Student Credit Card Usage and the Perceived Importance of Financial Literacy Education

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ABSTRACT

This research had two major goals: the first, to identify credit card usage patterns in an undergraduate population and second, to assess the degree to which undergraduates believed that systematized instruction at the college level in personal financial management was a worthwhile goal. The results indicated that undergraduates at a public, urban, undergraduate-only college in the Western US viewed financial literacy education as a very valuable and desirable addition to their curriculum, especially with respect to managing credit card debt, budgeting and paying for college. Implications of the findings are discussed.

INTRODUCTION

Credit card debt is a critical problem facing today's college student. The most recent national research conducted by the Student Loan Marketing Association (SLMA or Sallie Mae), tends to confirm this contention. According to data collected by Sallie Mae in the spring of 2008:

- 84% of undergraduates had at least one credit card, up from 76% in 2004
- The undergraduates surveyed reported an average balance of $3,173, the highest in the years the study has been conducted and an increase of $1000 since 2004
- Only 15% of freshmen surveyed reported having no credit card debt, down dramatically from the 69% reported in 2004
- Graduating seniors reported an average credit card debt of more than $4,100, up from $2,900 in 2004
- Nearly 30% of undergraduates responded that they had used their credit cards to pay tuition and education related fees, up from 24% in 2004
- Undergraduates who used credit cards to pay for direct education expenses (tuition, fees and textbooks) reported charging $2,200 per year, more than double 2004's reported average spending of $942.

The same study asked students to what extent they felt equipped to manage their own personal finances (Student Loan Marketing Association, 2009). The vast majority of undergraduates (84%) reported a desire for more educational opportunities on financial management topics. Further questions revealed that nearly two in three respondents (64%) would have preferred to receive information in high school or early in their college careers (40%). Preferences for delivery of this financial management information varied, with 35% of the sample reporting a preference for classroom training while another 35% specified “one-on-one” meetings or counseling sessions as the preferred method.

Lack of financial education may be negatively impacting students’ academic performance. Indeed, nearly half (45%) of undergraduates reported experiencing high levels of anxiety about their ability to pay their credit card bills, with almost one-quarter (24%) saying they felt “extremely anxious”. This anxiety may manifest itself in students’ working more hours than they otherwise might, necessarily taking away from the amount of time that can be devoted to academic pursuits. As a result, students can be forced to drop out of school or significantly extend the amount of time it takes to complete their degree (Grable & Joo, 2006).

In May of 2009, President Obama signed the Credit Card Accountability, Responsibility and Disclosure Act (2009) into law. TITLE III of C-CARD (Protection of Young Consumers) clearly delineates responsibilities for both credit card issuers and higher education institutions. According to The Act, it is the sense of the Congress that each institution of higher education should adopt policies concerning the monitoring of credit card marketing practices on campus. The act further states that “credit card and debt education and counseling sessions (should) be offered as a regular part of any orientation program for new students of such institution.’’

Additionally, Section 510 of C-CARD requires a comprehensive summary report be prepared covering all existing federal financial and economic literacy education programs. The Act requires that the report address “…existing Federal postsecondary financial and economic literacy education programs and annual funding to support these programs…” The Act further requires development at the Federal level of a strategic plan, based on this summary report, designed to “…improve, expand, and support financial and economic literacy education…” Therefore, it is likely that based on this legislation, new funding sources will be made available to institutions of higher education that are willing to make a significant commitment to improving the quality of financial literacy education made available to students.

Colorado’s state legislature has also taken notice of the importance of education in financial literacy with respect to student outcomes. In 2008, Colorado Governor Bill Ritter signed into law House Bill 08-1168 (An Act Concerning Financial Literacy in Kindergarten Through Twelfth Grade Education; Colorado Revised Statutes) which mandates that personal financial literacy State Model Content Standards be adopted by the State Board of Education. The bill made Colorado one of 18 states that currently require personal financial management content to be incorporated into the K-12 curriculum in some form and in some pre-existing area of the curriculum (three additional states mandate a one-semester course devoted *exclusively* to personal financial management).

The Colorado legislation states that “The state board shall ensure that preschool through elementary and secondary education standards, at a minimum, include standards in reading, writing, mathematics, science, history, geography, visual and performing arts, physical education, world languages, economics, civics, *financial literacy*, and any other instructional areas for which the state board had adopted standards as of January 1, 2008 (emphasis added).”

This research examines the credit card usage patterns of undergraduate students enrolled at the Metropolitan State College of Denver (Metro State). Metro State is perhaps unique in that it shares several buildings on its main campus with two other institutions of higher education: the Community College of Denver and the University of Colorado at Denver and Health Sciences Center. This sharing of facilities creates a high likelihood that students enrolled at Metro State may be exposed to the marketing efforts of a particular credit card issuer that has a marketing agreement with one of the other two institutions on the main campus, but has no agreement in place with Metro State.

These encounters, if and when they occur, expose Metro State (and any other institution with similarly shared facilities) to potential legal liability under the requirements imposed by C-CARD (2009). Consider the case of a Metro State student who obtains a credit card by visiting a credit card solicitation table sponsored by one of Metro's sister institutions. Further assume that this student later experiences financial problems and is unable to repay the debt incurred on that card. Anecdotal evidence has indicated that the anxiety generated by this debt can, in extreme ses, result in student suicides.

In this situation, it is quite possible that Metro State could be found in violation of the requirements imposed by C-CARD if the institution had not provided financial education opportunities to its students, *even if* no agreement existed between the issuer and Metro State. Litigation and possible liability judgments could follow. We therefore contend that making financial literacy a priority in the undergraduate curriculum to be the best legal protection for colleges nationwide while at the same time being in the best interests of students. As a further incentive, providing such educational opportunities may generate funding opportunities from the federal government under the language of C-CARD (2009).

The goal of this study was to survey the attitudes and behavior of Metro State students with respect to their credit card usage and their desire for formal training in financial literacy. The results allow college administrators to be informed about the content that undergraduate students most desire in their undergraduate freshman and sophomore level courses. It seems clear that in an increasingly competitive educational marketplace, students will choose the institution that offers curriculum most consistent with their specific needs and wants. The institution that best delivers that curriculum should see more stable enrollments, a significant consideration in these times of declining state funding.

LITERATURE REVIEW

Recent efforts in the direction of financial literacy education, including the Colorado legislation previously cited, place heavy emphasis on the instruction of young consumers. For example, the Jump$tart Coalition for Personal Financial Literacy (2009) lists as its organizational purpose "…advancing the financial literacy of kindergarten through college age youth by providing advocacy, research, standards and educational resources…" Support for early financial education is offered by the work of McCormick (2009) who concluded from a detailed review of the financial education literature that the earlier students are introduced to financial management topics, the better.

However, other research suggests that the provision of financial education to high-school age students is often less than effective. One study found that while "just in time" education programs (those provided for and immediately prior to the recipient encountering a financial event) were effective for older consumers, the impact was less pronounced for young people (Mandell & Klein, 2007). The authors concluded that for high school populations in particular (to which the Colorado legislation is at least partly directed), provision of financial literacy education often has limited impact because the information is not *perceived* by the recipient as being particularly useful or relevant (Mandell & Klein, 2007). Similarly, Bruder (2009) argued that a limitation to the efficacy of financial education in high school is that even as seniors, high school students might not recognize the importance of the information being presented because of its lack of immediate relevance in their lives.

The statistics regarding credit card debt and delinquency among college students are alarming. Research indicates that a significant majority (estimates range from 70-95%) of college students have at least one credit card (Manning, 1999; Markovich & DeVaney, 1997). With respect to credit card indebtedness, Nellie Mae Corporation, a major provider of student loans (and a subsidiary of Sallie Mae) found in a 2004 study that one-third of their respondents had credit card debt in excess of $2,000 (Nellie Mae, 2005). In a follow-up study of credit card use among graduate students, Nellie Mae found that credit card balances increased by 77% between the first and third years of graduate school (Nellie Mae, 2006).

Further compounding the problem of credit card indebtedness is a lack of financial literacy among college students. Research indicates that many undergraduates do not maintain a written budget, and of those who do, a minority actually stay within its parameters (Henry, Weber & Yarbrough, 2001). It has been recommended that colleges lead the way in addressing this fact by instituting financial literacy programs (Ruth, 1995). Further, it has been suggested that early exposure is key to the efficacy of this information. Since students have early access to credit card debt (often as early as the junior year of high school), some argue that financial literacy education should begin as early as student orientation sessions at the beginning of the freshman year in college (Joo, Grable & Bagwell, 2003). In short, we see a population of college students with burgeoning credit card debt, who experience the stresses associated with this debt as a conflict with their academics and who have little to no financial training in how to manage their credit.

This research attempts to identify parallels between the national data on credit card use and indebtedness and the usage of undergraduate students at Metro State. Secondarily, it is intended to reveal the beliefs, attitudes and preferences of this population with respect to proposed educational programming in personal financial literacy.

METHOD

Data Collection

Our sample frame was the entire set of 23,958 currently enrolled students at Metro State. College email addresses were secured from the institution, and a series of emails were sent to each student following human subjects review of the research proposal. Recipients were advised 1) of the purpose of the study, 2) specifically advised that their participation in the survey was voluntary and that 3) there was no way to tie responses to any particular individual, thus preserving the respondent's anonymity. As an incentive to participate in the study, we advised recipients that a drawing for a prepaid $100 Mastercard would be held following the conclusion of the research and that specific instructions on how to participate in the drawing were to be found after (and if) the recipient of the email completed the survey. Electronic precautions were taken to ensure that no respondent could complete the survey more than once.

Approximately one week before the survey began, an alert email was sent to each student in the sample frame announcing the purpose and intent of the survey and informing the recipient that the *opportunity* to participate in the survey was forthcoming. One week later, emails were sent to all email addresses containing a hot-link to an electronic survey management company where our questionnaire was posted online. Another hot-link was embedded on the final page of the survey leading an email account established specifically for the purposes of the drawing. Recipients who chose to enter the drawing (in which participation was voluntary) could send their contact information to the address. A drawing was held following the conclusion of the project to award the prepaid $100 Mastercard. The establishment of a separate email address served to further ensure that the anonymity of the respondents was preserved, even for those who chose to enter the drawing.

A total of three follow-up emails were sent to all recipients reminding them of the purpose of the survey, its importance and asking for participation. Each email contained the assurance that participation was voluntary and offered the opportunity to participate in the drawing for the Mastercard.

Sample

A total of 3,765 responses were received utilizing this method, representing a response rate of 15.7% of the students contacted, with electronic measures ensuring that no single respondent could complete the survey twice. This small percentage represents a major limitation to this research: it is possible that the opinions expressed by our sample differ from those held by the population as a whole, perhaps significantly. That said, the degree of similarity between the sample and the population with respect to demographics gives some optimism in this regard.

Table 1 summarizes the demographic information as reported by the respondents to the survey, along with comparable statistics for Metro State's student body as a whole (for comparison purposes). Student body data presented are from the fall semester of 2010, the most current semester for which these data are available (Metropolitan State College of Denver, 2010).

Table 1
Summary Demographic Information (Sample and Student Body) by Percentage of Responses

	Sample	Student Body
Gender		
Female	66.6	54.2
Male	32.3	45.8
Year in School		
Freshman	21.8	28.5
Sophomore	19.0	20.6
Junior	26.6	20.3
Senior	32.6	26.7
Enrollment Status		
Full-time	72.0	61.8
Part-time	28.0	38.2
Ethnicity		
American Indian/Alaska Native	1.1	.9
Asian	4.1	4.1

Black/African American	6.4	6.3
Hispanic/Latino/Latina	13.4	16.0
Native Hawaiian/Pacific Islander	.7	.1
White	68.7	63.4

Table 1 (Continued)

Age		
Under 25	50.2	55.4
26-35 years	30.2	31.4
36 years or older	19.5	13.1
Employment Status		
Employed Full Time	30.7	-
Employed Part Time	35.0	-
Not Employed	28.7	-
Current Annual Salary		
$40,000 or less	82.9	-
$40,001 - $80,000	11.0	-
$80,001 or more	1.4	-
Size of Employer		
Small (Less than 50 workers)	37.5	-
Medium (50-1000 workers)	27.3	-
Large (More than 1000 workers)	31.5	-

Note. Some category percentages total less than 100 due to respondents failing to answer or provide information on a particular item.

RESULTS

Credit Cards: Number and Origin

About 2/3 of our sample (67%) indicated that they owned at least one credit card at the time of the survey (Mean = 2.5 cards, standard deviation = 1.8). The majority of our sample (75%) responded that they received their first card before the end of their freshman year in college (54% said they had their first card before they left high school). Of the various methods reported for the origin of this first card, the largest portion of our sample (21%) said that they had received their first card via a mail solicitation from the issuer (another 13% cited joint ownership with a parent while 11% mentioned getting the first card via an in-person solicitation at a retail or other outlet).

Credit Cards: Balances and Usage

The majority (77%) of our sample report that they currently carry balances on their cards. When combining across all cards owned, while 48% reported aggregate balances of less than $1,000, a significant minority of the sample (16%) reported balances due in excess of $6,000. The sample was specifically asked to identify which educational expenses were typically paid by means of credit cards. A significant majority (86%) claimed to typically use cards for this purpose. For those who reported using credit cards to pay at least some of their educational expenses, textbooks and school supplies topped the list of items for which cards were used (55%

of the sample reported using cards in this way). Next on the list (25% of our sample), and far more worrisome given the magnitude of the expense, was the use of credit cards to pay tuition and college-related fees. When asked about the motivation to use cards to pay these costs, 36% of our sample cited "convenience" as the driving force, but 40% of our sample specifically indicated that they were turning to plastic because financial aid was not covering the cost of these items, and they did not have sufficient savings to make up the difference. Over 1/3 of our sample (37%) reported that they were frequently or sometimes surprised to see how high their balance due had climbed as a result of their credit card use. Interestingly, in this regard, the majority of our sample had never (46%) or only rarely (19%) reported asking their parents for advice on how best to manage their credit cards and prevent their over-use.

Credit Cards: Payment Behavior

The largest portion of our sample (38%) claimed that they usually paid more than the minimum payment on their cards but rolled over balances due from month to month. For this portion of our sample, interest rates and charges would have been most keenly relevant. Another 30% reported that they paid their balances in full every month, while 9% reported making only the required minimum payment. A very small minority (2%) reported that their parents made the required payments on the card, indicating that the vast majority of our sample was economically responsible for servicing this credit card debt. Of note, 28% of our sample reported buying items using their cards (either sometimes or frequently) with full knowledge that they would not have the money to pay the bill when it arrived.

Credit Cards: Effects

Almost 2/3 of our sample (63%) reported feeling at least some anxiety over their ability to pay the credit card bills when they came due. At the high end of this spectrum, 13% reported that they felt either very or extremely anxious about paying their credit card bills. Consistent with this finding, 19% of our sample reported that the amount of their credit card debt adversely impacted their academic performance.

Although not specifically the focus of this paper, student loan debt was mentioned as a concern of our sample. Over 60% of our sample reported having used student loans to finance their college education, and 45% of those respondents expected to owe more than $20,000 in total student loan debt by the time they graduated. Almost 20% of the group reported having no idea how much time it would take to repay their loans, despite the disclosures made by the lenders as required by federal truth-in-lending laws.

Financial Literacy Education: Perceived Importance

Our sample was nearly unanimous (99.6%) in their belief that financial literacy education belonged somewhere in the educational curriculum. By far the largest portion of this group (64% of the sample) felt that such information should be provided during the high school years. An additional 14% of the sample believed such information should be delayed until a student had entered college. In this respect, our sample mirrored Sallie Mae's findings cited earlier in this paper.

When asked specifically if the College should require a formal course in financial literacy, the sample was almost evenly split. Thirty-eight percent agreed with the proposition while 33% disagreed (27% offered no opinion). It should be noted that disagreement with this statement does not necessarily indicate that the 33% who disagreed believed that financial literacy is unimportant in the educational arena. It may well be that this group feels the concept is important, but should not be addressed in a formalized classroom setting or should not represent a graduation requirement. This contention is supported by the responses to one survey item that asked respondents to agree or disagree with the statement "Personal Financial Management should be (have been) a part of my educational program". Fifty-eight percent of the sample expressed agreement with this statement, while only 21% disagreed (27% were neutral). This suggests that students may recognize the importance of financial education in the curriculum, while objecting to its being elevated to a requirement for graduation.

Financial Literacy Education: Delivery Methods

The survey asked respondents to rank, on a 5-point Likert scale, their degree of preference for receiving financial literacy education (with 5 labelled Most Preferred). Table 2 below illustrates the percentage of respondents citing a given method as being highly preferred (either a 4 or 5 ranking on our Likert scale model).

Table 2

Preferred Methods of Delivery of Financial Literacy Education, by Percent of Sample Indicating a Strong Preference for a Given Method (N=3523)

Parents	58%
1-to-1 counseling	51%
Formalized Classroom	48%
Workshops/Seminars	39%
Email tipsheets	35%
Online tutorials	34%
Self-study (non-credit)	25%

Financial Literacy Education: Content

In an open choice format (respondents were free to choose as many topics as they wished from a list of several financial management topics), respondents indicated a strong preference for information on savings/budgeting, paying for college and financial aid strategies as well as debt reduction and management. This result seems intuitive as these areas are of most immediate concern to students in their day-to-day lives. The full list of topics, along with the percentage of the sample who indicated each as a preferred content item, is listed below in Table 3.

Table 3
Financial Education Content Area Topics Listed as Desirable by the Sample by Percent (N=2089)

Saving/Budgeting	24.2%
Paying for College/Financial Aid	20.7%
Debt Reduction/Management	18.9%
Retirement Planning	6.6%
Investment Planning	8.5%
Insurance Planning	5.4%
Tax Planning	5.3%

CONCLUSIONS

It should be noted that despite the statistics, the headlines in the popular press and the lack of dedicated financial literacy programs at the university level, most college students manage their credit card debt effectively (Norvilitis & Santa Maria, 2002). Our research confirms this finding: almost 70% of our sample report either paying their entire balance when due or making more than the minimum required payment each month. That said, the "rolling over" of balances from month to month still represents a significant financial cost to servicing credit card debt. Sixteen percent of our sample reported balances due in excess of $6000 on all cards owned.

Our sample was also broadly consistent with respect to the ownership of credit cars, with almost 2/3 of our sample reporting that they owned at least one charge card. This number is consistent with the figure reported by Manning (1999).

Most telling in this research was the degree to which respondents felt that financial literacy should have a place in their educational curriculum. The majority of the sample (64%) expressed a belief that this educational content should be provided in high school. That said, previous research casts doubt on the effectiveness of this approach, perhaps due to a lack of perceived relevance on part of high school students (Mandell & Klein, 2007; Bruder, 2009). As a result, the suggestion offered by Joo, Grable and Bagwell (2003) that exposure begin early in the college years, when students have begun to establish a substantial degree of economic independence from their parents may have more relevance here.

Our sample strongly indicated a demand for more financial literacy training. As was seen in Table 2, when asked about the preferred *source* for this content, parents and family were cited most frequently (58% of respondents). This is despite the fact that over half of the sample reported *never* having such conversations with their parents and family regarding financial advice and skill building. We therefore question the efficacy of traveling down this road. The second most cited potential source, one-on-one counseling (51% of respondents) would require institutions of higher education to hire batteries of financial counselors (complete with support staff) in order to accomplish. In an economy where state revenues are falling and budgets for colleges and universities are being dramatically cut, this option seems unrealistic. The third most often reported choice (48% of respondents) was that of a traditional, classroom-based delivery system. This option seems to make the most sense and to be the most feasible. Highly trained professionals are readily available to teach such classes in a systematic fashion (versus information gleaned from parents and families), assessment structures already exist to evaluate the degree of educational progress being made, and the support structure for delivering such information is already in place. The authors believe that the classroom based option makes the most sense of the responses given by the sample.

With respect to desired content of this financial education, the most frequently cited responses were (as would be expected) topics of immediate relevance to the student audience: debt management, saving and budgeting, and paying for college (See Table 3 above). This underscores the contentions of previous authors who contend that financial literacy education will be more effective to the extent that it addresses concerns that are of immediate relevance to the audience. Consistent with the express purpose of this paper, there seems to be a demand for this information being expressed, at least among Metro State students. The authors contend that the focus of such educational programming should be broadened to include the above-mentioned topics and add others. Substantial efforts should be made at illustrating how this content is relevant to the students in the here and now in order to secure their attention. As Metro State's student body is of a non-traditional nature (older, more likely to be employed full-time, more likely to be married and with children) this may be an easier task at this institution than at others.

That said, the authors would recommend, consistent with the expressed views of the sample, institution of a broad ranging financial management course. Relatively few in our sample (between 7-9%) expressed a desire to learn more about topics such as insurance, investing, retirement planning and estate planning. But considering that for most of the sample, their time in college will be the last opportunity they have for receiving financial education from an unbiased source, in a classroom environment, with pressure to learn, the authors would recommend extending the content to include the above-mentioned topics.

As financial educators, we understand the reality that (for example), accumulating sufficient assets for a secure retirement *requires* that this effort start sooner rather than later. Simple time value of money calculations can show that delaying the systematic accumulation of retirement assets into or beyond a worker's third decade can seriously imperil the likelihood of a secure retirement. If that is the case, today's undergraduate needs to be shown those numbers now and educated in at least the basics of retirement planning strategies.

Considering the reality that most of our graduates will go to work in the private sector one day, and the prevalence of defined-contribution employer-sponsored retirement plans, it makes sense to provide our students with the rudiments of investment analysis. Gathering assets for retirement will be to little avail if those assets are invested imprudently during the decades preceding retirement.

If we believe that accumulating assets is an important goal (either to fund retirement, college savings, purchasing homes, or other financial goals) then it would seem prudent to include in the financial education curriculum information on how to *protect* those assets from harm. Asset protection is clearly the function of insurance, and such instruction should be included in any financial literacy program.

Finally, following a life cycle perspective, the end of the program should logically consist of the basics of estate planning instruction. This content probably should not rise to instruction in the intricacies of trusts, but a background in the basic estate planning documents (wills, powers of attorney, advance medical directives and living wills) is relevant to anyone at any age. There is a misperception among many that estate planning is only the province of the "rich" and can therefore be safely delayed, if not ignored entirely. This misperception can easily be countered by a consideration of the risks to which students (and their dependents) are exposed without such documents in place.

This research has shown that at Metro State, credit card usage among the undergraduate population is roughly on par with national norms. As such, and considering the federal legislation in place, Metro State faces a potential liability exposure if no efforts are made at financial education on its campus. College classroom delivery of this education would seem to be the most practical and the most desired by the sample. Broad based content coverage would seem to be preferred to more narrowly focused, one-time seminars or workshops.

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