

## **College Student Credit Use and Attitude toward Credit Card Companies**

Shweta Singh, Texas Woman's University

[SSingh2@twu.edu](mailto:SSingh2@twu.edu)

David H. Rylander, Texas Woman's University

[DRylander@twu.edu](mailto:DRylander@twu.edu)

Tina Mims, University of North Texas

[MimsTC@gmail.com](mailto:MimsTC@gmail.com)

## **College Student Credit Use and Attitude toward Credit Card Companies**

### **INTRODUCTION**

The recent recession has touched virtually every American, straining savings, changing spending and borrowing habits as long-term unemployment reaches levels not seen in 70 years (Pew-Forum, 2010). With many Americans still feeling recessionary effects, how are college students coping with their own futures and debt? How do students perceive credit cards and credit card companies? Shortly after being on a college campus, many students find they have credit card debt (Compton and Pfau, 2004). The growth of U.S. credit card debt is known to be problematic regardless of whether the credit card consumer is a college student or part of the general population, but college students are especially vulnerable to debt spending. Parents of children and of young adults are known to exacerbate their own credit card debt by unsupervised spending online, which is certainly no way to address the growing consumer credit card debt crisis (Penny, 2001).

While there is little debate that credit cards are a convenient way to pay for goods and services, there are concerns that certain attitudes and behavioral traits exist that indicate credit card use problems. For example, measuring Compulsive Buying Tendencies (CBT) was recently used to examine the behavioral traits of college students and their credit card debt (Joireman et al., 2010). CBT in general consumer investigations is typically linked with lower levels of self-esteem and conscientiousness (Hersey, 1938, Green, 1960, Roberts and Jones, 2001); higher levels of depression and anxiety (Rungtusanatham and Salvador, 2008); and materialism (Marler-Jr., 1960, Rungtusanatham and Salvador, 2008). Low credit card knowledge among college students makes students especially ill-equipped to make educated choices with credit cards (Braunsberger, 2005).

Given the dangers of credit card debt and the vulnerability of college students, more understanding regarding the attitudes of these students with regard to credit card companies and credit card debt is needed. The timing of this investigation is desirable given new legislation went into effect in

2010 that regulates credit cards to students. This study examines student knowledge, attitudes toward credit card companies, and credit behaviors since the legislation. The overall aim of this investigation is to better understand students' attitudes, beliefs and behaviors regarding credit card debt and credit card companies. Results point to implications for policy makers, credit card companies, college students and academic institutions.

## **BACKGROUND**

Varying approaches exist to address a number of aspects about student behavior with credit cards. As with the acquisition of any consumer product or service, underlying motivations are often a facet investigated by researchers (Rothwell, 1955, Udell, 1964, Mantel and Kardes, 1999, Mowen and Minor, 2001). Four factors revealing the reasons students are motivated to acquire credit cards include: buying power, meaning the student has some "purchasing power" they perceive with use; incentives, being the "perks" used by credit card companies to entice the student; the credit card company's reputation as perceived by students; and finally, a good credit rating the student seeks by having and using a credit card (Blankson, 2008). However, motivation is known in consumer behavior to differ from attitudes and attitude formation (Fishbein, 1967, Ajzen and Fishbein, 1977, Crespi, 1977, Alba and Hutchinson, 1987, Mowen and Minor, 2001).

### *Attitude toward Credit Card Debt*

The college student market is often considered vulnerable or even naïve when it comes to life experiences (Warwick and Mansfield, 2000, Soman and Cheema, 2002, Lyons, 2004, Pirog and Roberts, 2007). Student credit card debt is tied to the student's attitude about money which stems from their home life (Davies and Lea, 1995). Where parents struggle with debt, likelihood exists so shall the student struggle with debt (Norvilitis and MacLean, 2010). Where parents establish a lifetime of savings, then in turn, their children are likely influenced to do the same (Altmann, 2003). The Credit CARD Act of 2009,

requiring the cosigning on credit cards issued to the under 21, puts parents on-the-hook as the likely cosigner (McClure, 2010).

In addition to the under 21 co-signer legislation, additional regulatory requirements recently include three disclosure standards made of credit card companies advocated by the Federal Trade Commission (FTC). These FTC disclosure standards intend to ensure college students are appropriately informed (Thomas et al., 2011). Although research indicates mixed results that financial literacy campaigns are effective, credit card companies in many ways still solicit to acquire college students (Estelami, 2009). Since these requirements took place, little is known about the impact the new legislation has on student attitudes toward credit cards or toward credit card companies.

Historically, extant literature carries a theme that credit cards can exacerbate debt (Warwick and Mansfield, 2000). There is a hint of a fear factor in student attitudes toward credit card debt that includes items representing hesitation, suspicion and doubt (Yamauchi and Templer, 1982, Roberts and Jones, 2001). Fear is a known cognitive driver of suboptimal financial decisions (Estelami, 2009). Worry and anxiety are also elements of student attitudes toward credit cards (Roberts and Jones, 2001). Serious consequences to health and even student suicide are attached to student credit card debt (2009). These grave outcomes to college student health led to the enactment of new laws intending to protect this population.

Prior to the 2009 legislation, the Jacquelyn and Phylis (2000) research provided insights into student attitudes toward credit cards in ways that describe their feelings about credit cards in general. Results included the following statements about credit cards:

1. 68.6% “They are good if used correctly”
2. 21.2% “They are not the best way to manage money”
3. 8.2% “They are the worst thing man ever invented”
4. 1.4% “They are the best thing man ever invented”

The dichotomy observed by reading these statements is overtly clear. While a good proportion of students appear to have a pragmatic approach toward using credit (e.g., “they are good if used correctly”), it is also evident that a sizeable proportion of student attitudes are negative (“worst thing ever invented” and “not best way to manage money”). It was previously hoped that financial literacy campaigns would encourage student consumers to have a more objective and realistic assessment of taking debt risks (Estelami, 2009).

College students want credit cards as much as credit card companies want the students, and for the same reason as most consumers: convenience (Manning, 2000, Boykins et al., 2001). Unfortunately, the lack of experience in managing a budget is a strong factor in students finding themselves unable to keep up with growing credit card debt (Boykins et al., 2001). Compton and Pfau (2004) experimented with warning messages to students to manipulate and learn from student change in attitudes toward credit card debt and credit card companies. Their study intended to find ways to foster student resistance to “persuasive messages of credit card companies.” The results were encouraging as there was sufficient evidence to indicate some degree of inoculation could successfully protect college students against credit card advertisements, protect healthy attitudes toward credit cards, and influence student behavior in ways to encourage word-of-mouth communication about the concerns of credit card debt (Compton and Pfau, 2004).

While a good amount of the literature indicates students are either realistic or cautious in their attitudes toward credit card debt, some studies found that students having a positive attitude toward credit cards were highly correlated to student credit card ownership. Higher affective credit attitude scores, i.e. credit cards make me happy, were found to be highly related to students carrying outstanding balances on many cards (Hayhoe et al., 1999, Hayhoe et al., 2000).

#### *Attitude toward Credit Card Companies*

Prior to the 2009 legislation, credit card companies were known for aggressively marketing to students (Stanford, 1999). For some time prior to the new legislations, credit card companies once

aggressively sought to make arrangements with the institutions and student organizations. Credit card companies went so far as paying students to sign up other students (Warwick and Mansfield, 2000). It was this aggressive, irresponsible approach by credit card companies that pushed legislatures to protect these young, naïve, newly minted adult consumers and their families (2009). To impede the problems of college student credit card debt, the Credit CARD Act requires that persons under the age of 21 must get a cosigner for a credit card (2009, Marte, 2009, Willis, 2009). In addition to this cosigner requirement, credit card issuers are mandated to move their marketing off-campus, (2009, Willis, 2009). This legislation has not, however, prevented colleges and universities from accepting credit cards to pay tuition.

Prior to the legislation, students believed that credit card companies soliciting on campus were somehow vetted by the university or college (Norvilitis and Santa Maria, 2002). A quarter of the students in the Norvilitis and Santa Maria study indicated they believed their college “had screened” the credit card companies who solicited at the student union. In fact, this underlying implied credibility that campuses deliver by being a channel of access to students brought about many ethical implications for researchers to investigate (Richins and Dawson, 1992, Manning, 2000, Warwick and Mansfield, 2000).

McClure indicates that the new legislation will help improve researchers’ ability to analyze the impact of credit card marketing (McClure, 2010). Public schools are now required to report relationships with credit card companies for any reason not just prevent the solicitation on campus. Some states have taken the new Federal law one step further. That step is to include debt education material even though mixed results exist concerning the impact of financial literacy campaigns in the general consumer population (Estelami, 2009). In light of both the challenging economic times and the Credit CARD Act targeting college students in particular, time is ripe for researchers to explore attitudes of students toward credit card debt and credit card companies.

### *Purpose of this Research*

Varieties of approaches in the literature have yielded some clarity about college student behavior and credit cards with regard to usage, debt, and attitudes. What is missing is a blended approach to address a number of research questions that combine student characteristics to predict *attitudes toward credit card companies* with *behavior exhibited with credit card usage*. This leads to the following research questions:

1. Is there a link between student attitude toward credit card companies and the level of responsibility students practice when using credit cards?
2. Do modes of acquisition have an impact on student attitude toward credit card companies and behavior related to credit card usage?
3. Is there a positive correlation between student awareness and knowledge about and their attitude as well as behavior toward credit card companies?
4. Does desirable payment behavior enhance student attitude toward credit card companies and promote more responsible usage of credit cards?
5. Do students who carry rewards cards tend to hold a more favorable attitude towards credit card companies and exhibit responsible behavior?
6. Does student attitude and behavior differ with differing credit card usage purposes?
7. What are some of the student characteristics that play a mediating role in shaping students' attitude and behavior toward credit cards?

The literature provides ample guidance to indicate that little is known about the relationship of college student attitudes toward credit card companies and the behavior they exhibit using credit cards. While an abundant amount of research exists to guide decisions on the general consumer population, especially in light of new legislation, more knowledge is needed about the mechanisms influencing college student attitudes, behaviors and modes of acquisition of credit cards and credit card debt.

Prior to recent legislation, the literature indicates that college students are either realistic or cautious in their attitudes toward credit cards, but this attitude was not associated with credit card companies (Warwick and Mansfield, 2000, Palmer et al., 2001, Xiao et al., 2011). Since a significantly high number of college students own and use credit cards, researchers also need to identify payment behavior in association with the attitude toward credit cards.

What also is missing in the literature is that the cost for encouraging both *credit card use* and *desirable payment* behavior by credit card consumers is generally driven by loyalty benefits. On one

hand, banks, lenders and other credit issuing institutions have a degree of profit involved when fees are collected. On the other hand, excessive rewards cost the credit company, thereby reducing profits. Still another possibility is that the college student customer is a poor credit risk to the credit card issuer reducing credit company profits when exacerbated with the reward program costs. The calculation of benefits to the credit issuer must include these reward expenses, but for the consuming college student, a lack of information exists as to how college student behavior is influenced. This gap leaves an opportunity for exploration.

## **METHODOLOGY**

### *Data Collection*

This study focuses on student attitude toward credit card companies. To this end, the sample was drawn from students attending a widely diverse public university. The sample of 280 students indicates considerable variance in attitudes and behaviors towards credit cards. The sample comprises of both undergraduate (approx. 64%) and graduate students (approx. 36%). Nearly 85% of the students in the sample use credit cards, and around 45% have been using these credit cards for more than 4 years.

### *Data Analysis*

The focus of analysis of the current paper is the student attitude toward credit card companies and their behavior when using credit cards. To measure their attitude and behavior, students were asked to rate the following statements on a scale of 1 to 4, with 1 being ‘strongly agree’ and 4 representing ‘strongly disagree’:

1. Credit Card companies indulge in deceptive practices that are harmful to customers.
2. Credit Card companies mislead consumers by hiding vital information about their policies from consumers.
3. Credit Card companies make it impossible for consumers to get out of debt.
4. I don’t think it’s ethical for credit card companies to market to students.
5. I am more impulsive when I shop with credit cards.
6. I spend more when I use a credit card.



7. I am less concerned with the prices of a product when I use a credit card.

For each of these statements, higher values indicate a more positive attitude towards credit card companies and responsible behavior related to credit card debt.

### *Data Reduction*

In an attempt to see whether these seven items can be reduced into fewer factors, and to identify any common underlying constructs measuring them, factor analysis was used. The results indicate that the seven items can be reduced into two main factors that are relatively uncorrelated with one another. While the last three questions on the survey (#5-7) loaded on to factor 1, the first four (#1-4) loaded on to factor 2. These factors were identified respectively as “behavior related to credit card usage” and “attitude toward credit card companies.”

### *Segmenting Students*

The two factors measuring student behavior and attitude towards credit card companies (as indicated by factor analysis) were used to segment the students into two groups. The cluster with higher mean values on factors 1 and 2 represents students with a more positive attitude toward credit card companies and those exhibiting more responsible debt behavior. Conversely, the cluster with lower mean values represents students with a negative attitude and less responsible debt behavior. Students who held positive attitude toward credit card companies were also more likely to use their credit cards responsibly. This helps answer our first research question regarding the link between debt attitude and behavior.

## **RESULTS OF THE STUDY**

### *Research Question 1: Linking Attitude and Behavior*

Cluster analysis results indicate an almost equitable distribution of students based on their attitude and behavior, with 47% exhibiting positive attitude and behavior, and 53% with negative attitude and behavior. The R-squares for both factors 1 and 2 are reasonable, accounting for 74% and 78% of the

variance explained in the clusters, respectively. For Research Question 1, a strong link exists between attitude toward credit card companies and responsible credit behavior.

#### *Finding the Discriminating Factors*

After segmenting the students based on their attitude, the next step was to find the factors that can discriminate between the two segments. Standardized canonical coefficients were used to identify the variables that best discriminate between the two student groups. Coefficients with higher absolute values (i.e.  $\pm \geq .30$ ) indicate higher ability to predict the group membership (Hair et al., 2006). Reward cards, payment behavior, number of credit cards, modes of acquisition, awareness, purpose for using credit cards, impulsiveness and certain student characteristics were all indicated as variables that help discriminate between the two different student groups using this coefficient criteria. The Wilkes' Lambda goodness of fit measure of the discriminant function is a significant .39. Therefore, we conclude the variables chosen are contributing to the discriminant function. Since the magnitudes of the standardized canonical coefficients help identify the discriminating variables, means of the differentiating variables were calculated by group. Key results indicating links between these different variables now follow.

#### *Research Question 2: Modes of Acquisition with Student Attitude and Behavior:*

Prior literature has already found a link between modes of credit card acquisition and customer riskiness and revenue (Singh et al., 2009b). The Internet has been shown to be a successful channel of acquiring customers that are less risky and at the same time generate profits for the credit card company (Singh et al., 2009a). In the context of college students, we find that the Internet is successful in acquiring customers that go on to exhibit a more positive attitude toward credit card companies and also use their credit cards more responsibly as compared to those acquired through direct selling.

#### *Research Question 3: Awareness with Student Attitude and Behavior:*

In an attempt to find out if students are truly knowledgeable about credit cards, Warwick and Mansfield (2000) found that nearly 71% of students in their sample were unaware of the actual interest rate they were paying on their credit cards. Concerns about the lack of financial literacy of students with regards to credit cards are rampant. On the other hand, an increase in financial literacy can also lead to a desire to acquire more credit cards (Richter and Prawitz, 2010). We tested for relationships between student awareness and their attitude and behavior regarding credit card debt. Results indicate that students who hold a positive attitude and use their credit cards responsibly:

- are more likely to always check their credit card statements for billing errors, while students exhibiting negative attitude and behavior are likely to check their statements either sometimes or rarely;
- are likely to be always aware of changing policies on their credit cards, while students exhibiting negative attitude and behavior are only sometimes aware of the changing policies; and
- are only sometimes or rarely aware of the interest rates being charged on their cards. ???

*Research Question 4: Payment Behavior with Student Attitude and Behavior:*

Consumers who carry a positive balance forward each month on their credit cards are a source of both risk and revenue for credit card companies (Singh *et al.*, 2009b). Late payments can signal a higher probability of default for the customer in question. However, is there a link between payment behavior of students, student attitude toward credit card companies and their behavior related to credit card usage? There is some evidence that students who pay off their credit card balances in full each month consider credit cards as being ‘useful’ compared to their counterparts who carry monthly balances. Durkin (2000) found that among credit card holders with an outstanding balance of more than \$1,500, 57% expressed a negative attitude toward credit cards, while 59% of those who rarely paid their outstanding balances in full held negative attitudes.

Our findings indicate that students exhibiting negative attitude and behavior are more likely to rarely or never pay off their balances in full each month as compared to always paying off the balances in

full. In addition, students who exhibit positive attitude and responsible behavior are more likely to make payments on their credit cards on time every month.

*Research Question 5: Rewards Cards with Student Attitude and Behavior:*

Past literature shows reward cardholders to be valuable to credit card companies. These reward card holders may not generate the maximum profits for the companies, but their value stems from the low financial risk they pose to the credit card firms (Singh *et al.*, 2009b). Based on their levels of risk and return, reward cardholders generate higher risk-adjusted revenue and risk-adjusted lifetime values for credit card companies more so than non-rewards cardholders (Singh *et al.*, 2009a; Singh *et al.*, 2009b). Happy and satisfied customers that exhibit a positive attitude toward a company and responsible behavior also provide value for the company in terms of repeated purchases and positive word of mouth. Our study extends the prior knowledge by indicating that rewards cardholders are more likely to exhibit a positive attitude and behavior toward credit card companies than are non-rewards cardholders.

*Research Question 6: Purpose of Credit Cards Usage with Student Attitude and Behavior:*

Credit cards are used for different purposes by different people. Some individuals use credit cards and incur credit card debt because of convenience, while other individuals see credit cards as a source for borrowing money (Lyons, 2004, Chudry *et al.*, 2011). An important distinction is that the latter purchase products and services on credit due to lack of readily available cash (Lyons, 2004). Extending this knowledge, we find students that hold a positive attitude toward credit card companies practice responsible behavior and are more likely to use the credit cards to conveniently build credit history. Students exhibiting a negative attitude and behavior use credit cards as a borrowing mechanism. The main purpose of the latter group is to make balance transfers, pay off balances on other cards and purchase luxury products and services.

*Research Question 7: Student Characteristics with Student Attitude and Behavior:*

While our findings indicate no significant difference based on student characteristics such as age or income, we do find that graduate students are more likely to hold a positive attitude and practice responsible behavior compared to undergraduates. In a study by Punjavat (1992), Punjavat found that international graduate students have a positive attitude towards credit cards, especially if they had used credit cards prior to coming to the United States or if their parents used credit cards. Our findings also indicate that self-employed students are more likely to exhibit negative attitude and behavior compared to students that are full-time employed.

#### *Research Question 7: Student Characteristics Shaping Attitude and Behavior*

The link between an individual student holding a higher the number of credit cards and maintaining greater credit card balances has already been established (Arano and Parker, 2007). In our analysis, we find a link between student attitude, behavior and the number of credit cards held. Students with negative attitude and behavior carry more than four credit cards, while students with positive attitude and behavior carry around two credit cards.

In the past, links between sensation seeking motivation and student credit card behavior exist (Dickerson, 1998). Until now, no link had been shown between impulsiveness and student attitude and behavior. Our contribution is that students who admit to being impulsive by nature tend to exhibit an overall positive attitude toward credit card companies. These students also use credit cards more responsibly. These findings are partly explained because students who admit to being impulsive may tend to take on the responsibility of (mis)management of their finances upon themselves rather than blame their woes on credit card companies. This may further explain their positive attitude toward the credit card companies and practicing responsible behavior towards managing credit.

## **DISCUSSION**

Our findings indicate two clusters of college students: one with a positive attitude toward credit card companies and positive credit use behaviors; the other with the opposing attitude and behavior.

Students in the cluster with positive attitudes (PAC) are more likely to use credit cards responsibly. PAC members will use credit cards as a convenient method for increasing their credit rating and are more likely to check their credit card statements, find billing errors and be aware of credit card policies. Students in the cluster with negative attitudes (NAC) are likely to use credit cards as a means to borrow money and buy things when cash is low. NAC members are rarely aware of interest rates and rarely check their statements.

Screening college students based on their attitudes toward credit card debt and credit card companies may be a benefit to both higher education institutions and credit card firms. The implications of our study indicate it is possible to segment students based on their attitudes and these attitudes more likely indicate the type of debt behavior the student will employ. However, one could also surmise that poor behaviors regarding credit card use will lead to undesirable consequences (e.g., fees or reduced credit rating), which would then leave students with a negative attitude toward the credit card companies. In this case, attitude is more of an outcome of the behaviors rather than the other way around. More research is needed to determine how much attitude is predictive prior to credit card use versus how much is developed after experiencing credit behaviors and consequences. In any case, credit card companies would be advised to monitor student attitudes and better educate students on responsible use of credit.

College administrators should take more action to educate students on credit card use, with an emphasis on undergraduate students. Findings indicate more responsible use and more favorable attitudes by graduate students, but undergraduate students are more vulnerable. With the increasing amount of college student loans and defaults on loans, credit card companies may face increasing default from irresponsible credit card use. This makes it more in their interest to more carefully screen credit applicants and better educate customers on responsible behaviors.

Results presented here are limited by a sample from a single university, although the sample includes a diversity of students. Sample size also limits more extensive breakdown among student clusters. Future research should build on these findings by testing a broader sample of college students

and, ideally, examining longitudinal changes in credit card behaviors and attitudes. Results could more clearly specify areas needing attention by credit card companies and college administrators.

## References

- (2009) Credit Card Accountability Responsibility and Disclosure Act of 2009. *Consumer Protection*. 2009-2010 ed.
- Ajzen, I. & Fishbein, M. (1977) Attitude-Behavior Relations: A theoretical Analysis and Review of Empirical Research. *Psychological Bulletin*, 84, 20.
- Alba, J. W. & Hutchinson, J. W. (1987) Dimensions of Consumer Expertise. *Journal of Consumer Research*, 13, 411-454.
- Altmann, R. (2003) Encouraging savings through the life cycle. *Journal of Financial Services Marketing*, 7, 297.
- Blankson, C. (2008) Measuring college students' choice criteria of credit cards: scale development and validation. *Journal of Marketing Management*, 24, 317-344.
- Boykins, A., Wagner, W., Behnen, R., Cunningham, J., Harding, M., Liese, C., Luetkemeyer, B., Wilson, V. R. & Wright, M. (2001) Report of the House Interim Committee on Consumer Protection and Credit Cards on College Campuses. Jefferson City, MO: House of Representatives, State of Missouri.
- Chudry, F., Foxall, G. & Pallister, J. (2011) Exploring Attitudes and Predicting Intentions: Profiling Student Debtors Using an Extended Theory of Planned Behavior. *Journal of Applied Social Psychology*, 41, 119-149.
- Compton, J. A. & Pfau, M. (2004) Use of Inoculation to Foster Resistance to Credit Card Marketing Targeting College Students. *Journal of Applied Communication Research*, 32, 343-364.
- Crespi, I. (1977) Attitude Measurement, Theory, and Prediction. *Public Opinion Quarterly*, 41, 285.
- Davies, E. & Lea, S. E. G. (1995) Student attitudes to student debt. *Journal of Economic Psychology*, 16, 663-680.
- Estelami, H. (2009) Cognitive drivers of suboptimal financial decisions: Implications for financial literacy campaigns. *Journal of Financial Services Marketing*, 13, 273-283.
- Fishbein, M. (ed.) (1967) *Attitude Theory and Measurement*, New York, NY: John Wiley & Sons, Inc.
- Green, E. (1960) How Monsanto Measures the Value of Its Marketing Activities. *Industrial Marketing* 39-42.
- Hair, J. F., Tatham, R. L. & Anderson, R. E. (2006) *Multivariate data analysis*, Upper Saddle River, N.J.; London, Prentice Hall PTR.
- Hayhoe, C. R., Leach, L. & Turner, P. R. (1999) Discriminating the number of credit cards held by college students using credit and money attitudes. *Journal of economic psychology*, 20, 643.
- Hayhoe, C. R., Leach, L. J., Turner, P. R., Bruin, M. J. & Lawrence, F. C. (2000) Differences in Spending Habits and Credit Use of College Students. *Journal of Consumer Affairs*, 34, 113-133.
- Hersey, M. L. (1938) The Elements of a System of Marketing Control. *Journal of Marketing*, 2, 201-208.
- Joireman, J., Kees, J. & Sprott, D. (2010) Concern with Immediate Consequences Magnifies the Impact of Compulsive Buying Tendencies on College Students' Credit Card Debt. *Journal of Consumer Affairs*, 44, 155-178.
- Lyons, A. C. (2004) A Profile of Financially At-Risk College Students. *Journal of Consumer Affairs*, 38, 56-80.
- Manning, R. D. (2000) *Credit card nation : the consequences of America's addiction to credit*, New York, Basic Books.

- Mantel, S. P. & Kardes, F. R. (1999) The Role of Direction of Comparison, Attribute-Based Processing, and Attitude-Based Processing in Consumer Preference. *Journal of Consumer Research*, 25, 335-352.
- Marler-Jr., J. E. (Year) Published. Building the Marketing Team. In: Business, F., ed. Marketing: Key to Everything, October 1960 1960 New York, NY. Grocery Manufacturers of America.
- Marte, J. (2009) Credit Card Rules For Under-21s: Wise Idea or Ticket To Financial Hardship? *The Wallet* [Online].
- McClure, A. (2010) Curtailing Credit Cards. *University Business*, 13, 7-7.
- Mowen, J. C. & Minor, M. S. (2001) *Consumer behavior : a framework*, Upper Saddle River, NJ, Prentice Hall.
- Norvilitis, J. M. & Maclean, M. G. (2010) The role of parents in college students' financial behaviors and attitudes. *Journal of Economic Psychology*, 31, 55-63.
- Norvilitis, J. M. & Santa Maria, P. (2002) CREDIT CARD DEBT ON COLLEGE CAMPUSES: CAUSES, CONSEQUENCES, AND SOLUTIONS. *College Student Journal*, 36, 356.
- Palmer, T. S., Pinto, M. B. & Parente, D. H. (2001) College Students' Credit Card Debt and the Role of Parental Involvement: Implications for Public Policy. *Journal of Public Policy & Marketing*, 20, 105-113.
- Penny, J. (2001) The payments revolution: The growth of person-to-person and 'Generation Y' payments services. *Journal of Financial Services Marketing*, 6, 190.
- Pew-Forum (2010) Pew Social & Demographic Trends. Washington, DC: Pew Research Center.
- Pirog, S. F. & Roberts, J. A. (2007) Personality and Credit Card Misuse Among College Students: The Mediating Role of Impulsiveness. *Journal of marketing theory and practice.*, 15, 65-78.
- Richins, M. L. & Dawson, S. (1992) A Consumer Values Orientation for Materialism and Its Measurement: Scale Development and Validation. *Journal of Consumer Research*, 19, 303-316.
- Roberts, J. A. & Jones, E. (2001) Money Attitudes, Credit Card Use, and Compulsive Buying among American College students. *Journal of Consumer Affairs*, 35, 213-240.
- Rothwell, N. D. (1955) Motivational Research Revisited. *The Journal of Marketing*, 20, 150-154.
- Rungtusanatham, M. J. & Salvador, F. (2008) From Mass Production to Mass Customization: Hindrance Factors, Structural Inertia, and Transition Hazard. *Production and Operations Management*, 17, 385-396.
- Singh, S., Murthi, B. P. S., Rao, R. C. & Steffes, E. M. (2009a) Risk-Adjusted Lifetime Value: A New Approach to Valuing Risky Customers. Manuscript ed. Working Paper submitted to Journal of Financial Services Marketing.
- Singh, S., Murthi, B. P. S. & Steffes, E. M. (2009b) Developing a Measure of Risk Adjusted Revenue (RAR) in Credit Cards Market: Implications for Customer Relationship Management. Manuscript ed. Working Paper submitted to Journal of Financial Services Marketing.
- Soman, D. & Cheema, A. (2002) The Effect of Credit on Spending Decisions: The Role of the Credit Limit and Credibility. *Marketing Science*, 21, 32-53.
- Stanford, W. E. (1999) Dealing with Student Credit Card DEBT. *About Campus*, 4, 12.
- Thomas, V., Fowler, K. & Kolbe, R. H. (2011) The implications of the FTC's clear and conspicuous standards for the communication of credit card information to young consumers. *Journal of Financial Services Marketing*, 16, 195-209.
- Udell, J. G. (1964) A New Approach to Consumer Motivation. *Journal of Retailing*, 40, 6.
- Warwick, J. & Mansfield, P. (2000) Credit card consumers: college students' knowledge and attitude. *Journal of Consumer Marketing*, 17, 617-626.
- Willis, G. (2009) Kids' Credit Cards. *CNNMoney* [Online].



- Xiao, J. J., Tang, C., Serido, J. & Shim, S. (2011) Antecedents and consequences of risky credit behavior among college students: Application and extension of the theory of planned behavior. *Journal of Public Policy & Marketing*, 30, 239-245.
- Yamauchi, K. T. & Templer, D. J. (1982) The development of a Money Attitude Scale. *Journal of personality assessment*, 46, 522-8.