STUDENT RACIAL DIFFERENCES IN CREDIT CARD DEBT AND FINANCIAL BEHAVIORS AND STRESS

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This study expands upon the work of Henry, Weber, and Yarbrough (2001) in examining the money management behaviors and financial outcomes of college students. The analysis was conducted using data from a sample that included an equal mix of African-American and non-Hispanic White students. It was found that African-American students held more credit card debt than others. When the relationships among race, credit card debt, financial behaviors, and financial stress were examined it was determined that credit card debt was positively related to both negative financial behaviors and financial stress. African-American students reported higher levels of financial stress than other students. The relationship between credit card debt, racial background, financial behaviors, and financial stress suggests that African-American students are affected more dramatically by debt than others.

Henry, Weber, and Yarbrough (2001) and Joo, Grable, and Bagwell (2003), among others, have noted a potential financial crisis on college campuses. Students are deluged daily with credit card offers and other enticements to go into debt. It has been estimated that 70% of all college students have and use credit cards (Joo et al.). The combination of consumer debt, educational loans, and poor financial management skills is leading some students to financial collapse. University administrators, faculty, and policy makers are generally aware that students who face financial stress tend to be more likely than others to drop out of school or significantly reduce the number of credit hours taken in order to work more hours. Generally, substituting work for study results in lower grade point averages and restricted access to on-campus extracurricular activities. This news is neither new nor pressing enough to draw university resources to rectify the situation.

What is less well known is how credit card debt, financial behaviors, and financial stress differ based on racial background. The majority of studies to date that have examined credit card debt and student stress and academic achievement have used samples of predominately non-Hispanic White students. Studies that

have examined the link between credit card debt and stress, for instance, using non-Hispanic White samples have shown that financial stress increases as debt rises. This study attempts to determine if the same relationship holds true for groups of students who are not non-Hispanic White.

The answer to this question has potentially serious ramifications for university administrators. The recent push on many university campuses to provide access, support, and overall encouragement to African-American students offers an insight into how answering this question can impact the design of minority student outreach efforts. Outreach efforts are typically focused on providing under-represented students with academic undergraduate assistance, social assimilation, and career placement (Pope, 2004). Very few campus programs are designed to include personal financial management skills as part of outreach efforts. If racial differences in credit card debt, financial behaviors, and financial stress do, in fact, exist, and support for personal finance training is lacking, then comprehensive programs to enhance educational opportunities for under-represented students may be less than effective.

The purpose of this paper is to provide evidence of potential student racial differences in credit card debt, financial behaviors, and financial stress on one college campus. The paper provides a starting point for thinking about what is happening on college campuses today in relation to training students about the importance of personal finance attitudes and behaviors.

Background Review

While the debate regarding whether or not racial differences exist in terms of personal financial knowledge, attitudes, and behaviors on college campuses, few can argue that such differences don't exist within the broader society. According to Keister and Moller (2000), for instance, the ownership of wealth in the United States continues to be concentrated in the hands of a small percentage of the population. Factors affecting wealth ownership are numerous. The type of assets held and the level of income earned by a household are primary determinants of wealth (Plath & Stevenson, 2000). Factors such as age, education, and family structure also play a role in wealth accumulation (Dinkins, 1994). Racial inequality has also been shown to be associated with discrepancies in wealth (Keister & Moller). The median income for African-Americans is at least 10% less than that for Non-Hispanic Whites, while net worth is less than 50% of Non-Hispanic Whites (Oliver & Shapiro, 1995).

A multitude of reasons have been presented to explain racial differences in income and wealth. Oliver and Shapiro (1995) summarized explanatory theories into four categories: (a) discrimination, (b) educational differences, (c) racial variation and behavioral differences, and (d) social influences. Those who support *discrimination* theory suggest that structural barriers have been placed to limit African-American access to income and wealth. Over time these barriers have created systematic lags in net asset accumulation (Schmitz, Williams, & Gabriel, 1994). *Education differences* have been shown to

exist, where those with a higher level of education tend to exhibit behaviors leading to wealth accumulation. In the past, Non-Hispanic Whites' access to formal education was less limited than for African-Americans. Supporters of *racial variation theory* believe that Non-Hispanic Whites, on average, are more willing to defer current consumption for future wealth compared to African-Americans. Finally, those who endorse *social influence theory* believe that changes in society impact wealth accumulation. Family structure changes are an example of this theory. Since the 1970s, for example, an African-American child has been more likely to grow up in a fatherless household than a similar Non-Hispanic White child. Social influence theory would suggest that because single-headed households are more likely to live in poverty, it is difficult for children in these situations to learn the skills necessary to accumulate wealth in their later life.

Regardless of the reason for racial differences, perceived past injustices, discrimination, and structural barriers to education have been shown to create discontent among African-Americans (Austin, 1992). Discontent may be attributable to inequities in the workplace as well as a tendency for African-Americans to have lower equity real estate values than others (Plath & Stevenson, 2000). Compared to Non-Hispanic Whites, African-Americans are more likely to rent than to own their personal residence. Dinkins (1994) concluded that African-Americans are less likely than non-Hispanic Whites to use housing dollars to generate home equity, a major source of wealth in the United States. Without this type of wealth it is difficult for some to fund a child's education and obtain supplemental income in retirement.

Spilerman (2000) hypothesized that the low level of wealth accumulation among African-Americans may be the result of a lower incidence of lifetime wealth transfer. African-American households have less wealth to transfer to other generations. Yet, even taking this into consideration, Spilerman still found that Non-Hispanic White families were disproportionately more likely to transfer wealth than African-Americans. According to Spilerman, "A low rate of asset transmission by African-American families might retard the process of narrowing the racial gap in wealth and living standards" (p. 515).

Could it be that this low incidence of home ownership, preference for liquid assets, and lack of inter-generational transfer of wealth has another related impact on financial knowledge, attitudes, and behaviors? For instance, if asset transfers between generations of African-Americans are limited, the knowledge associated with managing gifts, asset transfers, and inheritances may also be constrained. It may also be possible that lack of knowledge, financial stress, and inappropriate financial behaviors is passed from one generation to another. If significant differences exist between African-American and Non-Hispanic White students this evidence may lead to further insights into understanding how and why attitudinal and behavioral factors influence financial well being.

Methodology

This study reports findings from a research project conducted on a major Midwestern university campus. Data were obtained from college students through a series of financial workshop and counseling sessions. On- and off-campus groups, such as fraternities, sororities, dormitory living groups, social services organizations, and academic units, sponsored workshops. Workshops were developed on a number of financial topics of relevance to college students – credit and debt, affording housing, saving for marriage, etc. A key component of the project was conducting pre- and post-tests of participant financial knowledge, attitudes, and behaviors. Every workshop was slightly different, and the types of questions asked of attendees differed based on the topic. However, a number of questions were standard in all questionnaires distributed to workshop participants.

Three research questions were examined:

1) Do racial differences in credit card debt exist?
2) Do racial differences in financial behaviors exist?
3) Do racial differences in financial stress exist?

A t-test was used to answer the first question. Two ordinary least squares regressions were used to address the two remaining questions. A description of the sample and variables used in the study is presented below.

Sample

Data from the 110 workshop participants selected for use in the analysis indicated that 53% of the sample was African-American. The remainder were almost entirely Non-Hispanic White. Table 1 summarizes other sample characteristics. For example, approximately 79% of respondents were female. The average age of those who provided useable responses was 21 years. The majority were in their junior year of college, and most were

Table 1
Sample Characteristics

Characteristic	African-American	Non-Hispanic White	Total Sample
Gender (1 = Female) (X/SD)	.739/.444	.827/.382	.786/.412
Age (X/SD)	20.087/2.189	22.596/6.521	21.418/5.115
Class Standing (Median)	Sophomore	Senior	Junior
Work Status (Median)	Not Employed	Employed Part-Time	Employed Part-Time
Marital Status (1 = Single) (X/SD)	1.000/.000	.770/.430	.880/.330
Automobile Loan Debt (Average Response)	Less than $1,000	Less than $1,000	Less then $1,000
Installment Debt (Average Response)	None	None	None
Monthly Housing Costs (Average Response)	$300 to $599	$300 to $599	$300 to $599

Table 2
Financial Behavior Items

Item	Average and Standard Deviation Score for African-American Respondents	Average and Standard Deviation Score for Non-Hispanic White Respondents	Possible Responses for Item	t-score
I make myself aware of the total amount of money I owe.	2.0000/.8530	2.3750/.6720	0 (never) to 3 (always)	2.46*
When I borrow money I shop around for the lowest interest rate.	1.1481/1.1560	1.8958/.9050	0 (never) to 3 (always)	3.61**
I have difficulty paying bills because of not enough money.	1.1786/.9740	.5745/.6830	0 (never) to 3 (always)	-3.57**
I pay credit cards in full each month and avoid finance charges.	.5238/.8040	1.9149/1.1000	0 (never) to 3 (always)	6.74**
I reach the maximum limit on my credit cards.	.5909/.9960	.2553/.6070	0 (never) to 3 (always)	-1.96*
I have a weekly/monthly spending plan that I follow.	.9286/.8500	1.2766/.8520	0 (never) to 3 (always)	2.07*
I spend more than I earn.	.9643/.8300	.8750/.8410	0 (never) to 3 (always)	-.54
I have specific written short-, intermediate-, and long-term financial goals.	.7143/.9670	1.0000/.8750	0 (never) to 3 (always)	1.58
I keep track of how much I spend on household expenses each month.	1.2500/1.1000	1.6042/.9170	0 (never) to 3 (always)	1.77

* $p < .05$ ** $p < .01$

employed at least on a part-time basis. Eighty-eight percent of respondents were single. In terms of financial factors, students, on average, held less than $1,000 in automobile loan debt and no installment debt. The average housing cost reported by respondents was between $300 and $599 monthly. Table 1 also shows the same data split for African-American and Non-Hispanic White students. In general, African-American students in this study tended to be slightly younger and not employed compared to Non-Hispanic White students.

Dependent Variables

A student's racial background was used as a dependent variable when answering

the first research question posited in this paper – do racial differences in credit card debt exist? The variable was dummy coded. African-American students were coded 1, with all others coded 0. Credit card debt owed by a workshop participant was measured by asking students to indicate their level of debt using one of ten categories ranging from no debt to $4,000 or more debt.

Two dependent variables were then used in separate regression models to answer the research questions related to racial differences in financial behaviors and stress. A financial behavior variable was developed for use in this study. Table 2 lists the questions, with average and standard deviation scores, asked to create the summated scored variable that was used in the regression (Table 3). Possible summated scores ranged from a low of zero to a high of 30. The average score for the sample was 11.00, with a standard deviation of 3.71. Table 2 also shows the t-test statistics between the two racial groups. In most cases, African-American students exhibited less desirable financial behaviors.

The second dependent variable was the level of financial stress currently felt by a respondent. Participants were asked to determine their current level of financial stress on a ten step scale with 1 indicating no stress at all and 10 meaning extremely stressful. The average stress level for the entire sample was 6.05, with a standard deviation of 2.25.

Independent Variables

Seven independent variables were used in the regression analyses. African-American respondents were coded 1; all other respondents were coded as 0. Women were coded 1, otherwise 0. Age was used as a continuous variable. Workshop participants who were employed either part-time or full-time were code 1, otherwise 0. Financial knowledge was also measured and used as an independent variable. In this case, participants were asked to rate their level of financial knowledge using a 10 step assessment. Those who chose a 1, for instance, had the lowest level of knowledge while those who chose 10 had the highest level of knowledge. The average knowledge score for the sample was 5.51, with a standard deviation of 2.21. Monthly housing expenditures were measured using a seven-choice question that asked students how much money they paid for housing per month over the past year. Response categories ranged from less than $300 to $2,500 or more. Finally, the credit card debt item, which was also used in the t-test of credit card racial differences, was used in the regression models.

Results

The first research question in this paper asked whether or not racial differences in credit card debt existed among the students in the sample. Results from a t-test indicated that African-American students were significantly more likely to hold larger credit card debt balances than non-Hispanic White students ($t = -2.40$, $df = 92$, $p < .05$). Once this difference was noted, two multiple regression models were used to determine if racial differences also existed in terms of financial behaviors and financial stress. Results from Table 3 show that racial background, subjective financial knowledge, and credit card debt were

Table 3
Regression Results Describing Financial Behaviors

Variables	B	Beta	t
(Constant)	9.636**		3.942
Race (1 = African-American)	-2.237**	-.331	-2.717
Gender (1 = Female)	-1.111	-.125	-1.217
Age	-.028	-.043	-.409
Monthly Housing Cost	.147	.057	.566
Employment Status (1 = Employed)	-.860	-.124	-1.141
Subjective Financial Knowledge	.556**	.322	3.036
Credit Card Debt	.672**	.438	4.146

* $p < .05$ ** $p < .01$
$R^2 = .360$

significant factors affecting financial behaviors. As shown in Table 3, racial differences in financial behaviors existed in the sample when holding all other factors constant. The difference was negative. African-American students exhibited worse financial behaviors than non-Hispanic White students.

The second regression model was used to address the question of racial differences in financial stress. It was determined that a student's credit card debt level was directly related to his or her self-assessed financial stress level, holding other factors constant. This result is consistent with previously published findings (e.g., Joo et al., 2003). The finding regarding racial differences was noteworthy. In this study, African-American students were found to have a higher level of self reported financial stress than others, holding all other factors constant (Table 4).

The answer to whether or not racial differences exist in terms of debt level, financial behaviors, and financial stress is 'yes.' African-American students held more credit card debt than others, exhibited worse financial behaviors, and had higher levels of self-reported financial stress than non-Hispanic White students. The findings related to behavioral and stress differences held true even after accounting for the level of debt held by students.

Discussion

The pending financial crisis on college campuses that has been alluded to by Henry et al. (2001) finds support in this study. This paper adds to the Henry et al. work by comparing the credit card debt levels held by African-American students to that

Table 4
Regression Results Describing Financial Stress

Variables	B	Beta	t
(Constant)	3.218*		2.006
Race (1 = African-American)	1.512**	.328	2.802
Gender (1 = Female)	-.167	-.030	-.290
Age	.035	.071	.674
Monthly Housing Cost	.074	.042	.417
Employment Status (1 = Employed)	.304	.065	.599
Subjective Financial Knowledge	.099	.094	.910
Credit Card Debt	.309**	.279	2.688

* $p < .05$ ** $p < .01$
$R^2 = .211$

held by non-Hispanic White students, and by assessing how financial behaviors and financial stress levels are impacted by debt level and racial differences. In general, African-American students were found to hold more credit card debt than others. When the relationships among race, credit card debt, financial behaviors, and financial stress were examined it was found that credit card debt was positively related to both negative financial behaviors and financial stress. This was true for all students. However, it was also found that, holding all other factors constant, including credit card debt, African-American students reported higher levels of financial stress than other students. The relationship between credit card debt, racial background, financial behaviors, and financial stress suggests that African-American students are affected more dramatically by debt than others.

Findings from this study suggest that a key question facing university and college administrators ought to be, "What can be done to increase the financial knowledge, behavioral characteristics, and attitudes of African-American students to offset increased stress levels that accompany credit card debt?" This is a question that is not usually asked or answered during minority college orientation sessions. Pope (2004) reported that nearly all orientation sessions are designed to introduce students to the campus and community and to establish mentoring relationships between and among new students, upperclassmen, faculty, and administrators. Little attention is ever given to how money management skills impact student life.

Unfortunately, universities and colleges may be missing one of the key factors of

alienation and ultimate student failure on campus. If credit card debt and financial stress differences are as widespread as this research suggests, African-American students may find that their ability to fund college expenses while maintaining a balance between academic requirements and social activities, is in jeopardy. If retention and ultimate graduation of African-American students is a priority on college campuses, now may be the time to include mentoring, counseling, and training in the area of personal finance topics in both orientation and ongoing help sessions.

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