

December 2017

College Students' Attitudes toward Debt

Elliott M. Beale

University of Georgia, elliott.beale@yahoo.com

Brenda J. Cude

University of Georgia, bcude@uga.edu

Recommended Citation

Beale, Elliott M. and Cude, Brenda J. (2017) "College Students' Attitudes toward Debt," *International Journal of Undergraduate Research and Creative Activities*: Vol. 9, Article 5.

DOI: <https://doi.org/10.7710/2168-0620.1099>

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Peer Review

This work has undergone a double-blind review by a minimum of two faculty members from institutions of higher learning from around the world. The faculty reviewers have expertise in disciplines closely related to those represented by this work. If possible, the work was also reviewed by undergraduates in collaboration with the faculty reviewers.

Abstract

College student debt has gained much attention. This article uses survey data to examine the influence of psychological factors on college student attitudes toward debt. In the sample of 283 undergraduates enrolled in a personal finance elective course, financial self-confidence was significantly related to debt attitude, indicating that less financially self-confident students tended to have more positive attitudes toward debt. Two other psychological factors, ability to delay gratification and comparing oneself to others, were not significantly related to debt attitudes. Among the control variables, only gender was significantly related; women had more negative attitudes toward debt than men. College major, involvement with parents about personal finance, and financial knowledge were not significantly related to student attitudes toward debt. Future researchers should consider reexamining the use of the scales used in this research. Although the scales had been used by previous researchers, they may have less relevance to young adults whose debt attitudes were no doubt influenced by the Great Recession of 2007-2009.

Keywords

college, students, debt, attitudes, personal finance, financial knowledge

Acknowledgements

This research was funded in part by the University of Georgia Agricultural Experiment Station.

INTRODUCTION

College students are in a distinctive period of their lives. Although not yet full adults, they face very adult decisions about acquiring and managing debt. According to Sallie Mae (2016), in 2015 56% of US college students had at least one credit card. Credit card usage is more prevalent among older college students (21 to 24 year-olds); more than 68% of college students say they have some type of outstanding debt, with an average monthly credit card balance of \$906 (Salle Mae, 2016).

College students are a group unlike any other and the decisions they make during this time in their lives can affect the rest of their lives. Davies and Lea (1995) explained why college students' debt attitudes are interesting to study, stating, in part, that: 1) Compared to each other, college students receive relatively the same income and have similar expenditures so non-economic factors may be easier to observe. 2) College students may be willing to have debt because they believe their incomes will be larger in the future. 3) What they choose to do after they graduate from college may be impacted by how much debt they have.

Katona (1995) asks whether increasing debt loads should be explained only by adverse economic circumstances, or to some extent is it due to psychological factors? This study focuses on these mental aspects to determine the effects that social comparison, ability to delay gratification, and financial self-confidence have on college students' attitudes toward debt, while also taking into consideration parental financial education, the students' financial knowledge and their gender and major.

Specifically, the research questions that were the focus of this research were: Do college students' propensity to compare

themselves to others, their ability and/or willingness to delay gratification, and their financial self-confidence influence their attitudes toward debt? How do financial education from parents and the students' own financial knowledge influence their attitudes toward debt, taking into account their gender and major?

LITERATURE REVIEW

Attitudes toward Debt

Davies and Lea (1995) hypothesized that college students take on debt because they believe that their current financial situation is temporary and that short-term debt will be repaid easily once they graduate and join the labor force. Davies and Lea also suggested that as students acquire more debt, their attitude about debt becomes more positive, meaning they were more tolerant of debt. In addition, they reported more positive attitudes toward debt among upperclassmen.

Davies and Lea's scale was designed to measure attitudes toward debt. This 14-item scale was measured on a Likert scale, 1 being "strongly agree" and 5 being "strongly disagree." Sample items were "You should always save up before buying something" and "There is no excuse for borrowing money." Higher scores indicate more positive attitudes toward debt. Davies and Lea reported an acceptable Cronbach's alpha of 0.79 (1995) but in Norvilitis, Szablicki, and Wilson's (2003) study of college students, the alpha was substantially lower at 0.30, suggesting that this scale did not measure a unified construct in their sample.

Social Comparison

Norvilitis and Mao (2012) defined social comparison as “the tendency to compare one’s own status to that of others in determining whether or not one has enough” (p. 391). If a student tends to compare himself to others and sees he has less than them, he may be inclined to use debt to purchase items in order to have “enough.” If a student compares himself to others and sees he has more than them, he also may be inclined to use debt to purchase more in order to stay on top. We found no previous research about the relationship between social comparison and attitudes toward debt. Related research is only indirectly relevant and often specific to a type of debt. For example, Pinto, Parente, and Palmer (2000) reported that students who were materialistic had positive attitudes toward credit card debt. Harrison and Agnew found no support for social class as a predictor of debt attitudes.

It is difficult to measure social comparison because many people may not know they are comparing themselves to others or may not want to admit to it (Gibbons & Buunk, 1999). The Iowa-Netherlands Comparison Orientation Measure (INCOM) was used to measure social comparison in this sample of students. The 11-item scale was created by Gibbons and Buunk in 1999. Sample items included “I never consider my situation in life relative to that of other people” and “I often like to talk with others about mutual opinions and experiences.” Answers were on a 5-point Likert scale where 1 meant “strongly agree” and 5 meant “strongly disagree.” Higher scores indicate lower levels of social comparison. The Cronbach’s Alpha for the Social Comparison scale in Gibbons and Buunk’s study (1999) of college students was 0.83.

Delay of Gratification

Delay of gratification is another factor from previous research that is hypothesized to be related to debt attitudes. Ray and Najman (2001) wrote that demanding instant gratification is a sign that an individual is immature and is often seen as the reason working class people do not move up the social ladder. The inability to delay gratification may lead to spending that cannot be financed with current income and thus a more positive attitude toward debt as a management strategy.

The 12-item scale that Ray and Najman designed to measure delay of gratification was used in this study. Sample items included “Are you good at saving money rather than spending it right away?” and “Would you describe yourself as being too impulsive for your own good?” The answer choices were “yes,” “no,” and “unsure” and scored with 3 for yes and 1 for no. Higher scores indicate less ability to delay gratification. The Cronbach’s Alpha in Ray and Najman’s study (2001) of college students was 0.72.

Financial Self-Confidence

In their 2012 study of college students, Norvilitis and Mao reported that college students who had more credit cards also had more financial self-confidence. This suggests that college students who are more financially self-confident may have a more positive attitude toward debt.

The 10-item scale used to measure financial self-confidence was adapted from Norvilitis and Mao (2012). Sample items included “I am confident that I know how to handle my money” and “If I needed to take out a loan, I would know how to start the process.” The answers were measured on a 5-point Likert scale, with 1 meaning “strongly agree” and 5 meaning “strongly disagree.” Higher scores mean lower financial self-confidence. The Cronbach’s

Alpha in Norvilitis and Mao's study (2012) was 0.81.

Parental Involvement in Financial Education

In the United States college students report learning more about credit cards from their parents than from any other source (Pinto, Parente, & Mansfield, 2005), although about one-third of college students state that they rarely have discussions with their parents about credit cards (Sallie Mae, 2009). Norvilitis and MacLean (2010) found that "parental hands-on mentoring of financial skills was most strongly related to lower levels of credit card debt" (p. 55). They also found that parents who avoided talking about finances with their children predicted problematic credit card use (Norvilitis & MacLean, 2010).

Thus, previous research suggests several possible relationships between parental involvement and their child's attitude toward debt. The perspective chosen for this research is that when parents are less involved, the child views debt more positively, as he or she sees a need to use it to manage financially.

The 8-item scale used in this study was taken from the measure created by Norvilitis and MacLean (2010) in their study of college students. Items were scored on a 5-point Likert scale, with 1 meaning "strongly agree" and 5 meaning "strongly disagree." Sample items included "My parents considered it important to teach me about money" and "My parents helped me budget my allowance." Higher scores indicate less interaction with parents about personal finance. The Cronbach's Alpha in Norvilitis and MacLean's study was 0.86.

Financial Knowledge

In previous research, a lack of financial knowledge, or the knowledge of basic financial concepts, has been related to increased levels of debt (Norvilitis et al., 2006). Norvilitis et al. (2006) described financial knowledge as "one of the strongest predictors of debt and also one of the most amenable to change" (p. 1407).

The study's co-author created a 40-item multiple choice financial knowledge test to assess basic understanding of financial concepts. Students were given one point for each correct answer. Sample questions included "Which of these is considered a fixed expense in making a budget?" and "Which of these is most likely to increase one's credit score?" Some items were drawn from previous research while others were written by the author. A higher score indicated greater financial knowledge.

Gender

Davies and Lea's (1995) study showed that men were more likely than women to have debt. They suggested this could be related to differences in budgeting styles. Previous research has also demonstrated that women are more debt averse than men (Croson & Gneezy, 2009; Kamleitner, Hoelzl, & Kirchler, 2012).

Major

There is little previous research about the influence of college major on college students' attitudes toward debt. Joo, Grable, and Bagwell (2003) reported that academic major was not significant in predicting college students' attitudes toward credit cards. Given the lack of previous research, we hypothesize that because students who study business learn about debt and its negative effects on financial well-being, non-business majors will tend to report more positive attitudes toward debt.

HYPOTHESES

- H1:** Higher levels of social comparison are related to more positive attitudes toward debt.
- H2:** Less ability to delay gratification is related to a more positive attitude toward debt.
- H3:** Higher financial self-confidence is related to a more positive attitude toward debt.
- H4:** Less financial education from parents is related to a more positive attitude toward debt among college students.
- H5:** Less financial knowledge is related to a more positive attitude toward debt.
- H6:** Being male rather than female is related to a more positive attitude toward debt.
- H7:** Non-business majors are more likely to have a positive attitude toward debt than business majors.

METHODOLOGY

The scales mentioned above were administered to college students enrolled in a one-credit hour elective personal finance course at a Research 1 institution. Responses were collected from students during class over five semesters starting in Fall 2013. The financial knowledge test was administered on the first day of class. Overall, 283 students' responses were considered viable because they were present on each of the class days that a scale was administered and responded to all of the questions with valid responses.

The Debt Attitudes, Social Comparison, Financial Self-Confidence, and

Parental Involvement in Financial Education scales were coded 1 to 5, with 1 meaning "strongly agree" and 5 meaning "strongly disagree." The Delay of Gratification scale was coded 3 for "yes," 1 for "no," and 0 for "unsure." Some questions on these scales were reverse coded. Females were coded 0 and males were coded 1. Business majors were coded 1 and non-business majors were coded 0.

A Cronbach's Alpha was calculated for each of the five scales to determine if the scales were measuring the same thing. A more in-depth investigation was done to determine the split-half reliability Spearman-Brown Coefficients for each scale below the recommended 0.8. Means and standard deviations for the five scales were calculated. A multiple regression analysis was also run to test the relationships of the independent variables to the dependent variable, Debt Attitudes.

The university's Institutional Review Board approved the project.

RESULTS

More than one-third (36.4%) of the students surveyed were male and just under one-fifth (19.1%) were business majors. See Table 1.

A Cronbach's Alpha was calculated for each of the five scales used in this research to determine whether each scale's items were measuring the same thing (see Table 2). A Cronbach's Alpha of 0.6 is

	Number	Percentage
Gender		
Male	103	36.4%
Female	180	63.6%
Major		
Business	54	19.1%
Non-Business	229	80.9%

Table 1. Demographics of the Sample

considered acceptable in exploratory research (Garson, 2009). Each of the scales met this standard, although the Cronbach's Alphas for the Debt Attitudes and Delay of Gratification scales were less than 0.7.

In fact, there were negative correlations between a number of items in each of these two scales, indicating the scales likely are to some extent measuring different dimensions that are negatively related to each other. In the Debt Attitudes scale, items 3 (Students have to go into debt), 7 (Students should be discouraged from using credit cards), 9 (It is OK to have an overdraft if you know you can pay it off), and 11 (You should stay at home rather than borrow money to go out for an evening in the bar) were problematic, as was item 8 (Do you fairly often find that it is worthwhile to wait and think things over before deciding?) in the Delay of Gratification scale. However, the item-total statistics indicated that removing items from these scales would not improve the Cronbach's Alpha. A more in-depth investigation of the scales indicated that all are somewhat marginal with split-half reliability Spearman-Brown Coefficients for each scale below the recommended 0.8 (Garson, 1999) (see Table 2).

Means and standard deviations for the five scales are reported in Table 3. The students' mean scores were below the midpoint on each of the five scales, indicating the sample can be described as holding slightly negative attitudes about debt, being somewhat willing to delay

Scale	Cronbach's Alpha	Split-Half Reliability Spearman-Brown Coefficient
Debt Attitudes	.653	.482
Social	.743	.606

Comparison (INCOM)		
Delay of Gratification	.672	.619
Financial Self-Confidence	.751	.779
Parental Involvement in Financial Education (PFES)	.755	.628

Table 2. Reliability Statistics for Scales

gratification, and somewhat lacking in financial self-confidence. The mean was six points below the midpoint on the Social Comparison scale, indicating the students were not inclined to compare themselves to others on a regular basis. The mean financial knowledge score was 17 out of 30, or 56.7%, a failing score.

A multiple regression analysis was conducted to test the relationships of the seven independent variables to the dependent variable, Debt Attitudes (see Table 4). The model was significant ($F = 2, p = 0.055$). The Variance Inflation Factors were below 5, indicating no multicollinearity issues.

Gender and Financial Self-Confidence were the significant dependent variables. Gender was the stronger predictor of the two with an unstandardized coefficient equal to -1.573 ($p = .015$). This indicates that female college students are more likely to have a negative attitude toward debt than males (males were coded as 1). The negative beta coefficient

Scale (Range in Actual Scores)	Mean	Standard Deviation
Debt Attitudes (33-64)	45.11	4.849
Social Comparison (INCOM) (11-54)	25.92	6.282

Delay of Gratification (6-30)	15.13	4.334
Financial Self-Confidence (10-40)	23.56	5.640
Parental Involvement in Financial Education (PFES) (8-38)	20.23	6.173
Financial Knowledge (0-30)	17.05	5.389

Table 3. Descriptive Statistics for Scales

for Financial Self-Confidence, -0.099 (p=.079), indicates that students who had less financial self-confidence tended to have a more positive attitude toward debt.

Model	B	Sig.
(Constant)	50.236	0.000
Financial Self-Confidence (FSC)	-0.099	0.079
Social Comparison (INCOM)	0.025	0.595
Delay of Gratification (DOG)	-0.031	0.647
PFES	-0.052	0.277
Financial Knowledge (FK)	-0.072	0.219
Gender	-1.573	0.015
Major	-0.590	0.455

R² = 0.049

F = 2 (p = 0.055)

Table 4. Regression Analysis Results – Debt Attitudes as Dependent Variable

LIMITATIONS

There were some limitations to this study. First, only college students from one university were sampled so the results may not be the same for all college students. Second, since all of the participants were college students, the results may not be generalizable to college-aged individuals who are not attending school. Third, the students sampled were participating in an

elective personal finance course, which suggests they had some interest in finance-related topics and this could skew the results. Fourth, college students are old enough to remember the effects of the Great Recession in 2007-2009 on the economy. Scale items written many years earlier may not accurately assess the concepts for college students who so recently experienced the impact of a recession on personal finances. Fifth, this research focused on attitudes, not behaviors. Previous studies (e.g., Lea, Webley, & Levine, 1993; Livingstone & Lunt, 1992; Tokunaga, 1993) have revealed some correlation between attitudinal variables and debt behavior among college students. While this is not necessarily a limitation, it would be a good topic for future research.

Sixth, this research was specific to attitudes about “debt” – which may or may not correlate with attitudes about specific types of debt, such as credit cards or student loans. Finally, the students’ current or future incomes and their current debt loads are not known, and likely are an important influence on debt attitudes.

DISCUSSION AND IMPLICATIONS

Though, Peltier, Pomirleanu, Endres, & Markos (2013) found that debt aversion was associated with higher levels of debt rather than lower levels, suggesting there is no clear cause and effect relationship, we wanted to test the relationships between the independent variables of gender, major, financial self-confidence, social comparison, delay of gratification, parental involvement in financial education, and financial knowledge and the dependent variable of debt attitudes.

A multiple regression analysis was used to test seven hypotheses. The students’ attitudes toward debt measure also were

regressed on the psychological factors social comparison, ability to delay gratification, and financial self-confidence. Parental involvement in their college students' financial education and the students' financial knowledge, gender, and college major also were included in the analysis. Among the psychological factors, only financial self-confidence was significant. The only other predictor that was significant was gender.

The relationship of financial self-confidence with students' debt attitudes was negative. Students who had less financial self-confidence tended to have a more positive attitude toward debt. This could be because they assume they will need to use debt to make up for mistakes they worry they will make. However, this result contradicts Norvilitis and Mao's (2012) conclusions college students who had more credit cards also had more financial self-confidence. This could be because of differences in the student populations or differences in student attitudes about debt in general vs. attitudes about credit cards.

Gender was the strongest predictor of college students' attitudes toward debt in this study. Female college students were more likely to have a negative attitude toward debt than males. This is consistent with other literature, such as Weber, Blais, and Betz's (2002) research which indicated that males discern less risk than females and are more likely to participate in risky financial behaviors.

Although none of the other psychological variables were significant, the direction of the relationships was as expected. Social Comparison was positively related to Debt Attitudes, indicating that students who were more likely to compare themselves to others also were more likely to have a more positive attitude toward debt. There was no previous research about this specific relationship but the findings align

with Pinto, Parente, and Palmer (2000), who discovered students who were materialistic had positive attitudes toward credit card debt. The negative coefficient for Delay of Gratification indicates that individuals who were less willing to delay gratification tended to have more positive attitudes toward debt. This agrees with the inferences we drew from Ray and Najman (2001) that demanding instant gratification may lead to spending that cannot be financed with current income and thus a more positive attitude toward debt. Perhaps students are more likely to view debt as a useful way to satisfy their wants if they feel more pressure from social comparison to purchase things or are unable or unwilling to delay gratification.

Parental involvement in students' financial education was negatively related to debt attitudes. This indicates that less financial teaching by parents and less positive interaction between parents and their children about money were related to a more positive attitude toward debt among the college students in the sample. This is in agreement with Norvilitis and MacLean (2010), who reported that when parents mentored their children's financial skills, the children had lower levels of credit card debt. Perhaps the respondents viewed debt as compensatory for the lack of support and teaching from their parents.

The negative relationship between college major and debt attitudes indicated that business majors had a more positive attitude about debt than non-business majors (business major was coded as 1). There was no previous research with which to compare these results. The negative relationship between financial knowledge and debt attitudes meant those with greater financial knowledge had more positive attitudes toward debt. This is not consistent with Norvilitis et al. (2006) who found that a lack of financial knowledge has been related to

increased levels of debt. Students with more financial knowledge, as well as business majors, may be more inclined to see debt as a financial tool that can be used to achieve goals instead of a financial roadblock to getting ahead.

The results of this study can be used to help college professors and administrators learn how to more effectively approach teaching college students about debt. With knowledge of the variables that can predict attitudes toward debt, they will be better prepared to address topics related to debt. Banks and credit card companies also can use the results of this study to incorporate knowledge about debt attitudes as they refine their marketing strategies. In addition, parents can use this information to better understand their child's attitudes about debt.

One perspective on the results of this research is to focus on debt education to males and those who are least confident in their financial abilities, as these characteristics were significantly related to a more positive attitude toward debt, regardless of the students' financial knowledge. The concern is that these students may be overconfident and underestimate the risk of taking on debt. Educators could present examples that use male characters, explaining that males are more likely to take risks. Or, perhaps a more effective approach would follow the Click It or Ticket model, a social marketing campaign redefining the benefit of using seat belts as avoiding a ticket from the police. Quantifying the consequences of more debt than one can manage as the cost of lost credit and employment opportunities and higher loan costs, for example, may be more effective than emphasizing the risks.

It also is important that female students and those who are financially self-confident not be forgotten, however. In fact, it is equally concerning if college students

overestimate the risk of debt and miss opportunities to appropriately use debt to advance.

Future repetition of this study could recruit a sample that is larger and more representative of the general college-aged population and could lead to more significant results. Because of the low Cronbach's Alphas for the Debt Attitudes and the Delay of Gratification scales and the low split-half reliability Spearman-Brown Coefficients for all scales, researchers should reevaluate continuing to use these scales without modification in the future. Four of the items in the Debt Attitudes were particularly problematic. Rather than attempting to revise four of the 14 items, a new scale might be more appropriate. However, only one item in the Delay of Gratification scale was suspect and perhaps that scale could be revised for future use.

In addition, all of the scales were created before the Great Recession. Recent reports have described its impact on young adults as making them less risk averse than previous generations (Zutz, 2017). Future research among college students should take this into account.

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