Financial Literacy and Credit Cards: A Multi Campus Survey

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Abstract

In America, credit cards on campus have been a disaster, leaving students buried in debt before graduation, often with little hope of paying off the debt before high fees and interest double the amount. This research details a multi-campus survey of current American college students and their use of credit cards. In the current project, we surveyed business students across five campuses in the United States (n=725) in fall, 2009. We found significant differences between students on their knowledge of credit cards and several demographic factors. We conclude by discussing the implications for further research in this area.

Introduction

The problem of credit card use has snowballed in the last decade. In 2004, the average college student had only $946 in credit card debt (Lusardi, Mitchell & Curto, 2010). In 2007, the average college senior had a $3000 credit card debt (Cahill, 2007). By 2008, the average increased to $3173 (Block, 2009b). By 2009, the average soared to over $4100 (Block, 2009a). The problem has gotten worse. A decade ago, one in five students had greater than $10,000 in credit card debt (Parks, 1999). Now, fifty percent (50%) of college students have four or more credit cards (Block, 2009b). Lyons & Hunt (2003) found that 30% of students had "maxed out" their credit cards, and had no more available credit. Card use climbed through college as seniors had twice as much debt as freshmen (Nellie Mae, 2007).

In practical terms, college students owed 24% of their yearly income in credit card debt (Norvilitis et al. 2003). In just three years, the costs of debt jumped to 30% of student income (Norvilitis et al. 2006). When student loans were added, the average debts for a college graduate are $20,400 (Weston, 2008; Nellie Mae, 2007). The problem compounded as college graduates doubled their credit card debt shortly after graduation (Adams and Moore, 2007).

How did we get into this problem? Credit cards have rapidly expanded on campus in the last twenty years (Ludlum and Smith, 2011; Manning and Kirshak, 2005; Nellie Mae, 2007; and Kara, Kaynak, and Kucukemiroglu, 1994). After years of aggressive marketing, there were no new customers without a credit card. Just one lender, Capital One issued over 37 million cards in America, one card for every six adults (Silver-Greenberg, 2009). Lenders, eager for new customers, came to campus to sign up new, unsuspecting students (Robb and Sharpe, 2009; Parks, 1999). College students were solicited for credit cards 25-50 times a year (Cahill, 2007; O'Connell, 1994; Susswein, 1995). Incentives included t-shirts and iPods for students to sign up (Block, 2009a). College students got credit without planning because of these slick marketing tactics (Cahill, 2007). A third of students never discussed the credit card decision with their parents (Block, 2009a).

The lenders eliminated income and employment requirements to make credit cards easier to get for college students (Cahill, 2007). American students have been inundated with credit card marketing schemes (Adams and Moore, 2007; O'Connell, 1994; Susswein, 1995). Some have exclaimed that credit cards are greater threat on campus than alcohol or sexually transmitted diseases (Parks, 1999). Some have called for the ban of issuing credit cards to college students (Acohido, 2008; Davies and Lea, 1995; Brobeck, 1992). A ban seems unlikely now, or at least ineffective. It is too late to implement a ban when nearly every student already has a credit card. Sallie Mae found that 84% of undergraduate students already have a credit card (Block, 2009a).

In this paper, we will review the problem of credit cards on campus. We begin by exploring the problems of credit. We will follow with a review of the literature on financial literacy of college students. Next we will examine the results of our survey on the use of credit cards. We will then examine demographic factors to see which ones relate to the abuse of credit cards. We will conclude with implications for further research and a call for action.

Review of the Problem

Most Americans do not understand the terms of their credit cards (Hensarling, 2008). The banks profited off of consumer mistakes (Acohido, 2008). America revised the credit card rules to protect consumers with little effect. The Schumer Box [named after Senator Schumer (D., N.Y.)] was designed to help consumers make informed choices (Rosato, 2008). It has not worked. For example, cash advance fees have been overwhelming. Lewis (2009) commented that withdrawing your own cash can cost you, and you would be paying for the rest of your life. This is not an exaggeration. Penalty fees generated $20 billion for credit card issuers in 2009 (Chu, 2009a). Retroactive interest rate changes and penalty interest rates have cost consumers $10 billion a year (Samuelson, 2010).

The high fees should have discouraged credit card use, but just the opposite was true (Ludlum & Smith, 2010). Americans are addicted to the convenience of credit, despite the high costs (Rutherford & DeVaney, 2009). Education only made this worse (Chien & DeVaney, 2001), as college educated consumers used credit cards 140% more than high school educated consumers (Rutherford & DeVaney, 2009). Some of this difference could be explained by availability of credit, but not all of it. Further, in a down economy, credit use is even more dangerous, as 94% of people under age 35 believe it is proper to borrow money for living expenses (Castellani and DeVaney, 2001).

Some actions may stem the tide of debt. As a result of changes during the Obama administration, credit card offers on campus should significantly decrease. Several changes have been important in reforming this area. The CARD (Credit Card Accountability, Responsibility, and Disclosure) Act of 2009 was designed to protect college students (Lusardi, Mitchell, & Curto, 2010). First, students under 21 must prove financial ability or have a co-signor (Block, 2009b). Now students will have to demonstrate means to pay before getting a card (Samuelson, 2010). Second, credit card companies are prohibited from conditioning gifts on applications for cards on campus. Third, the new law limited penalties for over-limit purchases (Chu, 2010). Lenders planned to scale back reward programs and increase fees to adjust to the new laws (Chu, 2009b). With the law change pending, the race was on to sign up credit card holders on campus before the new prohibitions took place (Ludlum and Smith, 2010). In the last quarter of 2009, the number of credit card offers increased 46% over the previous quarter (Mindlin, 2010; Bulik, 2010). JP Morgan Chase increased credit card mailings by 87% in 2009 (Bulik, 2010). Almost 400 million credit card offers mailed in last three months of 2009 (Mindlin, 2010). Consumers Union claimed this will be the last "open season" on college students (Block, 2009b).

After examining the credit card problem, we should examine student competence to use them. If students know the risks of credit use, the increased debts are an informed risk, and probably not a concern. Sadly, this is not true.

Review of the Literature

Eitel and Martin (2009 at 618) explained "Financial literacy is paramount to the success of future generations." Financial literacy has been defined as "the ability to make informed judgments and to take effective actions regarding the current and future use and management of money" (U.S. Dept. of Treasury, 2008). This is not a dominant view. Americans have spent more than they make (a negative savings rate) since 2005 (Nellen and McWilliams, 2008).

Earlier research indicated responsible credit behavior by college students (Lyons, 2004; U.S. GAO, 2001). This was not a concern when students had little access to credit. If the students cannot get a credit card, it is expected they would not know about the details of this type of debt. The research that was available was not promising. Students had low level of knowledge on credit card details, such as interest rates, credit limits, or credit fees (Jones, 2005; Warwick and Mansfield, 2000).

Credit cards are now a way of life for college students (Lyons, 2004). Why? They are not just a convenience. Costs of education have risen faster than the increases in financial aid (College Board, 2005). Robb and Sharpe (2009) explained that high balances might be a result of low levels of financial aid, using credit cards an alternative school funding. Credit cards have become a default tool of financial aid for college students. With the high costs and fees, using credit cards to finance education is a danger.

Method for the Survey

We wanted to examine the financial literacy of students across several campuses. A convenience sample of business majors were taken from large survey classes at five campuses in the U.S. in the fall semester of 2009. The schools were a mix of public and private schools and varied in size from under 6000 students to over 25,000 students.

Students were asked to complete the questionnaire during class time. The survey instrument was voluntary and anonymous. A total of 725 completed surveys resulted. No surveys were rejected because of incomplete answers. However, in some questions, there were fewer than 725 responses. A complete list of the questions is in the appendix.

Nearly all (91.7%) of survey participants were business majors. The group was fairly distributed among academic years. The respondents were in the following: freshman, 3%; sophomore, 10%; junior, 31%; senior, 38%; and almost 9% were in graduate school. Since most students were in the last years of the business program, most had completed the core business classes. More than 61% had taken a class in business ethics. Over 74% had taken a class in business law. On average, students reported studying less than nine hours per week.

Females and males were evenly divided. By age, the group consisted of traditional students. Only 4.7% were under age 20. Less than 10% were over age thirty. Only 15.7% of the respondents were married, but 17% had children. Tobacco use was reported by 16%. Most students worked while attending school (75.6%). Fewer than 25% owned any stock or securities.

Findings

We found that 70% of undergraduate college students had a credit card. Just over a third (33.9%) had only one credit card. This leaves approximately 36% of college students with two or more credit cards. This was less than the finding of the Sallie Mae survey (86%), but greater than the findings of Robb and Sharpe (2009) with 66%. Graduate students have even more credit use, with 96% having a credit card (Robb and Sharpe, 2009). Norvilitis et al. (2006) found that 74% of students had at least one credit card. Robb & Sharpe (2009) found 66% of Midwest students had at least one credit card.

Students used them. Nearly half reported using the card only for emergencies. Another 36% used it less than five times a month. Nearly 13% use their cards frequently. Interestingly, nine students (1.1%) reported using their cards more than once a day.

When paying for education, credit use was not a problem. Very few relied on credit cards for funding college tuition, but most say they would use credit cards to purchase books or supplies. These findings were not of serious interest in this survey because use of credit cards is a function of necessity, not knowledge. The use of credit cards by students told us more about the student's family wealth than about any aspect of financial literacy.

However, only 9.4% of students paid their credit card in full each month. This left most students (90%) with some indeterminate amount of credit card debt each month, subject to high interest and other charges. In contrast, Robb and Sharpe (2009) found only 38% of students reported a balance subject to interest. Norvilitis et al. (2003) found that only 32% of college students paid off credit card debts in full each month. This change could be caused by the economic downturn as students struggle financially, and must keep a balance on their credit cards.

We examined three factors of practical financial literacy. First, did students know the interest rate on their credit cards? Second, did students know the late payment charges for their current credit cards? Third, did students know the penalty for being over their credit balance? We also examined the three factors together, to determine which students knew all three facts about their current credit cards.

Since the interest rate is the primary cost of credit, a financially literate student should know the interest rate he/she is paying (Robb and Sharpe, 2009). We predicted this amount to be high, since so many credit card issuers advertise these rates as a key marketing tool. We were surprised, but not in a good way. Only 14.6% of students claimed to know the interest rate they paid on credit. In other words, less than one in six students knew the interest rate they were paying. Since we had no way to verify the information, we are safe in assuming this figure was an over-estimate of the level of knowledge. The results likely over-state student knowledge, since it was self-reported (either "I know" or "I don't know"). Without the students' financial records, we cannot ask detailed information (such as listing their interest rate) and then comparing it to the real financial records from lenders. Privacy laws make that type of investigation impossible.

We also examined the two most frequent costs (other than interest) for a credit card user, the late payment fee and the over balance fee. The late payment fee is a form of penalty for not dispatching the current payment on schedule. Often, this fee dramatically increases the costs of credit use. However, the students we examined were oblivious to this charge. A strong majority (75.7%) had no idea of late payment charges on their credit card. Less than one in four students knew the amount of the late fee on their credit card. Like the interest rates, since we had no way to verify the information, we are safe in assuming this figure was an over-estimate of the level of knowledge. When we examined the over balance fee, we were also disappointed. Only 29.2% claimed to know the penalty for being over their credit balance. Still, this amounted to less than one in three students who knew this frequently assessed fee. Again, we are safe in assuming this figure is an over-estimate of the level of knowledge.

If we combine the financial literacy tools, fewer than 10% knew their interest rate, the late charges, and the over balance penalty on the credit cards they use. This showed us when we examined the financial literacy of our college students, fewer than one in ten knew these basic facts of a financial tool they have in their pocket every day. We know that college students lacked financial literacy. What else do we know about the students who abused credit cards? We investigated which demographic factors were related to credit card use. By identifying which students were more likely to abuse credit cards, we can target our financial literacy programs to those most in need. We examined the results of questions on credit card use and compared them with the following demographic factors: year in school, major, taking an ethics course, taking a business law course, political affiliation, and gender.

We also examined several factors outside of student behavior, such as owning stock, smoking, being employed, being married, and having children. In addition, we compared the use of credit cards with the student attitudes including their views of corporate social responsibility and governmental involvement in the economy. For each, we started with a null hypothesis (no relationship). We used the chi-squared analysis for goodness of fit to test for relationships. As students age in college, do they gain maturity in dealing with credit? We compared younger students (freshman and sophomores) to the older students (juniors and above). On a positive note, older students showed more responsibility in knowing their interest rates (x^2=41.79, df=21, p=.004), knowing the over balance fees (x^2=45.160, df=21, p=.002), and knowing the late fees (x^2=49.213, df=21, p=.000). This would mean that older students are more financially aware of the costs of credit use.

However, younger students use their credit cards more often than old older students (x^2=215.86, df=154, p=.001). This could be seen in two ways.

First, this is a positive sign. Since older students knew about the costs of credit, they naturally should have used them less. From a pessimistic view, younger students who lack knowledge were using credit cards more. Perhaps juniors and seniors stopped using credit cards because they have already gotten themselves into credit trouble during their first two years as students. We tried to assess this by asking students to report their amount of credit card debt. However, most students left that question blank, making any comparison impossible.

Next we examined the effects of specific courses on credit card understanding. Students who had taken a business law course were significantly more aware of interest rates (x^2=19.945, df=9, p=.018), late fees (x^2=19.704, df=9, p=.020), and over balance fees (x^2=18.603, df=9, p=.029) than students who had not taken business law. This should not be a surprise, since these topics are covered in this course.

Ethics classes also impacted student knowledge of credit card costs. Students who had taken an ethics course showed greater understanding of interest rates (x^2=16.737, df=6, p=.010) and late fees (x^2=13.729, df=6, p=.033) than students who had not taken an ethics class. This is likely because of the recent financial scandals which have been used to demonstrate ethical theories. Any discussion of the financial scandals would include some mention of the financial issues, bringing those to the students' attention.

Certainly, there are other courses which cover the topics of credit costs (such as accounting and finance). This is not to imply that the other courses would not increase understanding of these issues. This survey did not ask details about all courses taken.

Several demographic factors showed significant results of being correlated with financial literacy. Students who owned stock showed significantly more knowledge about credit card costs. Student stockholders knew more about interest rates (x^2=26.884, df=12, p=.008), late fees (x^2=22.783, df=12, p=.030), and over balance fees (x^2=24.263, df=12, p=.019). This is not surprising. If a student owns stock (even a small amount), they will pay more attention to financial issues, since these "classroom" issues have a real impact on their lives. In this factor, stockholding was a dichotomy (yes or no). The survey did not ask for any amount. It might be an interesting project to see if the amount invested influenced the students' knowledge and desire for credit.

Student employment made a significant difference in the understanding of credit card issues. Employed students were more responsible and informed about the interest rate they paid (x^2=45.901, df=9, p=.000), the late fee they paid (x^2=28.21, df=9, p=.001), and the over balance fee they paid (x^2=30.717, df=9, p=.000). Employed students have already entered the workforce (even if just part-time). As a result, the employed students will spend more time learning the details of finances.

Marital status also made a significant difference in the understanding of credit cards. Married people were much more knowledgeable about all credit issues, such as interest rates (x^2=40.728, df=9, p=.000), late fees (x^2=29.968, df=9, p=.000), and over balance fees (x^2=17.046, df=9, p=.048). Married people, often independent for the first time, would likely pay more attention to financial matters that directly affect them. Past research (Robb and Sharpe, 2009) found that married people had the same number of cards, but higher outstanding balances than single students.

While being married had an effect on financial literacy, having children did not. Those with children had no significantly greater understanding of credit cards than those who did not. Tobacco use also did not result in any significant findings on any of the questions on credit card knowledge.

Surprisingly, gender made no difference. None of the questions on fees had any significant differences by gender. This supports some previous research, such as Robb and Sharpe (2009) who found no differences in credit card use by gender. This contradicts previous findings from several studies that found females displayed lower levels of financial knowledge (Seyedian and Taihyeup, 2011; Lusardi, Mitchell, & Curto, 2010; Borden, et al., 2008; Lusardi and Mitchell, 2005; Jones, 2005; Chen and Volpe, 2002). Armstrong and Craven (1993) and Lawrence, et al. (2003) found that female students were more likely to have a credit card than male students. Hayhoe, Leach, and Turner (1999) found that a significant number of females have four or more credit cards.

Interestingly, some factors were not related to credit card use. Students' major (business or non-business) did not have any relationship to their use of credit cards or financial literacy. We found no significant results over any of the questions. This should be discounted because the sample was so heavily made up of business majors. A larger sample of non-business majors should be examined.

However, this finding contrasts with Chen and Volpe (1998) who found that business majors knew more about financial literacy than non-business majors. Robb and Sharpe (2009) also found that business majors were less likely to keep a credit card balance than non-business majors.

We used two measures of political views to see if those views influenced their use of credit. We examined ideology and activism. Neither made any significant results on the use of credit. Students' political identification, which describe as ideology (five stages from very conservative to very liberal) did not have any relationship to their use of credit cards or financial literacy. No significant results came from any of the questions. Students' view of governmental involvement in the economy (defined as more active, less active, or the same) did not have any relationship to the use of credit cards of financial literacy.

Implications for Further Research & Conclusion

Despite the many definitions of financial literacy, college students did not possess a strong financial knowledge (Ludlum and Smith, 2011; Jones, 2005; Warwick and Mansfield, 2000; Chen and Volpe, 1998). This lack of knowledge covered not only credit use, but essential functioning like budgeting and retirement planning (Norvilitis et al. 2006).

Our students lacked even basic financial knowledge of a common credit tool that many of our students used every day. There is no way to describe these results as a success in education of financial literacy.

Clearly, one of the key findings is the dire need for more basic, consumer oriented information for college students. While we like to encourage higher level thinking (market analysis, etc.), we should expect business students to leave college with enough understanding of the financial word to function. Students without financial literacy will struggle with resources which may impede their chances of completing a college degree (Eitel and Martin, 2009; Lyons, 2004).

Students want this kind of training. Lyons & Hunt (2003) found that 81% want more financial literacy training. But not all programs will work. They need to targeted. Past financial literacy programs have not worked. DeVaney, Gorham, Bechman & Haldeman (1996) found only a 33% of those receiving financial literacy training responded by limiting their number of credit cards.

This result may also explain part of our national problem with credit. If our college students do not understand credit costs, what can we expect from the larger portion of our society without a college education? These results should serve as a wakeup call for both our college students and our college outreach efforts into the community to train people about the costs of credit.

It is clear the status quo of financial literacy is a failure. Some programs have shown promise and their details should be examined (see Rosacker, et al., 2009). The existence and design of financial training programs should be questioned. If students want to function in a modern society where credit is common, they must understand the costs of using plastic. To ignore this problem is to promise another generation of credit users who will be buried in high interest and fees which they may not ever be able to pay.

References

Acohido, B. (2008). Credit card support could toughen rules. (Nov. 28) *USA Today*, 5b.

Adams, T. and Moore, M. (2007). High-risk health and credit behavior among 18- to 25-year-old college students. 56.2 *Journal of American College Health*, 101-108.

Armstrong, C. J., & Craven, M. J. (1993). Credit card use and payment practices among a sample of college students. *Proceedings of 6th Annual Conference of the Association for Financial Counseling and Planning Education*: 48-159.

Block, K. (2009a). Credit card reform swipes easy plastic from college students. (May 26) *USA Today*, 3b.

Block, K. (2009b). As card rules change, college students can still build a credit history. (Sept. 8) *USA Today*, 3b.

Borden, L. M., Lee, S. A., Serido, J., & Collins, D. (2008). Changing college students' financial knowledge, attitudes, and behavior through seminar participation. *Journal of Family Economic Issues, 29*(1), 23-40.

Brobeck, S. (1992). Consumer's attitudes toward credit cards. *Credit World, 80,* 8-13

Bulik, B.S. (2010). Quit complaining about more credit-card offers. (Feb. 15) 81.7 *Advertising Age*, 9.

Cahill, T.P. (2007). Credit card caution. *New England Journal of Higher Education* (Fall), 21-22.

Castellani, G. & DeVaney, S.A. (2001). Using credit to cover living expenses: A profile of potentially risky behavior. 13.2 *Family Economics and Nutrition Review*, 12-20.

Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. *Financial Services Review*, *7*(2), 107-128.

Chen, H., & Volpe, R. P. (2002). Gender differences in personal financial literacy among college students. *Financial Services Review, 11,* 289-307.

Chien, Y.W. and DeVaney, S.A. (2001). The effects of credit attitude and socioeconomic factors on credit card and installment debt. 35.1 *J. of Consumer Affairs*, 162-179.

Chu, K. (2009a). Credit card fees keep going up. (March 16) *USA Today*, 1b.

Chu, K. (2009b). Credit card protections come with some holes. (May 21) *USA Today,* 3b.

Chu, K. (2010). Fed proposes rule to rein in late, over-limit charges on credit cards. (March 8) *USA Today,* 6b.

College Board. (2005). Trends in college pricing.

Davies, E., & Lea, S. E. G. (1995). Student attitudes to student debt. *Journal of Economic Psychology, 16*, 663-679.

DeVaney, S.A., Gorham, E.E., Bechman, J.C., and Haldeman, V.A. (1996). Cash flow management and credit use: Effect of a financial information program. 7 *Financial Counseling and Planning*, 71-79.

Eitel, S.J. and Martin, J. (2009). First generation female college students' financial literacy: real and perceived barriers to degree completion. 43.2 *College Student Journal* 616-630.

Hayhoe, C.R., Leach, L.J., and Turner, P.R. (1999). Discriminating the number of credit cards held by college students using credit and money attitudes. 20 *Journal of Economic Psychology* 643-656.

Hensarling, J. (2008). Choices benefit consumers. (August 13) *USA Today* 10a.

Jones, J. E. (2005). College students' knowledge and use of credit. *Financial Counseling and Planning*, *16*(2), 9-16.

Kara, A., Kaynak, E., & Kucukemiroglu, O. (1994). Credit card development strategies for the youth market: The use of conjoint analysis. *International Journal of Bank Marketing*, *12*(6), 30-36.

Lawrence, F. C., Christofferson, R. C., Nester, S. E., Moser, E. B., Tucker, J. A., & Lyons, A. C. (2003). Credit card usage of college students: Evidence from Louisiana State University. University of Illinois at Urbana-Champaign, Research Information Sheet #107.

Lewis, P. (2009). Your 50 Pound bill for life. (Feb. 12). *Community Care,* 34.

Ludlum, M., & Smith, B.C. (2011). Assessing business in hindsight. 1 *Mustang J. of Accounting & Finance*, 104-116.

Ludlum, M., & Smith, B.C. (2010). The credit card plague on the American college campus: A survey. 1 *Mustang J. of Law & Legal Studies*, 72-76.

Lusardi, A., & Mitchell, O. S. (2005). Financial literacy and planning: Implications for retirement wellbeing. Michigan Retirement Research Center Research Paper No. WP 2005-108.

Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. 44.2 *Journal of Consumer Affairs*, 358-380.

Lyons, A.C. (2004). A profile of financially at-risk college students. *The Journal of Consumer Affairs*, *38*(1), 56-80.

Lyons, A.C. and Hunt, J.L. (2003). The credit practices and financial education needs of community college students. 14.1 *Financial Counseling and Planning*, 63-74.

Manning, R. D., & Kirshak, R. (2005). Credit cards on campus: Academic inquiry, objective empiricism, or advocacy research? *NASFAA Journal of Student Financial Aid, 35*(1), 39-48.

Mindlin, A. (2010). A comeback for credit card come-ons. (Feb. 15). *New York Times,* b1.

New York Times. (2010). Loan Sharking, Inc. (Feb. 25) b1.

Moskalionov, S. & Ludlum, M. (2010). Student use and abuse of credit cards in Russia. 1 *Mustang J. of Business & Ethics*, 67-74.

Nellen, A. and McWilliams, J. (2008). Financial literacy: University –focused activities. *Tax Advisor*, May, 314-316.

Nellie Mae. (2007). Graduate students and credit cards fall 2006: An analysis of usage rates and trends. Retrieved from http://www.nelliemae.com/library/research.html

Norvilitis, J.M., Merwin, M.M., Osberg, T.M., Roehling, P.V., Young, P., & Kamas, M.M. (2006). Personality factors, money attributes, financial knowledge, and credit-card debt in college students. 36.6 *J. of Applied Social Psychology*, 1395-1413.

Norvilitis, J.M., Szablicki, P.B., & Wilson, S.D. (2003). Factors influencing levels of credit card debt in college students. 33 *J. of Applied Social Psychology*, 935-847.

O'Connell, V. (1994). A new campus stalker: Credit card companies. *Money, 23,* 40.

Parks, C. (1999). Credit card abuse puts students at risk. *The Black Collegian* 72-78.

Robb, C.A. & Sharpe, D.L. (2009). Effect of personal financial knowledge on college students' credit card behavior. 20.1 *J. of Financial Counseling and Planning*, 25-43.

Rosacker, K.M., S. Ragothaman, and M. Gillispie. (2009). Financial literacy of freshmen business school students. 43.2 *College Student Journal* 391-399.

Rosato, D. (2008). Check out a credit card offer. 37.8 *Money* 37.

Samuelson, T.D. (2010). New credit card laws 2010: How will I benefit? (Feb. 22). *Christian Science Monitor*, 29.

Rutherford, L.G. and deVaney, S.A. (2009). Utilizing the theory of planned behavior to understand convenience use of credit cards. 20.2 *J. of Financial Counseling and Planning, 48-63.*

Seyedian, M., and Taihyeup, D.Y. (2011). Improving financial literacy of college students: a cross-sectional analysis. 45.1 *College Student Union* 177-189.

Silver-Greenberg, J. (2009). Credit card deal a losing hand to Cap One. (Jan. 26). *Business Week*, 11.

Susswein, R. (1995). College students and credit cards: A privilege earned? *Credit World, 83,* 21-23.

U.S. Department of Treasury. (2008). Financial Literacy and Education Commission. Retrieved from www.mymoney.gov.

U.S. General Accounting Office. (2001). Consumer finance: College students and credit cards. Report to Congressional Requesters (GAO-01-773).

Warwick, J., & Mansfield, P. (2000). Credit card consumers: College students' knowledge and attitude. *Journal of Consumer Marketing, 17*(7), 617-626.

Weston, L.P. (2008). How much college debt is too much? Retrieved from http://articles.moneycentral.msn.com.

Appendix. Survey Questions.

DO NOT PUT YOUR NAME OR IDENTITY NUMBER ON THE SURVEY.
ALL ANSWERS ARE CONFIDENTIAL. You are not required to participate. If you do not wish to participate, please turn in your survey blank. If you are under age 18, please do not participate.
Please circle the correct answer. Thank you in advance for your participation.

What year in school are you presently? _______

What is your major? Business Non-Business

Have you taken a course in business ethics? Yes No

Have you taken a course in Business Law or Legal Environment of Business? Yes No

Would you describe yourself?
Very Conservative Conservative Independent Liberal Very Liberal

Are you male or female? Male Female

Are you presently a stockholder/investor in any publicly traded company?
Yes No I don't know

Do you use tobacco? Yes No

Are you currently employed? No Part-time Full-time

Are you married? Yes No

What is your age? ______________

The following questions used a five point Likert scale of:
Strongly Agree – Agree - No Opinion – Disagree - Strongly Disagree

Describe your views on the following statement: "Corporate Social Responsibility means that a corporation should try to protect the environment."

Describe your views on the following statement: "There are clear and uniform standards of right and wrong by which everyone should be judged."

Describe your views on the following statement: "What is right and wrong depends on individual values and cultural diversity."

Describe your views on the following statement: "Businesses have an ethical duty to care for the environment."

Would you want to work for a company that had been accused of unethical business practices?
Yes No Unsure

How many children do you have? ____________

How many credit cards do you have?__________

How many times do you use a credit card in an average month? _________________

How do you PRIMARILY pay for your education?
Borrow/loans Parents
Work Scholarship

What monthly payments do you make on your most used credit card?
Minimum amount
What I can afford that month
Paid in full every month

How much is your interest rate on your most used credit card?
I know for certain.
I have a general idea.
I have no idea.

How much is the late fee on your most used credit card?
I know for certain.
I have a general idea.
I have no idea.

How much is the over balance fee on your most used credit card?
I know for certain.
I have a general idea.
I have no idea.

Are you more or less likely to work for a company if you know from your own experience that the company is not ethical?
More likely
About the same
Less likely

NOTE: There were additional questions which are not part of this research.