# CREDIT CARD ATTITUDES AND BEHAVIORS OF COLLEGE STUDENTS

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Henry, Weber, and Yarbrough (2001), writing in this Journal, reported that many college students are living on the verge of a financial crisis. The purpose of this study was to further consider this assertion by examining college students' credit card use behavior and attitudes. A concurrent purpose was to test the factors associated with students' attitude toward credit cards. It was determined that, using a sample of 242 undergraduate and graduate students from a southwestern state university, Ethnic/racial background, academic level, credit card ownership, parents' credit card use, money ethic, and locus of control were associated with college students' credit card attitudes. Henry et al.'s assertion that students are vulnerable to a financial crisis was confirmed.

College students' use of credit cards has recently received increased visibility throughout the media (Hayhoe, 2002). Henry, Weber, and Yarbrough (2001), writing in this Journal, concluded that in addition to credit problems many students do not have a written budget, and of those who do have a budget few young people actually use it. They determined that university students "are vulnerable to financial crisis" (p. 246).

The staggering number of credit cards in circulation exemplifies this crisis, as does the number of cards carried by the average student. Currently, there are 1.3 billion credit cards in circulation, which, when averaged, equals about 12 cards per household (Sullivan, Warren, & Westbrook, 2000). The growth of credit cards on college campuses has tended to mirror the credit saturation found in the general public (Xiao, Noring, & Anderson, 1995). More than a decade ago Churaman (1988) reported on college students' use of con-

sumer credit. It was during this period that the banking industry began permeating the student credit card market in the late 1980's (Manning, 2000). Churaman reported that in 1985-86 over half of all college students had bank credit cards. This figure has been on the rise as some 70% of all undergraduates at four-year colleges have at least one credit card today.

The increased number and type of credit cards on university campuses has seen an explosive level of growth in the past decade, with most credit card companies targeting college students. What remains still unanswered is what effect credit card circulation among college students has had on the financial attitudes, behaviors, and outcomes of young Americans.

The purpose of this paper is to extend the research originally reported by Henry et al. (2001) by reporting findings from a study that was designed to examine college students' credit card use behavior and identify the factors associated with credit attitudes. This research also identifies the factors related to college students' attitudes toward credit cards. Attitude toward credit was assumed to be explained with demographic characteristics, socioeconomic characteristics, background factors, and psychological factors.

## Methodology

A survey data collection method was used. Questionnaires were distributed to randomly selected classes offered in the College of Human Sciences of one large university in a southwestern state. From the total of 250 questionnaires that were distributed, 242 questionnaires were returned. The survey instrument included questions regarding debit card usage, credit card usage, attitudes toward credit, financial knowledge, demographic characteristics, and other personal finance attitude and behavior.

Attitude toward credit was measured with nine questions adapted from a study by Awh and Waters (1974). Each item was measured with a 4-point Likert-type-type scale that ranged from strongly agree (4) to strongly disagree (1). A summated index was created for use in the multivariate analyses. Those who had higher scores on the attitude toward credit scale were assumed to have a more positive credit attitude. Possible scores ranged from 9 to 36. The mean score for the respondents was 20.94. The reliability coefficient of the index was .8256 (Table 1).

In this study it was hypothesized that credit card possession and use is most likely influenced by four factors: (a) demographic characteristics (e.g., age, gender, marital status); (b) socioeconomic factors (e.g., income, education, and other indices of socioeconomic status); (c) background characteristics (e.g., life events, childhood experiences); and (d) psychological characteristics (e.g., locus of control, self-esteem, materialism)(Churaman, 1988; Davies & Lea, 1995; Tokunaga, 1993). A total of five demographic characteristics were examined: Age, gender, ethnic/racial background, marital status, and birth order. Age was measured at the interval level and considered to be a continuous variable. Gender, ethnic/racial background, marital status, and birth order were dummy coded. Those who were male, White/Caucasian, never married, or first and the only child were coded 1, otherwise, all other categories were 0.

Table 1
Attitude Towards Credit

| Attitude Towards Credit (N=242) | | | | |
|---|---|---|---|---|
| Item | SA | TA | TD | SD |
| 1. The cost of using a credit card is too high. | 25.6 | 42.6 | 24.4 | 7.4 |
| 2. It is unwise to use any credit card. | 4.5 | 21.9 | 45.9 | 27.7 |
| 3. Credit cards make a positive contribution to society. | 5.0 | 33.2 | 45.6 | 16.2 |
| 4. Credit cards should be used only in case of an emergency. | 21.5 | 35.1 | 35.1 | 8.3 |
| 5. I dislike all credit cards. | 4.5 | 14.9 | 45.1 | 35.5 |
| 6. Credit cards provide a needed service. | 19.8 | 62.5 | 16.5 | 1.2 |
| 7. Credit cards are safe and risk free. | 0.4 | 9.5 | 47.9 | 42.1 |
| 8. It is too easy to overspend with a credit card. | 57.8 | 35.1 | 5.0 | 2.1 |
| 9. I fear the consequences of overspending with a credit card. | 38.4 | 36.0 | 19.8 | 5.8 |

Items 1, 2, 5, 8, and 9 were reverse coded.

Income, housing situation, employment status, and education were included as socioeconomic factors. Student personal income was measured with an interval scale, which ranged from none to above $10,000. Housing situation was dummy coded. Those who lived off-campus were coded 1 (78.5%), otherwise 0. Employment status was also dummy coded. Those who were employed either full or part-time were assigned 1, otherwise 0. Two education measures were used in this study: Academic level and academic major. Academic level was considered an interval level variable: (1) freshman, (2) sophomore, (3) junior, (4) senior, and (5) graduate student. Academic major was dummy coded. Those who were enrolled in a human sciences college (i.e., child development, family studies, food and nutrition, family and consumer sciences education, restaurant and hotel management, merchandising, family financial planning, and interior design) were assigned 1, otherwise 0.

As recommended in the college student credit card literature, parents' credit use was used as a family background measure. Students were asked to answer the following question using choices ranging from never (1) to always (4): "Did your parents use credit cards when you were young?" About half (45.9%) of the students said their parents used credit cards always or usually when they were young, while the remainder said sometimes or never. Parents' credit use and abuse was also measured. Those who answered that

their parents had credit-related problems were assigned 1, otherwise 0. Slightly more than 28% of the students answered that their parents had at least one credit-related problem. One credit related variable (i.e., credit card ownership) was included as a background factor. Those who held credit card(s) were coded 1, otherwise 0.

Two psychological factors were included in the analyses: Money ethic and locus of control. A money ethic scale was adapted from Tang (1995). The scale included 12 items. Each item was measured with a 4-point Likert-type scale, ranging from strongly agree (4) to strongly disagree (1). Examples of money ethic items include: (a) money is important, (b) money is evil, (c) money makes people respect me in the community, and (d) money can give me the opportunity to be what I want to be. Some items were reverse coded to represent a homogeneous direction. Higher scores were interpreted to mean that the respondent valued money and its attributes to a greater extent than those with lower scores on the measure. Possible scores ranged from 12 to 48. The mean score for respondents was 32.68. The reliability coefficient of the index was .7461.

A total of 14 questions measuring locus of control were adopted from Levenson (1973). Locus of control items were also measured with a 4-point Likert-type scale, with 1 representing strongly disagree and 4 indicating strongly agree. Examples of locus of control scale items include: (a) I am usually able to protect my personal interests; (b) when I get what I want, it's usually because I'm lucky; (c) to a great extent my life is controlled by accidental happenings; and (d) when I make plans, I am almost certain to make them work. Some items were reverse coded. Higher scores represented an external locus of control, suggesting that these individuals felt that they had less control over their lives than others. Possible scores ranged from 14 to 56, with a mean score of 41.87. The reliability of the scale was .7040. Table 2 summarizes the measurement of the variables in this study. (see table 2)

### Analysis

Descriptive analyses were performed to examine the demographic characteristics and credit card use behaviors of the sample respondents. A least squares multiple regression was conducted to examine the factors associated with credit attitudes. A correlation matrix was developed and examined to diagnose the possibility of multicollinearity between and among the variables. Potential multicollinearity issues were further examined with SPSS collinearity diagnosis techniques using tolerance, VIF, and eigenvalues as suggested by Hair, Anderson, Tatham, and Black (1995). Because of the high correlation between age and marital status, and the resulting possible collinearity problem, marital status was excluded in the final regression analysis.

### Results

Respondents' ages ranged from 18 to 47, with a mean age of 21 years old. More than one half of the respondents were female (57%), and the majority (86.8%) were never married. About one-fifth (21.5%) of the respondents lived on cam-

Table 2
Demographic Charactoristics

Variables and Demographic Characteristics of the Respondents (N=242)

| Variable | % of the Sample | Variable Level |
|---|---|---|
| **Demographic Characteristics** | | |
| Age | | Continuous |
| Under 21 | 45.5 | |
| 21 | 20.3 | |
| Over 21 | 34.2 | |
| Gender | | Dummy Variable |
| Male | 43.0 | 1 |
| Female | 57.0 | 0 |
| Ethnic/Racial Background | | Dummy Variable |
| White/Caucasian | 86.6 | 1 |
| African American/Black | 2.1 | 0 |
| Hispanic/Latino | 6.6 | 0 |
| Other | 4.7 | 0 |
| Marital Status | | Dummy Variable |
| Never Married | 86.6 | 1 |
| Married | 8.7 | 0 |
| Other (Divorced/ Separated/ Widowed) | 4.6 | 0 |
| Birth Order | | Dummy Variable |
| First Born/Only Child | 42.2 | 1 |
| Youngest | 42.1 | 0 |
| Others | 15.7 | 0 |

Table 2 (cont.)
Demographic Charactoristics

| **Socioeconomic Characteristics** | | |
|---|---|---|
| Income | | Dummy Variable |
| Less than $4,000 | 35.6 | 0 |
| Above $4,000 | 64.4 | 1 |
| **Socioeconomic Characteristics** | | |
| Housing Arrangement | | Dummy Variable |
| On-campus | 21.5 | 0 |
| Off-campus | 78.5 | 1 |
| Employment | | Dummy Variable |
| Employed part-time | 56.4 | 1 |
| Employed full-time | 8.7 | 1 |
| Not employed | 34.9 | 0 |
| Academic Level | | Interval Level |
| Freshman | 15.3 | 1 |
| Sophomore | 28.1 | 2 |
| Junior | 26.4 | 3 |
| Senior | 26.4 | 4 |
| Graduate Student | 3.8 | 5 |
| Academic Major | | Dummy Variable |
| Human Sciences | 71.5 | 1 |
| Business | 14.9 | 0 |
| Arts and Sciences | 9.1 | 0 |
| Other | 4.5 | 0 |

Table 2 (cont.)
Demographic Charactoristics

| **Background Factors** | | |
|---|---|---|
| Parents' Use of Credit When Student was | | Interval Level |
| Young | | |
| Always | 16.1 | 4 |
| Usually | 29.8 | 3 |
| Sometimes | 44.2 | 2 |
| Never | 9.9 | 1 |
| Parents' Credit Related Problem | | Dummy Variable |
| Yes | 28.5 | 1 |
| No | 71.5 | 0 |
| Credit Card Owners | | Dummy Variable |
| Yes | 70.7 | 1 |
| No | 29.3 | 0 |
| **Psychological Factors** | | |
| Money Ethic | | Interval Level<br>Possible range 12-48 |
| Locus of Control | | Interval Level<br>Possible range 14-56 |

pus. The remaining (64.5%) students lived in rental housing. The majority of the students were White or Caucasian (86.8%), while 6.6% of the respondents were either Hispanic or Latino. The majority of the students (71.5%) were human sciences majors; 14.9% were business majors, and 9.1% were arts and sciences majors. In

terms of academic level, 15.3% of respondents were freshmen, 28.1% were sophomores, 26.4% were juniors, 26.4% were seniors, with the remainder (3.8%) being graduate students. More than one-half (56.4%) of the students were employed part-time, and 34.9% were not employed. Twenty-one students indicated that they were employed full-time.

Table 3 shows the credit card use behaviors of the survey respondents. The majority of students (70.7%) held one or more credit cards. This figure matches the national average. More than 10% of the students possessed five or more credit cards. On average, college students received their first credit card when they were 18 years old. The survey indicated that some students obtained their first credit card as young as 15 years of age. It was also found that about one quarter (22%) of the students never keep copies of their charge slips, and they seldom check receipts against their monthly credit statement. On the other hand, almost half (49.4%) of the students paid their credit bills in full. While this seems positive, almost 10% of the students paid only the minimum payment in any given month.

The most cited reason for using a credit card was convenience. This finding indicates that these college students used credit for everyday expenses. In terms of credit card knowledge, only about one-half of the students were aware of the associated fees on credit cards. This represents both the positive and negative aspects of college students' use of credit cards. College students may not be aware of the annual percentage rate or late fees because they don't pay any interest or late fees. On the other hand, this also epitomizes carelessness in relation to credit use because lack of knowledge about these important card characteristics is not a substitute for protection in the case of incurring interest expenses or late fees. These findings are summarized in Table 3. (see table 3)

Students were also asked to indicate their attitude toward credit card usage and credit card use behavior for various expenditure categories. They were then asked to indicate their current credit card balance. Table 4 shows the findings related to attitudes toward credit card usage. When asked whether using a credit card is a good idea or a bad idea, the majority of students answered that it depends on the situation. For example, students answered that it is acceptable for college students to borrow money to finance school related items (93.3%), to cover expenses due to illness (89.5%), and to cover living expenses (74.7%). On the other hand, they thought that it is unacceptable for college students to borrow money to purchase a luxury (89.5%) or to cover the expenses of a vacation (87.5%). (See table 4)

Students were then asked to provide information about how often they used credit cards, and about how much they charged on their credit cards during the previous month. As shown in Table 5, almost one quarter of those students who held credit cards used their cards regularly (often and sometimes) for each category. The most frequent purchases with credit cards included apparel and services, food away from home, and entertainment. The least purchased categories included housing and tobacco products. College students charged the largest amount of money for

Table 3
College Students' Credit Card Use Behavior (N=242)

| Variable | % |
|---|---|
| Number of Credit Cards Owned | |
| None | 29.3 |
| 1 | 16.9 |
| 2 | 19.8 |
| 3 to 4 | 20.6 |
| More than 5 | 13.4 |
| | (M=2.16) |
| Age When First Credit Card Acquired | |
| Before 17 | 17.3 |
| 18 | 50.9 |
| 19-20 | 22.5 |
| Over 20 | 9.3 |
| | (M=18.36) |
| When you use credit cards, do you keep copies of the charge slips and check receipts against your monthly bills? (N=173) | |
| Always | 35.8 |
| Usually | 19.1 |
| Sometimes | 23.1 |
| Never | 22.0 |
| How do you usually pay your monthly credit card bills? (N=173) | |
| I pay credit bills in full | 49.4 |
| I pay between the minimum and full amount | 40.7 |
| I pay the minimum payment | 9.9 |

Table 3 (cont.)
College Students' Credit Card Use Behavior (N=242)

| | |
|---|---|
| The number one reason of using credit cards (N=173) | |
| Convenience | 39.3 |
| Emergency | 22.0 |
| Consumer Protection | .6 |
| Shortage of Cash | 20.2 |
| Safety (don't want to carry cash) | 2.9 |
| Establish credit history | 13.3 |
| Other | 1.7 |
| Credit card related knowledge (N=173) | |
| Percentage of those who know annual percentage rate on their major credit card | 61.3 |
| Percentage of those who know late fee on their major credit card | 54.9 |
| Percentage of those who know annual fee on their major credit card | 59.5 |
| Percentage of those who know cash advance fee on their major credit card | 39.9 |

Table 4
Credit Card Usage Attitudes

| Credit Card Usage Attitudes | % | |
|---|---|---|
| Do you think it is a good idea or a bad idea for people to buy things using credit card? | | |
| Good Idea | 11.2 | |
| It Depends | 80.5 | |
| Bad Idea | 8.3 | |
| In which situation do you feel it is all right for a college student to borrow money? | Okay | Not Okay |
| To cover the expenses of a vacation | 12.5 | 87.5 |
| To cover living expenses | 73.7 | 26.3 |
| To consolidate bills | 67.1 | 32.9 |
| To purchase a luxury | 11.5 | 89.5 |
| To finance school related items | 93.3 | 6.7 |
| To finance the purchase of a car | 67.9 | 32.1 |
| To cover expenses due to illness | 79.5 | 10.5 |
| To finance the purchase of furniture | 36.7 | 63.3 |

apparel and services. The average balance for those who held credit cards was $890.42. The average balance for those who carried a balance from month to month was $1,769.85.

Table 6 shows the results from the regression analysis of factors associated with credit attitudes. Among the demographic characteristics, racial/ethnic background was significantly related to respondents' attitudes toward credit. Compared to other ethnic groups, White/Caucasians had more positive attitudes toward credit, controlling for other variables. Age, gender, and birth order were not significantly related to the attitude toward credit cards (See table 6).

Among the socioeconomic variables, academic level was significantly related to respondents' attitude toward credit. Specifically, those who were in higher academic years tended to have a negative attitude toward credit compared to those who were in lower academic years, controlling for other factors. Other socioeconomic characteristics such as income, employment status, housing situation, and academic major were not significantly related to the attitude toward credit cards.

Background characteristics were significantly related to attitudes toward credit cards. Those students whose parents used credit cards often had a positive attitude toward credit compared to those who had parents used credit cards less, controlling for other variables. To a lesser degree, stu-

Table 5
Credit Card Use by College Students

| Category | Frequency of Credit Card Usage (%) | | | | Average Amount Charged (Monthly) Mean $ (SD $) |
|---|---|---|---|---|---|
| | Often | Sometimes | Hardly Ever | Never | |
| Food at home | 10.2 | 17.5 | 16.3 | 56.0 | 30.07(70.16) |
| Food away from home | 12.1 | 29.7 | 19.4 | 38.8 | 24.34 (40.62) |
| Alcoholic Beverage | 7.8 | 10.8 | 18.1 | 63.3 | 12.88 (44.55) |
| Housing | 1.2 | 4.2 | 7.8 | 86.7 | 4.91(30.69) |
| Apparel and Services | 13.2 | 35.3 | 20.4 | 31.1 | 51.79(108.10) |
| Transportation | 19.3 | 18.7 | 16.9 | 45.2 | 37.42(95.22) |
| Health Care | 6.0 | 5.4 | 10.8 | 77.8 | 9.00 (49.07) |
| Entertainment | 10.7 | 23.2 | 16.1 | 50.0 | 20.31(52.78) |
| Education | 9.0 | 19.3 | 13.9 | 57.8 | 36.42(152.61) |
| Tobacco Products and Smoking Supplies | 2.4 | 6.0 | 6.6 | 85.0 | 3.57 (17.56) |
| Other (Personal Care) | 7.5 | 17.5 | 16.3 | 58.8 | 17.15(60.94) |

Table 6
Factors Associated with the Attitude toward Credit Cards (N=226)

| Variable | B | SE B | Beta |
|---|---|---|---|
| Demographic Characteristics | | | |
| Age | -7.32E-02 | .09 | -.06 |
| Gender (Male =1) | .22 | .60 | .02 |
| Ethnic/Racial Background (White =1) | 1.90 | .85 | .14* |
| Birth Order (First Born and Only Child =1) | .647 | .60 | .07 |
| Socioeconomic Characteristics | | | |
| Income (Over $4,000 =1) | .71 | .68 | .07 |
| Housing Arrangement (Off campus=1) | -.68 | .83 | -.06 |
| Employment (Employed =1) | .17 | .66 | .02 |
| Academic Level | -.66 | .30 | -.17* |
| Major (Human Sciences =1) | -.90 | .66 | -.09 |
| Background Factors | | | |
| Parents Credit Use | .71 | .35 | .13* |
| Parents' Credit Problem (If yes =1) | -1.22 | .68 | -.12 |
| Credit Card Owners (Owners =1) | 2.70 | .67 | .26** |
| Psychological Factors | | | |
| Money Ethic | .14 | .06 | .14* |
| Locus of Control | .17 | .07 | .16* |
| Constant | 7.69 | 4.02 | |

$R^2$ = .222 F = 4.28** * p <.05. ** p <.01.

dents whose parents had credit-related problems tended to have a negative attitude toward credit compared to others, controlling for other variables. Credit card possession was positively associated with the attitude toward credit. Those who possessed credit card(s) had a more positive attitude toward credit compared to those who did not have a credit card.

The two psychological factors were significantly related with the attitude toward credit. Money ethic and locus of control were positively associated with credit. Those who had a positive money attitude (i.e., ethic) and those who exhibited a strong (i.e., higher level) external locus of control tended to have a positive attitude toward credit compared to others, controlling for other factors.

**Discussion and Implications**

It appears that Henry et al. (2001) were correct in warning that "university students are vulnerable to financial crisis" (p. 246). Compared to reports by Churaman (1988), today's college students are not exhibiting

improved credit knowledge or improved credit card practices. About one-half of the students paid their credit balances in full each month, but one would have expected an improvement in this and other behaviors in the decade since Churaman reported her findings.

This study also found that ethnic background, parent's credit card use when students were young, credit card ownership, academic level, money ethic, and locus of control were significant factors associated with students' attitude toward credit. Findings from this study partially support research conducted by Xiao et al. (1995) who found that gender, academic major, living arrangement, number of credit cards owned, number of all cards owned, time of using credit cards, and consignment status were significantly related to credit attitudes. However, in the current study gender, academic major, and living arrangement were not significant factors affecting credit attitudes.

This study expands the working body of knowledge regarding college students' use and attitudes about credit cards by incorporating background factors, such as parent's use of credit and psychological factors such as money ethic and locus of control as determinants of credit attitudes. The fact that students' behavior and attitudes are influenced by their role model (i.e., parents, peers, or teachers) and previous experience is not surprising. However, this is an issue worth future consideration. It appears, based on the findings of this study, that a student's attitude toward credit is highly dependent upon socialization. Exposure to credit usage, either positive or negative, appears to influence one's attitude towards credit. Take, for example, parents' use of credit. Those students who witnessed positive credit behaviors tended to have more positive attitudes towards credit, while students who saw parental mismanagement of credit tended to be disinclined towards credit use.

This leads to a possible intervening counseling and education strategy for use by college and university administrators and financial counselors. Specifically, those individuals who indicate negative exposure, in terms of financial matters, with their role model(s) during early years of life can become a special target group for counseling and education. Future research incorporating interactions between socialization factors (e.g., parental use of credit, cohort use of credit, and exposure to credit based on demographic factors) and money ethics and locus of control issues may point to tools and techniques that can be used to improve the credit wellness of college students. It is highly recommended that future research, therefore, take into account the background variables of respondents.

Students should, as Ruth (1995) suggested, be presented with the necessary knowledge and information to be more responsible for their behaviors with regard to credit card use. Since a number of students in this study obtained their first credit card as early as age 15, credit use information should be presented early in the college career of students, perhaps beginning with new student orientations. There has been a great deal of attention given to the role of universities and colleges in promoting complacent attitudes toward debt

as well as the need for effective financial literacy and credit education programs (Manning, 2000). As suggested in this research, credit education may be that important component in college curriculums that will lead to improved credit behaviors and improved financial knowledge.

## Summary

Findings from this study have shown that college students are greatly involved with credit cards. The research indicated mixed practices of college students' credit use and a low level of knowledge regarding credit. Based on the assumption that one's attitudes affect behavior, obtaining information on the factors affecting college students credit behavior offers a solid first step to improving college students' credit card behaviors.

The following recommendations are presented to help guide further future research on this important topic. These suggestions are based on a review of the inherent limitations in this study. First, this research used a convenience sample of college students. In this type of research, acquiring a random sample is expensive and time consuming; however, in future research endeavors, a random and larger sample should be considered. Second, income measures should be further developed in future research. College students' income is hard to measure because the definition of income varies from student to student. In this research, income was classified as cash flow from jobs, scholarships, allowances, and other income; however other measurements of income should be developed in future research. Finally, additional attempts should be made to standardize measures related to credit attitudes and behaviors. In this way future research can be evaluated on a consistent and reliable basis.

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