

College Credit: Attitudes about Money and Credit Card Knowledge among 2003 SROP Students

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Abstract

The purpose of this study was to describe college students in the Pennsylvania State University 2003 Summer Research Opportunities Program (SROP) attitudes about money matters and knowledge about credit cards. Twenty-four students completed a survey about their attitudes on money matters and knowledge about credit cards. Students' responses to the pretest survey indicated that: 1) 83% of them had one or more credit cards and they were knowledgeable on 2 of the 11 knowledge survey items. Furthermore, 75% or more of the students agreed that 2) they could benefit from lessons on using credit cards, b) were interested in learning about stocks, c) colleges should offer a mandatory course in managing money, and d) knowing how to manage money efficiently is more important than earning a large salary.

Introduction

“When people understand credit as a trust that is built by time and when damaged can only be repaired by time, rather than ‘free money’, the economic system of this country will improve and we will no longer depend on credit, we may revert back to cash.”
-Stacy L. Wallace, 2003

Background of the Study

The use of credit plays an important role in the American economy and it is used from the highest level of government down to individual households. As a nation, we are in debt. The news media is constantly reporting the trillion dollar deficit of the United States federal government. Individual households may not be able to generate reports of deficit spending (spending of public money raised by borrowing rather than by taxation) as easily as the federal government. However, it is crystal clear that many Americans are spending beyond their income level. The level of reported bankruptcies and the outstanding consumer debt levels are two indicators of consumers spending borrowed money. Since 1982, the number of personal bankruptcies has increased steadily reaching over 1, 400,000 in 2001. (American Bankruptcy Institute, 2001). According to Federal Reserve data reported in the Washington Post on February 6, 2002, outstanding consumer debt was just over \$1.6 trillion dollars in 2001. In 1996, that number was just below 1.2 trillion. In addition, the savings rate of U.S. households has been negative and/or just above 1% in recent years. In 1970-79, the personal savings rate was about 8%. In 1998, the personal savings rate had fallen to less than 1%.

Credit card debt is a significant factor in the consumer credit debt of levels of many American households. The typical American may own up to seven credit cards. Among the credit card holding Americans are young, jobless college students who do not understand the consequences of using credit cards unwisely.

Statement of the Problem

Each year, thousands of college students get the privilege of using credit cards to make purchases related to attending college and for non-school needs. Many of these newly minted card holders get the cards on their own, while others get them with parental assistance. Regardless of how college students obtain credit cards, media reports suggests that many of them are using credit irresponsibly, causing more damage to their financial lives than a quick fix and a few years of hard work can repair. This irresponsible use suggests that college students do not understand some critical details about using credit cards wisely.

Purpose of the Study

The purpose of this study was to describe college students' a) knowledge about credit cards, b) their attitudes about selected money matters and c) their behaviors/actions related to managing credit cards. The following research questions guided the study:

1. What do 2003 SROP students know about key credit card concepts?
2. Will the total knowledge score differ between students who attend and those who do not attend an optional educational seminar on credit cards?
3. What are 2003 SROP students' attitudes about selected money matters?
4. What are 2003 SROP students behaviors/actions related to managing credit cards?

Review of Related Literature

Early Records of Credit

According to Encyclopedia Britannica, credit card use originated in the United States during the 1920s when individual companies, such as hotel chains and oil companies, began issuing them to preferred customers for purchases made at those businesses. Credit cards were called "metal money" and offered advantages such as an interest free and deferred payment option ("How Credit Cards Work," 2003).

Popularity and use of charge and credit cards increased until World War II when all use was prohibited. However, after the war, charge cards bounced back in use and popularity, becoming more accessible to the general public. In 1950, Diner's Club introduced the first universal credit card, i.e. one that could be used at a variety of restaurants, retailers, and other businesses. This card was designed especially to meet the travel and entertaining needs of business travelers ("The History of Credit Cards in the U.S.," 2003)

In the late 1950s, Bank of America introduced the first bank card system with a "revolving-credit" card. Under this plan, the bank credited the account of the merchant as sales slips were received and assembled charges to be billed to the cardholder at the

end of the billing period. The cardholder, in turn, paid the bank either the entire balance or in monthly installments with interest (“How Credit Cards Work,” 2003). “The ‘revolving-credit’ plan ... marked an important milestone in the development of the credit card industry” (“The History of Credit Cards in the U.S.,” 2003).

Bank Card Associations (Master Charge now MasterCard and Visa) emerged across the nation in the 1960s to streamline the credit transaction process and to manage the enormous task of issuing and processing charge cards. In the early 1970s, electronic card authorizations were introduced. This allowed retailers to get approval for transactions 24 hours a day. By the late 1970s, magnetic strips on the back of cards, along with electronic dial up terminals shortened the approval process to 1-2 minutes (“The History of Credit Cards in the U.S.,” 2003). Today, millions of Americans hold at least one credit card, increasing their potential spending levels.

Types of Credit Cards

The two main types of credit cards are secured and unsecured. Secured credit cards are bankcards that look like regular Visa, MasterCard, or Discover cards; however, they are backed by a collateral deposit in the bank (Detweiler, 1997). Consumers who use secured credit cards are trying to establish or rebuild a credit history. In addition to expensive transaction fees, banks may charge a one-time non-refundable application or processing fee for a secured card. The credit line of a secured credit card is a percentage of your deposit (Bad Credit? No Credit? No Problem!,”n.d.).

Unsecured cards do not require a collateral deposit in the bank. The merchant or service provider collects what you owe from the company that issued you the card. The card issuer then bills you on a monthly basis. The minimum monthly payment due is based on a percentage of your total balance. You are charged interest on the unpaid balance you owed from the previous billing cycle (“Credit Card or Debit Card: The Great Debate,” 2001).

Other types of cards include travel and entertainment (T & E), retail, and affinity cards. T & E cards, such as American Express, Carte Blanche, and Diners Club, grant credit by third parties and require balances to be paid in full. T & E cards have an annual fee. Retail cards are credit cards issued by department stores and gasoline companies. These cards are only good in the stores that issued the card. Usually, there are no annual fees associated with this type of card (Boston, 1996). An affinity card carries the logo of an organization and the lender’s emblem. The organization receives financial incentives such as a percentage of all sales made with the card, while the consumer may earn frequent flyer miles or points toward merchandise for using the card (“How Credit Cards Work,” 2003).

Use of Credit Cards

In 2001, the majority (83%) of undergraduate students had credit cards and used them regularly. As students progress in college, their usage of credit cards and outstanding balances increase. On average, 16% of the undergraduate’s total debt owed is from credit cards. Credit card payments make up 34% of the total monthly payments

students make after graduation and 35% of the interest paid. Unfortunately, students will pay a much higher price for money borrowed on credit cards than for money borrowed in education loans (“Undergraduate Students and Credit Cards”, 2002).

According to Student Monitor, a market research firm in Ridgewood, NJ, after several years of rising steadily, students’ use of credit cards to pay for college expenses dropped in 2002. However, the use of plastic currency such as automated teller machines (ATM) and debit cards grew significantly in popularity (Chavez, 2002).

Knowledge of Credit Cards/ Financial Matters

In the United States, financial education is not required in high schools or college. Yet, to live successfully and to maneuver in the market place, a basic understanding of money matters is essential. Idaho, Illinois, Kentucky and New York are the four states that require students to complete a course in personal finance before their high school graduation. New York and Illinois are among the top five in the country in terms of public school enrollment having personal finance education requirements (“Survey of the States”, 2003). Consumers who do not learn to manage money in school may be learning from the school of hard knocks or from their parents. In a survey conducted by the National Council on Economic Education, 94% of children indicated they learned money management from their parents. High school seniors scored 52%, while their parents scored 57%, both failing in financial literacy (“Financial Literacy”, 2002).

College seniors know more about insurance than credit cards. In a study by Markovich and DeVaney, 50.4% seniors owned three or fewer credit cards, 43.6% owned four or more cards, and 6.3% had no cards. Seniors with three or fewer credit cards had smaller outstanding balances than seniors with four or more cards. Only one third planned on having three to six months of pay in an emergency fund. Over half (52%) did not know which financial institution charged the highest interest rate on loans, and 40% did not know when interest charges’ on a new purchase would begin if a balance was carried over. However, students were familiar with the concept of loss and beneficiaries, but they were not familiar with the concept of life insurance as a saving element. Nevertheless, almost all of the seniors (99%) believed they needed auto and medical insurance, 44% believed they needed disability insurance, and 88% believed they need homeowner or renter’s insurance.

Debt Levels

Use of credit cards by college students has generated concern about the impact of “easy credit” and student debt. “Easy credit”, a decline in Pell Grants, using loans instead of savings to pay for college, and inflation in tuition are factors that contributed to the misuse of credit cards (McLaughlin, 2002).

Credit cards are readily available to most college students even though they may not have a part-time job. Soon to be high school graduate and college freshmen are prime targets of credit card companies. Card issuers know that most consumers use their first credit card for about seven years before switching to another card. Universities do

not prepare students on how to handle the temptation of instant gratification that “easy credit” represents (Murphy, 2003). This is alarming because the average debt of a college student is \$2,327 while the economy is staggering. Thirty-nine percent of all college graduates have unmanageable debt, while African-American students have 55% and Hispanic students have 58% of unmanageable debt levels (McLaughlin, 2002).

Tuition hikes have also contributed to the rise in debt levels. When tuition rises, the amount of federal aid some students receive becomes meager. Federal grants remained the same covering 37% of tuition, while postsecondary education costs rose, widening the gap between college costs and student aid (“Why do Students Borrow”, 2001). Postsecondary education costs grew rapidly during the 1990s. Four-year public institutions charges increased 49%, while at four-year private institutions tuition prices rose 32%. Unfortunately, income for households with college-bound children grew 4% while Federal Pell Grants increased only 15% (“Why do Students Borrow”, 2001).

Methods and Procedures

Design and Population

The descriptive survey research method was used to conduct this study. Participants were rising sophomores, juniors, and seniors from 17 colleges and universities from the United States and territories who participated in summer research programs at Pennsylvania State University. There were 25 students from the Summer Research Opportunities Program and 10 students from the Ronald McNair Program.

The Instrument and Data Collection

Existing surveys, pretest and posttest, previously approved by the Pennsylvania State University Office for Research Protections for use with human subjects were used to collect data.

The pretest. Section A contained 10 attitude statements about money matters. Section B had 11 multiple choice knowledge questions and one open ended question. Section C contained demographic questions.

The posttest. The posttest contained the same sections as described above for the pretest. However, an additional section was added to capture planned or actual behaviors/actions related to managing credit cards.

Data were collected at the end of weekly seminars attended by SROP and McNair program participants. Before the pretest was given, the study was explained to the students and their rights as participants were discussed. In addition, participants received a written explanation and two copies of the informed consent. One signed copy of the consent form was returned to the researcher and one was maintained by the participants for their records.

The pretest was administered during week two of the 7.5 week SROP program. The surveys were coded to maintain confidentiality. No identifying information was

included on the survey that could be used to identify individual participants. However, participants were asked to put a four digit number on the pretest that they could remember and use on the posttest. This number was used to match the pretest and posttest responses of participants. The posttest was administered during week five of the SROP program.

Pretest and posttest surveys were matched using the student provided four digit number. Surveys without a match were discarded resulting in 24 useable surveys.

Educational seminar. Three days after the pretest, 13 participants attended an optional one hour educational seminar where key credit card concepts were discussed. At the end of the seminar, students were given a packet of literature containing information on the concepts discussed and additional topics about credit cards.

Data Analysis

The Statistical Package for the Social Sciences (SPSS) was used to analyze the data. Descriptive statistics (frequencies, percents, and means) were used to provide a demographic profile of the students and their credit card ownership. In addition, the following techniques were used to answer each research question.

1. What do 2003 SROP students know about key credit card concepts?
 - a. Frequencies, percents for the 11 individual knowledge items.
2. Will the total knowledge score differ between students who attended and those who did not attend an optional educational seminar on credit cards?
 - a. An independent t-test was used to determine the gain between the total knowledge scores for the pretest and posttest means for all students.
 - b. An independent t-test was used to determine if there were differences between the pretest mean score and the posttest mean score for students who attended and those who did not attend the optional educational seminar.
3. What are 2003 SROP students' attitudes about selected money matters?
 - a. A paired t-test was used to determine if there were differences in the pretest and posttest mean scores on the attitude items.
4. What are 2003 SROP students' behaviors/actions related to managing credit cards?
 - a. Frequencies were used to describe the students' behavior or action changes on the behaviors/actions items.

Findings/Results

Demographic Profile of 2003 SROP Students

Twenty-four (24) useable surveys were completed by the 2003 SROP students. The majority 19 (79%) were female; 16 (66%) were African American; 14 (58%) were

seniors; 9 (38%) were 21 years of age; and 24 (100%) had never married (Table 1, see Appendix A).

SROP Students' Ownership of Credit Cards

At the time the pretest was administered, 20 (83%) of the 24 students had one or more credit cards. By the time the posttest was administered 18 (75%) students reported owning one or more credit cards and 6 (25%) reported owning zero (0) cards (Table 2, see Appendix A).

SROP Students' Knowledge about Key Credit Card Concepts

Table 3 presents information about students' knowledge on individual credit card concepts. Students were considered knowledgeable if 70 percent or more responded correctly to a single knowledge question.

On the pretest, students were knowledgeable about the role of the credit bureau (70.8%) and how credit card issuers make their money (75%). On the posttest, students were knowledgeable about cash advances (70.8%), the role of the credit bureau (70.8%), how credit issuers make their money (83.3%), and the Fair Credit Reporting Act (75%) (See Table 3, Appendix A).

Table 4 presents findings on SROP students' total knowledge score on the pretest and posttest. The mean knowledge score on the pretest was 5.12 and 6.33 on the posttest. The difference between the pretest and the posttest scores was significant at the .05 level.

SROP Students' Attitudes about Credit Cards

Table 5 presents information on the SROP students' attitudes about credit cards and other money matters. Table 5 also presents findings of the paired t-test conducted to determine if there were differences in the matched pretest and posttest scores of SROP students. Of the ten attitude statements, significant differences were found between pretest and posttest scores on three items. They were:

- I read an article about money in magazines or newspapers at least once a week.
- I watch a TV program about money at least once a week.
- Parents or family members talk about saving money in my presence.

SROP Students' Behaviors/Actions about Credit Cards

Behavior or action statements were included only on the posttest survey and the related findings are presented in Table 6. Students were asked to indicate the following relative to 11 behavior/actions statements on managing credit cards:

1. Definitely won't do.
2. Probably won't do.
3. Plan to do.
4. Probably did as a result of these sessions
5. Definitely did as a result of these sessions.

Half (50%) of the students indicated they paid more than the minimum due when not paying the entire balance listed on a monthly credit card statement. In addition, 30%

of the students indicated they paid credit card bills early in the billing cycle and extra on their credit card accounts with the highest annual percentage rate. Furthermore, 50% or more of the students indicated they planned to do the following: request a copy of their credit report (58.3%), review their credit report (70.8%), read the back of their monthly credit card billing statement (58.3%), and use a web-based calculator to estimate the time it will take to repay the balance on an account.

Discussion

This study described college students' a) knowledge about credit cards, b) their attitudes about selected money matters and c) their behaviors/actions related to managing credit cards.

The majority of the students had one or more credit cards. As a group on the pretest, they were knowledgeable on the role of credit bureaus and how credit card issuers make money. In addition to the two previous items, their posttest scores indicated they were knowledgeable on two additional items: cash advances and the Fair Credit Reporting Act. Students who attended the optional educational session had a higher knowledge gain score on the posttest than students who did not attend the optional educational session. This gain was significant at the .05 level. The finding that students lacked knowledge on less than half of the knowledge items is consistent with findings of previous studies of college students (Davis, 2000 & 2002; Myles, 2001). The increased mean knowledge score of the educational session attendees suggest that college students can learn some key details about managing credit cards wisely in a short period of time.

Responses to the behavior/actions items on the posttests suggest that awareness was increased on selected behaviors related to managing credit cards. Half of the students indicated they paid more than the stated minimum on monthly credit card statements and planned to take other actions related to managing credit cards (request a credit report, review their credit report, read the back of the monthly credit card statement, and use a web based calculator to predict debt repayment period). The survey and/or participation in the educational workshop may have raised the students' awareness about other money related issues. There was a significant gain in the mean pretest to posttest scores of attitude statements on three areas: 1) reading newspaper or magazine articles about money, 2) watching a television program about money, and 3) family member discussions about money.

Appendix A

Table 1

Demographic profile of 2003 SROP students (N=24)		
	f	%
Gender		
Male	5	20.8
Female	19	79.2
Race		
African American	16	66.7
Hispanic/Latino(a)	5	20.8
Other	3	12.5
Marital Status		
Never Married	24	100
Married	0	—
Age		
19	4	16.7
20	4	16.7
21	9	37.5
22	5	20.8
28	1	4.2
45	1	4.2
Current Standing		
Sophomore	1	4.2
Junior	8	33.3
Senior	14	58.3
Graduate	1	4.2

Note: Dashes indicate data not reported.

Table 2

Credit card ownership of SROP students (N=24)

no. of credit cards	Pretest		Posttest	
	f	%	f	%
0	4	16.7	6	25.0
1	10	41.7	9	37.5
2	5	20.8	4	16.7
3	2	8.3	2	8.3
4	—	—	2	8.3
5	2	8.3	1	4.2
7	1	4.2	—	—

Note: Dashes indicate data not reported.

Table 3

Knowledge about key credit card concepts (N=24)

Concept	Pretest		Posttest	
	f	%	f	%
1. Annual percentage rate	2	8.3	11	45.8
2. Cash advances	16	66.7	17	70.8
3. Credit Bureau role	17	70.8	17	70.8
4. Lost card liability	2	8.3	4	16.7
5. Grace period	10	41.7	15	62.5
6. Missing payment affect	16	66.7	15	62.5
7. Credit report denial	5	20.8	8	33.3
8. Money makers	18	75.0	20	83.3
9. Fair Credit Reporting Act	10	41.7	18	75.0
10. Closing credit accounts	15	62.5	13	54.2
11. New purchase interest	12	50.0	14	58.3

Table 4

Overall credit card knowledge gain scores (N=24)

Test	M**	SD	Mean	
			Difference	t
Pre	5.12	2.07	—	—
Post	6.33	2.05	-1.2083	-2.550*

*p < .05 level.

Note: **Means calculated on number of correct responses to knowledge questions; could range from 0-11.

Table 5

Attitudes of SROP students about credit cards (N=24)

Variable	Pretest		Posttest		Mean	
	M	SD	M	SD	Difference	t
Read money magazines	1.96	.99	2.38	1.05	-.416	-3.12
Watch money TV shows	1.88	.89	2.46	1.10	-.583	-2.81
Parents/family discuss saving money	4.50	.88	4.13	.99	.375	2.58

*p<.05

Table 6

Behavior/actions of SROP students (N=24)

Behavior/Actions	f	Definitely won't do/Probably won't do	Plan to do	Probably did as a result of these sessions/ Definitely did as a result of these sessions
		%	%	%
1. Requested credit report	24	16.7	58.3	25.0
2. Reviewed credit report	24	8.4	70.8	20.9
3. Reduced new purchases	24	25.0	37.5	37.5
4. Pay credit card bill early	24	25.0	37.5	37.5
5. Pay extra money on credit card	23	37.5	33.3	25.0
6. Use Schumer box	24	37.5	45.8	16.3
7. Close credit accounts not in use	21	29.1	37.5	20.8
8. Opt out of pre-approved offers	22	16.7	41.7	33.3
9. Read back of credit card monthly billing statement	24	16.6	58.3	25.0
10. Use web based calculator	24	25.0	70.8	4.2
11. Pay more than minimum due	24	20.9	29.2	50.0

References

- Bad Credit? No Credit? No Problem! (n.d.) Retrieved June 30, 2003, from <http://creditmechanics.com/>
- Boston, K. (1996). *Smart Money Moves for African Americans*. New York: G.P. Putman's Son's
- Chavez, J. (2002). College Students Used Credit Cards Less This Year. Retrieved June 10, 2003 from <http://web.lexis-nexis.com/universe/printdoc>
- Davis, Z. (2000). Perils in the Plastic Jungle; Credit Card Use and Knowledge of SROP 2000 Scholars. *The Pennsylvania State University Summer Research Opportunities Program Journal: Vol. 8.* (pp. 59-69). University Park: The Pennsylvania State University.
- Davis, Z. (2002). *Credit Card Use and Knowledge of Penn State Undergraduates*. Unpublished master's thesis, Pennsylvania State University, University Park.
- Detweiler, G. (1997). *The ultimate credit handbook: How to double your credit, cut your debt, and have a lifetime of great credit*. New York: Penguin Books.
- DeVaney, S. & Markovich, C. (1997, Fall). College Seniors' Personal Finance Knowledge and Practices. *Journal of Family and Consumer Sciences*, 61-65.
- Financial literacy missing from most schools' curricula. (2002) Retrieved September 19, 2002 from <http://www.bankrate.com/brm.news/special/20000816.asp?keyword=>
- How Credit Cards Work. (1998-2003). Retrieved June 30, 2003, from <http://money.howstuffworks.com/credit-card.htm/>
- McLaughlin, E. (2002). New study shows that many college students are in debt. Retrieved July 6, 2003 from http://www.ucsdguardian.org/cgi-bin/print?param=news_2002_03_14_05
- Murphy, E. (2003, May 6). *Portland Press Herald*. Retrieved June 6, 2003 from <http://web.lexis-nexis.com/universe/printdoc>
- Myles, C. (2001). Credit Cards and Penn State 2001 SROP Scholars: Knowledge, Use and Management Practices. *The Pennsylvania State University Summer Research Opportunities Program Journal: Vol. 9.* (pp.199-209). University Park: The Pennsylvania State University.
- Myvesta.org. (2001). *Credit Card or Debit Card: The Great Debate*. Retrieved June 15, 2003, from myvesta.org

Nellie Mae. (2002). *Undergraduate Students and Credit Cards: An analysis of Usage Rates and Trends*. Retrieved June 15, 2003 from www.salliemae.com

Redd, K. (n.d.). Why do Students Borrow So Much? Recent National Trends in Student Loan Debt. Retrieved July 6, 2003 from http://www.ericfaculty.net/databases/ERIC_Digests/ed451759.htm

Survey of the States. (2003). Economic and Personal Finance Education in Our Nation's Schools in 2002.

The History of Credit Cards in the U.S. (2002-2003). Retrieved June 30, 2003, from http://www.100best-credit-card-reports.com/article_creditcardhistory.php

U.S. Bankruptcies Filings. (n.d.). Retrieved July 24, 2003 from <http://www.abiworld.org/stats/usfile.gif>