Perceived Norms, Financial Education, and College Student Credit Card Behavior

Michael S. Gutter, University of Florida
Selena Garrison, University of Florida

Credit card ownership among college students has become nearly ubiquitous in recent years. Current research indicates that approximately three-fourths of all college students have at least one credit card (Nellie Mae, 2005). While several studies indicate that the majority of students who have credit cards use them responsibly, irresponsible use by a few has raised the alarm of educators, administrators, and consumer advocates (Lyons, 2007, 2008; U.S. General Accounting Office, 2001). For this minority, risky credit behaviors, such as making late payments, maxing out credit limits, and regularly carrying a credit card balance, can result in a number of short and long-term negative consequences (Lyons, 2007, 2008). For example, risky credit card behaviors can result in substantial late fees, interest rate hikes, and a higher overall cost of borrowing. Also, many prospective employers and landlords check credit reports. Thus, prospective employees and tenants may also face constrained employment and housing opportunities. This is because poor credit behaviors can lead to lower credit scores, which can impact the ability to get credit when needed. In addition, insurance scores, which provide a guide to pricing and insurability, can also be affected by credit scores. Thus, poor credit management in college can lead to reduced access to credit after graduation, as well as more limited access to employment, housing, and insurance opportunities. There is additional evidence that poor credit management can also lead to negative health outcomes and an increased likelihood of dropping out of school (Lyons, 2007, 2008).

Some studies have found that young adults are woefully under-prepared when it comes to personal finance education. In a 1997 Jumpstart Coalition survey on financial literacy, high school seniors in the U.S. answered, on average, only 57% of the

questions correctly (The Jumpstart Coalition for Personal Financial Literacy, 1997). Subsequent Jumpstart surveys have continued to reflect the dismal state of financial literacy among high school seniors (The Jumpstart Coalition for Personal Financial Literacy, 2000, 2002, 2004, 2006, and 2008). For example, the 2006 survey found that students answered just 52.4% of the questions correctly on average. This percentage declined again in 2008, when students answered only 48.3% of the questions correctly. However, scores for the questions related to credit use and management were found to be slightly higher than those for the overall test. This finding suggests that students may be more knowledgeable about credit than commonly thought, perhaps because of greater exposure to credit or greater interest in credit information than other financial management topics.

Increasing financial education is generally accepted as a solution to reducing risky financial behaviors (Fox, Bartholomae, & Lee, 2005). Current research suggests that special programs should be designed for financially at-risk students who are likely to engage in risky credit behaviors (Lyons, 2007, 2008; Xiao, Shim, Barber, & Lyons, 2007). Researchers have examined existing information regarding the prevention and intervention of risky health behaviors (e.g., smoking and excessive alcohol and drug use) in an effort to link that knowledge to risky credit behaviors so as to better measure behavior change and evaluate the impact of financial education (Lyons, 2005).

We believe that extending research from the health prevention and intervention field to financial behaviors may indeed be a useful direction to explore. In that spirit, we offer a possible extension of health prevention and intervention work for financial educators and researchers to consider. Current health communications research suggests that perceived norms are related to college students' risky health behaviors, such as excessive alcohol use (Clapp & McDonnell, 2000; Perkins, Haines, & Rice, 2005; Perkins & Wechsler, 1996). There is evidence to suggest that financial knowledge and attitudes

concerning financial behaviors are transmitted through peers, school, family, and the media (Fox, Bartholomae, & Gutter, 2000; Lee & Hogarth, 1999; Shim, Xiao, Barber, & Lyons, 2008; Xiao et al., 2007), with family being the primary socializing agent.

Children learn financial knowledge through observation of, and participation in, financial behaviors and through their parents' instruction, which can directly and indirectly impact their financial knowledge and disposition (Mandell, 1997; McNeal, 1987; Moschis, 1987). Several studies have begun to explore the idea of financial socialization (Shim et al., 2008; Xiao et al., 2007). The implication of this type of social learning is that the more an individual perceives that others engage in a particular risky behavior, the more likely one is to engage in that behavior themselves.

In this exploratory study, we examine a possible link between perceived norms and risky credit behaviors. There has been some speculation that perceived social acceptability of debt may contribute to risky credit behaviors (Manning, 2005). Is there, in fact, a relationship between the perceived pervasiveness of risky credit behavior and one's own behavior? From the financial education literature, we might expect parents to have an influence on an individual's financial behavior (Hibbert, Beutler, & Martin, 2004). Does this bear out? Perhaps one's closest friends are a significant reference group. Manning hypothesized that a broader perception that "everyone's doing it" can lead to an increased likelihood that an individual will engage in particular behaviors – an idea referred to as *environmental press*. Peer pressure and the media are two examples of presses that often impact one's behavior. Wilken (2005) described the responses to presses in the environment as often resulting in individuals working toward and changing particular behaviors or situations. Thus, one such environmental press could be exposure to financial education. This may affect what one's perception of normative behavior is, and thus, may act as a countermeasure to spending and consumption presses facing students. Therefore, this study also

explores the effect that financial education has on the degree to which perceived norms influence one's behavior.

Methodology

Sample

The sample for this study consisted of 249 students in a personal finance class who completed a pre-class survey in fall of 2006 at a large Midwestern university. It is important to acknowledge upfront that a limitation of this study is that the results are subject to selection bias. While many of the students were required to take the course as part of a degree requirement, a sizable percentage took the course as an elective. Thus, some of the students in the sample were enrolled in the course because they had to, while others may have been enrolled out of personal interest or a desire to improve their own financial management skills. Also, this was a convenience sample of students which limits our ability to generalize the findings to the campus as a whole and to the general population of college students in the U.S. Still, this exploratory study provides some interesting results and insight into the financial socialization process of young adults. Note that data were collected from students at three different points throughout the course. Data collected from students prior to the class are presented in this paper.

With respect to the demographics, the sample was predominantly white (89%), with about two-thirds being female (67.9%). Less than 10% of the sample was over 22 years of age, with the remainder being between the ages of 18 and 22. About half were working and about 13% qualified for a Pell Grant. The Pell Grant can be a useful indicator of a family's level of financial resources; eligibility for the Pell Grant is based on the expected family contribution formula used to determine federal financial aid needs. The percentage in the sample qualifying for a Pell Grant was a little lower than the average for the university. Thus, the sample may have been comprised of students with greater family financial resources. Finally, only about 28% of the sample reported having had a financial education class in high school.

Key Variables and Analysis

This study is interested in perceived patterns of behavior for various reference groups and the relationship of these perceived patterns of behavior with college students' own self-reported financial behavior. Students were asked to report the frequency of their own credit-related behaviors and the frequency with which they believed others (i.e., parents, close friends, and typical students) engaged in the same behaviors. With regards to others, students were asked the following: "Think about your PARENTS/CLOSE FRIENDS/TYPICAL STUDENTS. CIRCLE the answer that indicates how often you think they do each of the following credit card behaviors: regularly carry a balance, max out their credit cards, and make late payments." All of these are behaviors that can negatively impact one's credit rating. "Regularly carries a balance" was defined as not paying off the monthly balance on their credit cards and carrying a balance across billing cycles. "Maxes out their credit cards" was defined as borrowing up to the maximum limits on their credit credits such that they are unable to make any additional charges. "Makes late payments" was defined as being late on any credit card payment.

Students were asked to indicate how frequently they thought each reference group engaged in the credit card behaviors using a five-point Likert scale with "1" indicating "Never" and "5" indicating "Always." Students could also select "N/A" if they thought the reference group did not have any credit cards or the behavior was irrelevant. For example, a student may have had the ability to reach their credit limit but their parents paid off their credit card bill in full each month, so in this sense, they were not responsible for making payments. Forthcoming results will show that only a smaller percentage of students reported "N/A" for their parents, and none of the students reported "N/A" for close friends or typical students.

Using the 5-point Likert scale, students were also asked to report the frequency with which they personally engaged in the same three credit behaviors. Note that 67.1% of the total sample (167 out of 249) reported having a credit card and 32.9% (82 out

of 249) reported not having a credit card. The results will show that the percentage of students without a credit card corresponded roughly to the percentage of students who reported "N/A" for the three credit-related behaviors. Also, note that some 18-year-old students in the sample who reported having a credit card may not have had credit for more than a year. Even so, the sample of students as a whole spanned an age range that included students with varying degrees of credit experience.

With regards to the analysis, descriptive statistics and correlations were used to explore the relationship between the perceived behaviors of the reference groups and the self-reported behaviors of the students. Descriptive statistics and correlations were found for the entire sample. Then, the sample was split into those who had taken a personal finance course prior to college and those who had not, to determine if prior financial education had any effect on the relationship between perceived and self-reported behaviors.

Results

Table 1 reports the frequency with which students reported engaging in the three credit-related behaviors, as well as the frequency with which they believed the reference groups (i.e., parents, close friends, and typical students) engaged in the same behaviors. With regards to the first credit behavior, Table 1 shows that 10.8% of the students reported that they either "frequently" (4.8%) carried a balance on their credit cards or "always" (6%) carried a balance. However, 38.9% of the sample reported that they "rarely" or "never" carried a balance (8.4% and 30.5%, respectively). With regard to perceived behavior, the results show that students thought the reference groups were more likely than themselves to carry a balance on their credit cards. Over 22% believed their parents "frequently" (13.7%) or "always" (8.4%) carried a balance. Almost 50.2% of the sample believed their close friends "sometimes" carried a balance, with over 11.6% believing that they "frequently" did so. The sample also believed that other

college students carried a balance more "frequently" than themselves. Recall that only 4.8% of the sample reported that they "frequently" carried a balance. However, almost 16.5% of them felt that typical college students "frequently" carried a balance. Overall, students' perception was that the reference groups were more likely than themselves to carry a credit card balance.

Table 1 also reports frequencies related to maxing out, or reaching the credit limit, on one's credit cards. About 59% of students in the sample reported "rarely" (10.8%) or "never" (48.2%) maxing out their credit cards. However, the reference groups were perceived to max out their credit cards more frequently. Almost 9.2% of the students believed that their parents "sometimes" reached their credit limit; while 3.6% felt their parents "frequently" or "always" reached their limit. This was slightly higher than the 4.8% of the sample that reported "sometimes" and the 2.4% that reported "frequently" or "always" maxing out their cards. The perceived frequencies for close friends showed that almost 49% of the sample felt their close friends "sometimes," "frequently," or "always" maxed out their credit cards. The perceived frequencies reported for typical students were even higher, with 57% of students feeling typical students "sometimes" maxed out their cards and 6.4% feeling they "frequently" did so. Thus, students in the sample felt that all of the reference groups, especially close friends and peers, typically maxed out their credit cards (i.e., reached their credit limits) more frequently than themselves.

With regard to payments, Table 1 shows that the majority of students in the sample (54.2%) reported that they were "never" late making credit card payments; only 10% indicated that they were "rarely" or "sometimes" late. Students felt that their parents were "somewhat" more likely to be late. Over 65.5% of the sample thought that their parents were "never" late and only 2% believed that their parents were "frequently" or "always" late. However, students felt that close friends and typical students were far more likely to be late on their payments. Over 42% of the sample felt their close friends were "sometimes" (36.5%), "frequently" (5.6%),

or "always" (0.4%) late. An even greater proportion of the sample felt that typical students were often late, with 60.2% of the sample perceiving typical students as being "sometimes" (56.6%) or "frequently" (3.6%) late on their credit card payments. In summary, students in the sample felt the reference groups were late on payments more frequently than themselves.

Table 1

Self-Reported Frequency of Own Credit Card Behavior and Perceived Behavior of Others

		Carries Balance on Credit Cards	Maxes Out Credit Cards	Makes Late Payments on Credit Cards
		%	%	%
Self-Reported Behavior	Never	30.5	48.2	54.2
	Rarely	8.4	10.8	8.4
	Sometimes	13.3	4.8	1.6
	Frequently	4.8	2.0	-
	Always	6.0	0.4	-
	N/A	36.9	33.7	35.7
	Total	**100.0**	**100.0**	**100.0**
Perceived Behavior of Reference Groups				
Parents	Never	25.7	59.8	65.5
	Rarely	16.5	22.1	18.1
	Sometimes	25.3	9.2	8.8
	Frequently	13.7	2.4	1.6
	Always	8.4	1.2	0.4
	N/A	10.4	5.2	5.6
	Total	**100.0**	**100.0**	**100.0**
Close Friends	Never	12.0	15.7	18.1
	Rarely	20.1	35.3	39.4
	Sometimes	50.2	37.8	36.5
	Frequently	11.6	9.2	5.6
	Always	6.0	2.0	.4
	N/A	-	-	-
	Total	**100.0**	**100.0**	**100.0**
Typical Students	Never	3.2	4.8	4.0
	Rarely	12.9	31.7	35.7
	Sometimes	65.9	57.0	56.6
	Frequently	16.5	6.4	3.6
	Always	1.6	-	-
	N/A	-	-	-
	Total	**100.0**	**100.0**	**100.0**

A positive relationship was expected between students' self-reported behaviors and their perceived norms of others' behaviors, such that students who reported a higher mean frequency of engaging in an imprudent behavior were more likely to report a higher perceived frequency of others' engaging in the same imprudent behavior. Correlations between own behavior and others' behavior were tested to examine this relationship. Table 2 presents the results for the entire sample. The correlation results were also computed separately for those who had taken and not taken a personal finance class prior to college. These results are also included in Table 2. T-tests were used to identify correlations that were significantly different from zero.

Table 2

Correlation Between Own Behavior and Perceived Norms for Reference Groups, by Pre-College Class Status

	Carries Balance			Makes Late Payments		
	Entire Sample	Pre-College Class	No Pre-College Class	Entire Sample	Pre-College Class	No Pre-College Class
Parents	0.476**	0.286	0.541**	0.117	-0.136	0.210*
Close Friends	0.393**	0.035	0.516**	0.148	0.240	0.091
Typical Students	0.155	-0.038	0.208*	-0.036	0.036	-0.070

* $p < 0.05$, ** $p < 0.01$

	Maxes Out		
	Entire Sample	Pre-College Class	No Pre-College Class
Parents	0.359**	0.424**	0.343**
Close Friends	0.244**	0.326*	0.192
Typical Students	0.026	-0.136	0.137

* $p < 0.05$, ** $p < 0.01$

In exploring the frequency of carrying a balance, several significant relationships were found (see the first block of Table 2). Greater perceived frequency of parents or close friends

carrying a balance was positively correlated with self-reported frequency of carrying a balance. This relationship was significant for the whole sample and for those who had not taken a pre-college personal finance class. Also, note that the correlations were higher for those without a pre-college personal finance class than for the entire sample. In addition, the correlations were much higher when compared to those who had taken a pre-college personal finance class. The correlation between the perceived frequency of typical students carrying a balance and self-reported frequency of carrying a balance was also positive and significant, but was smaller in magnitude than the relationship found for parents and close friends. The findings suggest that, in the absence of formal financial education, parents and peers may play a more important role in students' financial socialization, especially with regard to credit card repayment behavior.

In exploring the frequency of making late payments, only one correlation was found to be significant. Specifically, Table 2 shows a positive and significant correlation between perceived frequency of one's parents making late payments and one's own self-reported frequency of making late payments, but only for students who had no pre-college financial education. This finding also suggests that, in the absence of formal financial education, parents may be an important socialization factor when it comes to paying credit card bills on time. It could also be that students tend to universally perceive that making late payments is an unacceptable behavior. If that is the case, students may be unlikely to engage in the behavior themselves, even if they perceive others engaging in the behavior. Why is this? When an individual makes a late payment, there are often immediate negative consequences, such as a late fee or perhaps embarrassing calls from the creditor's collection department. Other behaviors such as carrying a credit card balance, or maxing out a credit card limit, have negative consequences, but the consequences may be less severe and not immediately felt. This could result in differing levels of avoidance that are unrelated to students' perceptions of others' behaviors or formal financial education. It could be that students have a strong

preference for wanting to avoid the short-term, negative consequences associated with making late payments and being delinquent.

Finally, in exploring the frequency of maxing out credit, several significant relationships were observed between perceived frequencies of parents and close friends maxing out their credit cards. Regardless of prior financial education, greater perceived frequency of parents maxing out their credit cards was positively correlated with self-reported frequency of students maxing out their credit cards. A positive correlation was also observed between perceived frequency of close friends maxing out and self-reported frequency of students maxing out for the entire sample and for those who had taken a pre-college personal finance class. The fact that parents' behaviors were a significant influence regardless of students' prior financial education is interesting to note, especially since parents and students are likely to have very different limits on their credit cards. This finding could be a reflection of shared family socio-economic status. In any case, the finding suggests that for some financial behaviors both parental influence and formal financial education may impact students' own behaviors.

Conclusions and Implications

The preliminary findings from this study are consistent with previous literature that has explored the relationship between various norms and youth behaviors (e.g., Shim et al., 2008). The results of this study suggest that a relationship between perceived norms and imprudent credit card behaviors is likely to exist. This supports the notion that financial socialization may play an important role in young adults' formation of financial behaviors and habits. The results also suggest that the financial socialization process may interact with formal financial education as well. Thus, both social and formal learning methods may be key determinants of financial behavior. Moreover, the role of parental modeling may be particularly important in forming financial

behaviors, and to a lesser, but also important extent, so may be beliefs about peer behavioral norms.

While this study is exploratory in nature and is subject to sampling and selection biases, the findings are still informative and have several important implications for financial educators and professionals, especially those working with youth and young adults. One implication for outreach is perhaps the recognition that there may be a greater need for social marketing to youth. In particular, social marketing strategies might be able to change the perception of what others are doing or thinking about with respect to financial management issues. This could be accomplished by sharing accurate statistics regarding the financial behavior of the reference groups. Social marketing also could be used to project the image that college students are trying to be more financially responsible by not engaging in these risky credit card behaviors. Additionally, financial education campaigns and programs that target youth could provide examples and models of appropriate behaviors through peer education efforts or even through reaching out to family units to promote greater dialogue. College students may lack awareness of the consequences of their actions, and as a result, this may be influencing the degree to which they engage in risky credit behaviors.

The results related to whether students had taken a personal finance course were somewhat mixed so it is difficult to draw any clear conclusions from the findings. The fact that the results were generated using a small, convenience sample limits our ability to explore this question in more detail. Despite this, several of the correlations were found to be significant. Yet, it may be that the relationship between students' own behavior and their perceptions of others' behavior is more associated with social learning rather than formal education. However, one key pattern was established. Students in the sample seemed to believe that others were more frequently engaging in risky credit card behaviors, especially parents and close friends. Educators can use these findings to incorporate information into existing programs and curricula about how the actions and behaviors of parents and

peers can in turn affect the financial behaviors of youth and young adults. New programs and materials that specifically address this financial socialization component may also need to be developed. One example might be to design a financial education program that includes information on how entire families can enhance financial communication and how parents can model more positive financial behaviors for their children. This could be beneficial in helping youth and young adults to understand prudent behaviors and dispel misunderstandings about the behaviors of others, especially those of their peers.

This study should be replicated and the sample expanded to include a larger, more robust, sample so as to further understand the role of perceived norms. Also, to further validate our results, additional research is needed which takes into consideration how financial education fits into a broader ecological model of habit formation. Financial education evaluation should also consider the effects of socialization in trying to understand why certain outcomes are met and others are not. Overall, more research is needed to address the following questions. Are certain financial behaviors more influenced by norms than others? Are certain reference groups more influential than others? How does financial education affect the relationship between norms and personal financial behaviors?

References

Clapp, J. D., & McDonnell, A. L. (2000). The relationship of perceptions of alcohol promotion and peer drinking norms to alcohol problems reported by college students. *Journal of College Student Development, 41*(1), 20-26.

Closing the gap between knowledge and behavior: Turning education into action. (2006). *Financial Counseling and Planning, 17*(1), 73-90.

Fox, J. J., Bartholomae, S., & Gutter, M. (2000). What do we know about financial socialization? *Consumer Interests Annual,*

46, [WWW Document]. Retrieved October 21, 2008, from https://www.consumerinterests.org/files/public/what.PDF

Fox, J., Bartholomae, S., & Lee, J. (2005). Building the case for financial education. *The Journal of Consumer Affairs, 39*(1), 195-211.

Hibbert, J. R., Beutler, I. F., & Martin, T. M. (2004). Financial prudence and next generation financial strain. *Financial Counseling and Planning, 15*(2), 51-59.

The JumpStart Coalition for Personal Financial Literacy. (2008, April 9). *Financial literacy still declining among high school seniors, JumpStart Coalition's 2008 survey shows.* [News Release]. Retrieved October 8, 2008, from www.jumpstart.org/docs/2008Jump$tartReleaseFinal.doc

The JumpStart Coalition for Personal Financial Literacy. (2006, April 5). *Financial literacy shows slight improvement among nation's high school students.* [News Release]. Retrieved October 8, 2008, from http://www.jumpstart.org/fileuptemp/2006GeneralReleaseFinal%202.doc

The JumpStart Coalition for Personal Financial Literacy. (1997, May 22). *High school seniors lack financial smarts, shows survey.* [News Release]. Retrieved October 8, 2008, from http://www.jumpstart.org/upload/news.cfm?recordid=37

Lee, J., & Hogarth, J. M. (1999). The price of money: Consumers understanding of APRs and contract interest rates. *Journal of Public Policy and Marketing, 18*(Spring), 66-76.

Lyons, A. C. (2005). Financial education and program evaluation: Challenges and potentials for financial professionals. *Journal of Personal Finance, 4*(4), 56-68.

Lyons, A. C. (2007). *Credit practices and financial education needs of Midwest college students* (Working Paper 2007-WP-23). Indianapolis, IN: Networks Financial Institute, Indiana State University.

Lyons, A. C. (2008). Risky credit card behavior of college students. In J. J. Xiao (Ed.), *Advances in consumer financial behavior research* (pp.185-207). New York, NY: Springer Publishing Company.

Mandell, L. (1997). *Our vulnerable youth: The financial literacy of American 12th graders.* Washington, DC: The Jumpstart Coalition for Personal Financial Literacy.

Manning, R. D. (2005). *Living with debt: A lifestage analysis of changing attitudes and behaviors.* Charlotte, NC: Lending Tree, LLC.

McNeal, J. V. (1987). *Children as consumers: Insights and implications.* Lexington, MA: Lexington Books.

Moschis, G. P. (1987). *Consumer socialization: A life cycle perspective.* Lexington, MA: Lexington Books.

Nellie Mae. (2005). *Undergraduate students and credit card debt: An analysis of usage rates and trends.* Braintree, MA: Nellie Mae. Retrieved October 8, 2008, from http://www.nelliemae.com/library/ccstudy_2005.pdf

Perkins, H. W., Haines, M. P., & Rice, R. (2005). Misperceiving the college drinking norm and related problems: A nationwide study of exposure to prevention information, perceived norms and student alcohol misuse. *Journal of Studies on Alcohol, 66*(4), 470-478.

Perkins, H. W., & Wechsler, H. (1996). Variation in perceived college drinking norms and its impact on alcohol abuse: A nationwide study. *Journal of Drug Issues, 26*(4), 961-974.

United States Government Accountability Office. (2001). *Consumer finance: College students and credit cards* (GAO-01-773). Washington, DC: Author. Retrieved October 8, 2008, from http://www.gao.gov/new.items/d01773.pdf

Wilken, C. (2005). *Family, youth, and community: A student's guide to data, theory, and practice.* Dubuque, IA: Kendall/Hunt Publishing Company.

Shim, S., Xiao, J. J., Barber, B., & Lyons, A. C. (2008). *Pathways to life success: A model of financial well-being for young adults.* Tucson, AZ: Take Charge America Institute for Consumer Financial Education and Research, The University of Arizona.

Xiao, J. J., Shim, S., Barber, B., & Lyons, A. (2007). *Academic success and well-being of college students: Financial behaviors matter.* Tucson, AZ: Take Charge America Institute for Consumer Financial Education and Research, The University of Arizona.

Michael S. Gutter is an Assistant Professor, Department of Family, Youth, and Community Sciences, University of Florida, 3002-C McCarty Hall D PO Box 110310, Gainesville, FL 32611; (352)273-3529; E-mail: msgutter@ufl.edu

Selena Garrison is an MS Student, Department of Family, Youth, and Community Sciences, University of Florida, 3002-C McCarty Hall D PO Box 110310, Gainesville, FL 32611; (352)273-3529; E-mail: selenah@ufl.edu