the practices. A financial fitness score was generated for each respondent, taking into consideration the total number of items that were applicable to the respondent. The results were used to classify students as "not financially at-risk," "somewhat at-risk," and "financially at-risk." At LSU, two focus groups were composed of students who were financially at-risk, and two focus groups were conducted with students who were not financially at-risk. Using transcripts of the focus group discussions, the UGA and LSU researchers independently identified the themes that emerged.

### Survey Results

A total of 1,891 students (1,400 from LSU and 491 from UGA) responded to the online survey, with response rates of 28% and 15%, respectively. The sample included undergraduate students from each year in school, although the largest proportion was seniors (33.4%). A large proportion (66.7%) reported that their GPAs were B or higher. About two-thirds (64.7%) were female. Most were Caucasians (80.1%); 10.7% were African American, 5.2% were Asian, and 2.4% were Hispanic. Over one-half (61.4%) said they had at least one credit card (see Table 1).

The most significant influence on students' money management behaviors was their parents (70.0% reported parents together; 13.0% said mother, 6.0%, father). Few students identified as their most important influence a brother/sister (1.2%), grandparents (1.9%), other family relative (1.2%) or friend (1.5%). A small percentage (5.2%) reported "other," which included boyfriend, girlfriend, husband, wife, teacher, self, personal experience, church, and classes.

#### *How Financially Fit Are College Students?*

On a 5-point Likert scale with 1 = always, 2 = usually, 3 = sometimes, 4 = seldom and 5 = never, students' mean financial fitness score was 2.2 (the median was 2.1). Students were most likely to avoid writing bad checks and to pay bills on time, and least likely to save monthly, to have a budget, and to balance a checkbook (see Table 2 in which a lower score indicates greater likelihood of using a financial management practice).

Multiple regression analysis indicated students' grade point average (GPA), having a credit card, year in college, ethnicity, and the marital status of their parents explained 8% of the variance in their financial fitness scores. Students were more likely to be financially fit if they had higher GPAs or had parents who were married. Students were more likely to be financially at risk if they had a credit card or were a minority or college senior. Note that these findings are preliminary, and additional analysis is currently underway.

Although preliminary, the findings are consistent with the previous literature. The discussions from the student focus groups provide greater insights and are reported in the next section.

Table 1  
*Demographic Characteristics of the Undergraduate Student Sample (N = 1,891).*

Demographic characteristics	n	%
Year in College		
Freshman	465	24.6
Sophomore	382	20.2
Junior	413	21.8
Senior	631	33.4
Full- or Part-time Student		
Full Time	1810	95.7
Part Time	80	4.2
Current GPA		
3.6-4.0	498	26.3
3.0-3.59	764	40.4
2.6-2.99	417	22.1
2.0-2.59	183	9.7
Below 2.0	29	1.5
Gender		
Female	1224	64.7
Male	667	35.3
Ethnicity		
White	1514	80.1
African American	203	10.7
Asian	99	5.2
Hispanic	45	2.4
Other	30	1.6
Have a Credit Card		
Yes	1161	61.4
No	730	38.6
Parents' Marital Status		
Married	1337	70.7
Divorced	398	21.0
Other	156	8.3
Most Significant Influence		
Both parents	1324	70.0
Mother only	246	13.0
Father only	114	6.0
Other	207	11.0

Table 2  
 Responses to Financial Fitness Questionnaire.

Financial Management Practices	Mean score (1 = always; 5 = never)
I avoid writing bad checks or ones with insufficient funds.	1.27
I pay my rent/mortgage and other living expenses (i.e., phone and utilities) on time each month.	1.35
I pay my credit card bills on time each month and am almost never late.	1.40
I avoid maxing out or going over the limit on my credit cards.	1.43
I avoid spending more money than I have.	1.69
I have little or no difficulty managing my money.	2.26
I pay my credit card bills in full each month to avoid interest charges.	2.29
I balance my checkbook each month.	3.03
I have a weekly (or monthly) budget that I follow.	3.14
I regularly set aside money each month for savings.	3.28

### Focus Group Results

#### *University of Georgia (UGA)*

Participants in the UGA focus groups were not grouped according to their scores on the financial fitness quiz. Thus, much of the discussion was general, focusing on how the students learned what they knew about financial management. Three important themes emerged.

*The influence of family members is important but complex.* Most students reported hearing various messages about money from various family members. Common examples were, “Don’t spend money you don’t have” and various cautionary statements about credit. Most of the messages students shared related to controlling spending and avoiding or using credit wisely. In addition, many were very aware that they and a sibling approached financial management differently and wanted to be different from or like their sibling, depending on whether the sibling was more or less responsible.

Moreover, a number of students reported that they knew what their parents expected of them and they also knew they weren’t meeting their parents’ expectations. Some students explained that they have less money in college than ever before. In high school, they had jobs and more generous allowances from their parents and fewer expenses. A few students said they weren’t managing their finances as responsibly as they might, because their parents’ behaviors allowed them to continue to rely on them. For example, one student said, “I... withdraw on a negative checking account, and they’ll still give me money. So, sometimes it could be like your parents just need to stop helping you.” Two students said that college was their first experience with managing money.

Finally, other students reported they had no intention of following their parents’ financial management examples. For example, one student said, “When my mother divorced my father when I was younger, she filed bankruptcy and I watched our car towed away. I watched a lot of things happen, and I knew what I didn’t want to happen.” More typical is this quote from a student, “My mom, she will say, ‘You’re not supposed to do that,’ but then she will give me the money.”

*Students prefer immediate feedback in financial management, including using electronic and online financial services.* A number of students described using online banking and online access to their credit card accounts. These students were *not* writing checks or balancing checkbooks. However, they *did* have systems for checking their bank account balances (usually to avoid overdrafting) and managing their credit card charges in relation to their credit limit. Typical comments from students were, “One of the most called numbers on my cell phone bill is my [bank’s name] number. Because I’ll call them up...and then it tells me how much money I have.” “I use my debit card because I don’t keep up with checks.” “I go [online] every day and I check it [checking account], just to make sure that everything is ok.”

*Students were very interested in receiving financial management information through the university.* Students demonstrated that they, like the general population, have individual preferences about how they receive financial management information. While some students were enthusiastic about an informative Web site, other ideas emerged. Some thought the university should target freshmen, recalling that they personally had more money as a freshman than ever again. Others thought it would be good to have a financial education center on campus.

Several suggested workshops or classes, with differences of opinion about whether these should be required or optional. One student, supporting her position that the course should be required, said, "It is education, even though it's not part of your bachelor's program, it's part of your life. You need to know this."

#### *Louisiana State University (LSU)*

Participants in the LSU focus groups were recruited based on their scores on the financial fitness quiz. In two of the focus groups, all of the students were ones whose scores on the financial fitness quiz classified them as financially at-risk. In the other two focus groups, the students' scores were such that they were classified as not financially at-risk. The discussion that follows focuses on the differences between the themes across the two types of groups.

*Use of credit cards.* Approximately one-half of the not at-risk group did not own a single credit card and tended to be outspoken regarding the dangers of credit card use/abuse. The other half who did hold credit cards tended to have only one and reportedly treated them "like a debit card" by paying off balances immediately before finance charges accrued. This group viewed credit cards as a way to establish a good credit rating. In contrast, the financially at-risk group did not have an aversive or cautious reaction to credit cards (or at least not until they were deeply in debt). Many reported holding multiple credit cards and did not discuss the importance of maintaining a zero balance. A recurrent statement was, "It is too easy to get credit cards." The at-risk group demonstrated relaxed attitudes toward debt ("I'm going to pay it off when I leave here [LSU]" and "I'll deal with my mistakes later").

*Assuming responsibility for actions.* The not at-risk group demonstrated personal responsibility for their finances in a number of ways. They reported careful tracking and budgeting of expenses. Although the method varied (checkbook, notebook, online), students kept a pulse on their expenditures and intentionally avoided impulse shopping. Compared with the at-risk group, the not at-risk group was more than twice as likely to report saving at some level. For about one-third of the group, this had been a practice established in childhood. The not at-risk group frequently mentioned the importance of understanding the value of money, or, in other words, having a respect for money by not "throwing it away." They also recognized the importance of discriminating between needs and wants. In contrast, the at-risk students discussed their tendency to engage in "impulse shopping." Although sometimes done solo, the majority (two-thirds) mentioned that they tended to make impulsive purchases with peers. One notable quote: "We mismanage money together." The at-risk students reported that external factors influenced their spending habits. Advertising, peer pressure, and the thrill of an expensive purchase as a "status symbol" all were mentioned as influences for this group. One recurrent theme was the point that everywhere you go you see "Bad credit, no problem" or "No credit, no worries" signs. Apparently, such messages are internalized at some level and tend to mute alarm among the at-risk students.

*Constructive financial discussions with parents.* Interestingly, there was no significant difference between the healthy and at-risk groups in the reported frequency of "family chats" regarding financial matters. The difference emerged in the nature of those discussions. For students not at risk, discussions with their parents were perceived as educational and as a non-intrusive check and balance. For at-risk students, the discussions tended to be construed as interrogative and intrusive: "Where did you get that new pair of shoes and how did you pay for them?"

### **Conclusions, Discussion, and Implications**

This research assessed the financial management practices of college students using a set of recommended practices. One conclusion from the research is that some college students are not managing their finances well, because they have not adopted the set of recommended practices. Another conclusion is that some "recommended" practices should be modified to more accurately match ways in which college students responsibly manage their finances. For example, it is not necessarily a sign of poor financial management if an individual who banks online doesn't balance his/her checkbook each month. The individual is unlikely to even have a checkbook; instead, the appropriate financial management practice may be to reconcile his/her online account as frequently as needed to avoid an overdraft. On the other hand, paying credit cards on time seems like a good measure of financial management behavior even if the payment is made online. Thus, future researchers should develop a scale of financial management responsibility that fits the financial management options available to college students. The findings from this research could be used to develop a "financial fitness quiz" that could be used as a risk assessment tool by college campuses as well as financial professionals and educators who work with young adults.

Although there are no doubt deficiencies in the assessment of students' financial management practices, the results suggest that some college students are financially at-risk, and thus there continues to be a need for on-campus financial education. Recall the quote by one student who indicated that financial education is "not part of your bachelor's program, it's part of your life. You need to know this." College campuses may want to require that

a personal finance course or financial life skills course be included as a general education requirement for graduation. The course would cover the basics of financial management that every college freshman needs to know. Other options available to campus administrators include workshops and seminars, financial counseling centers on campus, peer education, and Internet resources. A realistic assessment of a campus' financial management options and decisions relevant to students is important to developing an effective educational program. For example, some of the financial education programs on college campuses have been developed by students and are taught by students to ensure a higher level of relevancy.

The findings from this research also have important implications with respect to the need for more educational resources for parents. Overwhelmingly, students reported that their parents influenced their money management behaviors. Parents need to be aware of the major role that they play in the financial socialization of their children and that this process occurs at a very early age. Resources are needed to educate parents about how to constructively talk to their children about financial management issues. Freshmen orientations on college campuses might include financial management education sessions for incoming students and their parents, either separately or together. Online resources for parents and college and college-bound students also could be particularly useful. A financial education Web site could be developed to serve as a "one-stop" shop, where students *and* parents could go to find information and resources on financial aid and other financial topics such as credit cards, budgeting, credit reports and credit scores, and identity theft. Some college campuses already are moving in this direction, but most of these efforts continue to focus on providing only information related to financial aid.

Also, campus administrators need to be aware that issues related to students' financial management often extend beyond the financial aid office. This study provides evidence that students who are more actively using their credit cards are more likely to be at financial risk than students who do not use credit cards. These findings suggest the need for a better balance of information and education on student loans *and* credit cards. However, financial aid offices specialize in providing information to students and parents about their financial aid options (i.e., federal loans, private loans, work study, grants, and scholarships). Many financial aid offices do not have the expertise and capacity to address financial issues that go beyond those of a traditional financial aid office. While some financial aid offices now have accredited financial counselors, they still may feel uncomfortable providing financial counseling and recommendations to students on issues that go beyond financial aid, such as how to manage their credit card debt.

Also, as previous literature points out, the implications of poor financial management can affect more than students' finances. It can affect their academic performance, mental and physical well-being, and even their ability to find employment after graduation (Bodvarsson & Walker, 2004; Lyons, 2003, 2004). Thus, campuses need to take a more holistic approach when addressing the financial needs of their students – student organizations and parents need to be involved in the process along with a wide range of campus offices (i.e., financial aid, student affairs, student health services, career centers, residence life, and student business services).

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