University of Nevada, Reno

The Recession Generation: An Examination of Millennials' Money Management Habits

A thesis submitted in partial fulfillment
of the requirements for the degree of

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by

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Abstract

Given that many of today's undergraduate students experienced the Great Recession during a highly impressionable age, it is reasonable to suggest that the event may have played a significant role in the development of their financial understanding. Although many younger millennials still depended on parents financially during the period of economic downturn and may not have experienced the effects of loss and related stress as strongly as older family members, exposure to those struggles may have influenced the money management tendencies that now characterize their adulthood. **This study examines the financial management practices and the overall effectiveness of those practices as perceived by a sample of undergraduate millennials. It also tests the hypothesis that the most significant economic event in the last decade had a visible effect on the development of financial management practices that millennials use today.**

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Introduction

The term "millennial," coined in 1991 as part of a generational study published in *Generations: The History of America's Future*, is used to describe members of the sizable group of people born between 1980 and 2000 (Strauss & Howe, 1991; Pew Research Center, 2015). Over the course of American history, various distinctions between generations' behaviors and values have been observed as global and domestic conditions have changed and as society and technology have continued to advance. These factors of technological progress and evolving values of society are some of the largest determinants of the economic climate, which greatly affects the way that generations differ from one another in their consumption levels and view of financial management. The dividing lines between generations are not always so clear, though – often times, subgroups composed of similarly-aged individuals within generations emerge and are characterized by varying beliefs and behaviors. Given this fact, coupled with the occurrence of significant economic events such as the Great Recession that occurred from late-2007 to mid-2009, it becomes reasonable to suggest that the money management techniques employed by millennials may greatly differ from those who experienced the recession at different points in their lifetime.

By tracking the frequency of keywords searched through Google's search engine, Google Trends data indicate that research on the millennial generation, or generation Y, has begun picking up speed over the last decade. The timing coincides with an important milestone in the lives of millennials: coming of age. As the first groups of millennials transitioned into "economic adulthood," a variation of the phrase used by Debevec,

Schewe, Madden, & Diamond in a study exploring the existence of subgroups in the millennial generation, a wealth of new behavioral data became available for analysis (2013). While various studies have taken place highlighting the differences between millennials and earlier generations – especially in relation to the workforce – a relatively small pool of data has been gathered on the financial habits of this generation (De Hauw & De Vos, 2010). Using an online questionnaire and University of Nevada, Reno students as a test group, this study intends to advance the literature on the subject.

According to Northcott & Doolin, there are four broad areas of accounting practice that have been identified and examined in relation to the habits of home accountants in previous studies: budgeting, record-keeping, decision making and long-term financial planning (2000). **The present study will determine the money management habits of an undergraduate subgroup of millennials with a series of questions roughly pertaining to the aforementioned topics with the hope of shedding light on the current financial positions and perceptions of students surveyed. It will also seek to determine whether the recent recession has had a noticeable effect on the development of financial management practices that millennials use today.** To give the study context, characteristics of college-aged students from earlier studies will be compared to data from the present study to determine whether financial behaviors of participants vary between the years and whether or not the Great Recession may have accounted for any change observed between the groups of students. To that end, many of the questions included in the survey instrument mirrors those used in prior research studies.

Besides adding to the general pool of knowledge regarding students and the

millennial generation, the proposed research may be useful for several specific groups. Educators looking to understand and spread financial knowledge, employers looking to better understand and motivate employees, and even banking institutions looking to sell financial products may all benefit from fresh views into the financial habits of millennials. Lastly, the results may offer some insight into the economic climate that this unique group will create in the coming years. Because students are a notoriously low-income and high-debt demographic (Davies & Lea, 1995), I hope to conclude that the financial acumen of the millennials attending UNR projects a brighter economic future than the one created by the previous generation from 2007 to 2009.

Review of Literature

Online searches for academic literature regarding the spending, saving, and debt-accumulating habits of college students yield a wealth of results. Because the purpose of this study is to determine how the millennial generation of college-going students manages its finances, extensive research was conducted on the group and factors that may influence its financial behavior. The focus of the literature review, therefore, is based on three particular attributes that the reasonable majority of respondents share, given their presence in university public records: 1) subjects are pursuing higher education at the University of Nevada, Reno; 2) subjects are members of the millennial generation; and 3) subjects will have observed or experienced the effects of the Great Recession during their lifetime. While the test group includes any willing participant enrolled in an undergraduate program at the University of Nevada, Reno, the focus of the thesis will be

on those respondents who are members of the millennial generation whose lives were impacted in some way by the Great Recession.

College Students Research

Extensive research exists on the group representing the first attribute – college students. Henry, Weber, & Yarbrough (2001) conducted a study during the spring semester in 2000 to determine the use of money management techniques of students in the College of Education at the University of Louisiana at Lafayette. One hundred twenty-six education majors representing each academic level were chosen to participate in a survey that measured students' demographics, income and debt levels, and budgeting practices. The study revealed that most of the students questioned did not have a written budget, but that women were more likely than men to use one. Of those students who practiced budgeting, married students and students between the ages of 36 and 40 were most likely to follow their budgets. Based on those findings, the researchers concluded that the students surveyed were "vulnerable to financial crisis," but that claim was not explained or substantiated by the contents of the report (Henry, Weber, & Yarbrough, 2001). However, because widely known consequences of not budgeting include overspending and relying too heavily on credit to cover expenses, financial crisis seems to be a reasonably possible end result to an extreme neglect of budgeting.

A study published earlier suggested that budgeting may only be part of the equation for financial stability among college students. Using a 52-question survey measuring personal financial literacy in the areas of general financial knowledge, savings and borrowing, insurance, and investments, as well as personal financial opinions, decisions, and education, Chen & Volpe (1998) found that participants from universities

across the country were able to answer only 53 percent of the financial literacy questions correctly. The researchers found that men and business students were more likely to answer the questions correctly than women and non-business students, and the topic of investment had the fewest number of correct responses overall. The study's conclusion challenges society to make the necessary changes in the educational system, as the researchers feared that financial incompetency is a limiting factor in students' ability to make informed financial decisions in the real world (Chen & Volpe, 1998).

A couple of similar studies were conducted during the recent recession between 2007 and 2009 whose findings also implied the need for increased financial literacy and awareness among college students. The Jump$tart Coalition for Personal Financial Literacy administered a financial literacy survey to full-time college students in 2008 and found the financial savvy of participants to be generally lacking (Mandell, 2008). The mean score on the financial literacy examination portion of the survey was 62.2 percent, and the researchers noted that students who took a personal finance course in high school tended to fare no better than those who did not (Mandell, 2008). Similarly, Allen & Kinchen reported that their study on the financial management practices of college students suggested a lack of proper personal financial education among respondents (2009). They emphasized a need for educators to help students understand the importance of financial management in order to avoid the stress of debt and financial instability (Allen & Kinchen, 2009).

More recent studies suggest the same lack of financial literacy among students that Allen & Kinchen and the Jump$tart Coalition found in prior research. LaBorde, Mottner & Whalley (2014) agree that substantial amounts of research point to a needed

improvement in financial literacy among college students, but their research aims to make a different determination; research by LaBorde, Mottner & Whalley attempts to identify the differences that exist between the perceived and actual financial knowledge of college students. After collecting and analyzing surveys from over 1,200 undergraduate students, LaBorde, Mottner & Whalley discovered that there was a significant gap between what students believed they knew about money management and what they actually knew. For example, a particularly disturbing finding they note was that only 15 percent of respondents knew the factors used to determine credit-worthiness, yet many students had borrowed money LaBorde, Mottner & Whalley (2014). A study conducted by Davtyan (2010) supports the need for increased education in the areas of investing and credit – he found that participants expressed the greatest interest in learning more about these topics. The study by LaBorde, Mottner &Whalley (2014) also revealed that older students had greater amounts of permanent credit card debt than younger students, which seems to contradict the general notion that older students tend to be more conservative with their money. Gender, they also found, impacted whether or not students were likely to perceive a necessity to save for the future, especially retirement. Females, more often than males, expressed the intent to start saving in the near future (LaBorde, Mottner, &Whalley, 2014).

Millennials Research

Members of the millennial generation, described by Strauss & Howe (1991) as persons born between the years of 1982 and 2004, have had a steadily growing impact on the world economy in the last couple of decades. Unlike the previously discussed research conducted on college students, far less research exists pertaining to the financial

literacy and financial management habits of millennials, specifically. Even so, in conducting the present study, I focus on the generational influence that has played a role in how students respond to survey questions about their financial behaviors and perceptions.

Members of the millennial generation have been historically stereotyped as having higher expectations than previous generations and being more impatient and ambitious (Ng, Schweitzer, & Lyons, 2010). As Ng, Schweitzer, & Lyons put it, millennials are known to "want it all" and "want it now," especially in terms of their careers (2010). Given those goals, though, Ng, Schweitzer, & Lyons found that the majority of millennials they surveyed seem to have realistic expectations for their first jobs after graduating from college. While respondents realized that they might not end up with an ideal job after college, millennials' top priority as identified by the study was the opportunity in the workplace for upward mobility. The study also indicated that a relationship did not exist between observed performance (defined by the grade point averages of participants) and the participants' expectations for promotions, which the authors took to corroborate another common stereotype of millennials feeling entitled (Ng, Schweitzer, & Lyons, 2010).

Even though millennials of all ages are often stereotyped together, research suggests that it is prudent to distinguish between older and younger millennials. In their study on the possible existence of a division between younger and older members of the millennial generation, Debevec, Schewe, Madden, & Diamond (2013) investigated whether or not it would be beneficial for researchers to view millennials as two distinctive groups. In their article entitled "Are today's millennials splintering into a new

generational cohort? Maybe!" the authors suggest that significant differences exist between younger millennials and older millennials, mostly in the dimensions of "piety" and "thrift." While older millennials are more likely to embrace saving, younger millennials seem to have a "live for today" lifestyle that is more self-centric and pleasure-seeking. Additionally, younger millennials are more accepting of nontraditional values, such as couples living together out of wedlock, and less interested in traditional values, such as forming and raising a family and praying to a higher being (Debevec, Schewe, Madden, & Diamond, 2013).

The study goes on to suggest that younger millennials may not embrace thrift as much as older millennials because younger millennials feel that their parents or loans will support an extravagant lifestyle (Debevec, Schewe, Madden, & Diamond, 2013). Additionally, the study proposes that younger millennials may feel insulated from the recession and confident that their parents' safety net will catch them if younger millennials find themselves in financial trouble.

Great Recession Research

Beginning in December 2007, the start of the Great Recession, commonly described as the most severe economic decline in America since the Great Depression, marked a very unfortunate time for recently graduated millennials transitioning into adulthood. According to a survey conducted by the Pew Research Center, young adults in the US were the group most seriously affected by the job shortage resulting from the recession (2010). While financial pains such as job loss and home foreclosure were felt by demographics all over the country, few groups experienced the unique discouragement felt by young adults thwarted in their first attempts at financial independence.

The Encyclopedia of Housing explains that an asset bubble exists when the "market price of the asset is substantially higher than the fundamental economic value of the asset" (Thibodeau, 2012, p. 339). It goes on to break down the way in which the most recent housing bubble formed in the years leading up to the Great Recession, when housing prices increased as the demand for housing rose. The encyclopedia entry explains that when the supply of mortgage credit increased and the standards of qualification for home loans dropped, consumer beliefs about future housing prices rose unrealistically, and the resulting increase in demand for housing pushed the prices up further. Finally, the entry describes how homebuyers who had been approved for mortgages despite insufficient credit began to default on their loans, causing the housing bubble burst and the economy to fall in domino-like fashion. Banks, unable to get mortgage payments from their clients, closed, and the increasing volume of foreclosed homes brought the values of other homes down with them (Thibodeau, 2012).

The aforementioned bursting of the housing bubble signified that the last economic straw had finally broken the camel's back; with shocking speed, the condition of the American economy plummeted. The chain reaction that took place after the housing bubble burst resulted in dramatic decreases in the number of jobs and opportunities available for those entering the work force for the first time as well as those who were better established, career-wise. According to the Economic Policy Institute (2011), 8.4 million jobs disappeared from the labor market between 2008 and 2009. A report by the Bureau of Labor Statistics states that the national unemployment rate rose from 5.0 percent in December of 2007 to 9.5 percent in June of 2009 (Department of Labor, 2012). The report states that negative unemployment effects continued even after

the recession itself was over: by October of 2009, the national unemployment rate had risen another 0.5 percent (Department of Labor, 2012). The labor market was not the only one to increasingly worsen during the recession, though; in a press release in 2011, RealtyTrac, the nation's largest online marketplace for foreclosure properties, reported that a record 2,871,891 properties in the United States in 2010 were subject to foreclosure filings, a two percent increase from 2009 and a 23 percent increase from 2008.

In some states the effects of the recession were stronger than the national average; data from the United States Census Bureau (2012) show that the unemployment average of Nevada rose from 4.6 percent in 2007 to 14.9 percent in 2010. Additionally, RealtyTrac (2011) reported that one in every 11 Nevada houses received at least one foreclosure filing in 2010, making it the state with the highest foreclosure rate in the country for the fourth consecutive year.

Based on the date range defined by Strauss & Howe (1991), members of the millennial generation were between the ages of 3 and 25 years old when the Great Recession began in December of 2007 and between the ages of 5 and 27 when it ended in June of 2009. Although many millennials were too young to have been directly impacted by the financial crisis, it is likely that some, if not many, millennials were exposed to the financial difficulties experienced during the Great Recession by their parents, other relatives or adult acquaintances. Because several studies have shown that parents play a sizable role in the formation of attitudes and financial behaviors of their offspring, millennials may have been significantly impacted by the recession through observing their parent's hardships (Northcott & Doolin, 2000; Norvilitis, & MacLean, 2009).

Accordingly, it would not be unreasonable to hypothesize that college students in

2016 may exhibit differing attitudes towards money than previously surveyed college populations in the prior published literature cited above. My study focuses on identifying whether or not there are significant differences in the knowledge of financial literacy between prior groups of college students surveyed and the millennials here at the University of Nevada, Reno.

Objectives

This study was designed to determine which methods undergraduate members of the millennial generation use for managing their personal or household finances and whether or not the recent recession significantly influenced the development of those practices. Because most millennials born after 1990 were financially dependent on their parents during the Great Recession, the event may have influenced the behaviors of those who watched older family members and friends struggle though the economic downturn. Secondarily, the survey was designed to reveal the levels of comfort that students feel with their debt and savings levels, along with the perceived effectiveness of their money management approaches.

Methodology

Measures and Analytic Procedure

An invitation to participate in a web-based survey was sent via electronic mail to 15,821 of 16,311 undergraduate students attending the University of Nevada, Reno (University of Nevada, Reno, 2016) on the Monday following Spring Break, March 28,

2016. Students were informed that their participation was completely voluntary, and that they would be able to choose to leave questions unanswered or discontinue participation at any point during the survey (see Appendix A for the full invitation). The invitation also contained contact information for the Research Integrity Office on campus for use if participants had questions about the study. All study procedures were reviewed by the Institutional Review Board (IRB) and received an exemption status (see Appendix C for the IRB determination). The survey instrument consisted of 40 questions relating to demographics and financial management habits. Additionally, a brief section gathered data about the impact of a recent and significant economic event, the Great Recession (see Appendix B for the full survey instrument). After completing the survey, respondents were given the opportunity to submit an e-mail address to enter a drawing for a chance to win a $50 e-gift card to Amazon or one of three $10 e-gift cards to Starbucks. The survey remained open for one week and closed on April 4, 2016.

Several questions used in the survey were borrowed from or modeled after questions from surveys in previous studies. The Jump$tart College Questionnaire used in a study on the financial literacy of American young adults (Mandell, 2008) and the Student Financial Management Survey used in a study testing the hypothesis that many Americans do not have the knowledge, skills or habits needed to effectively manage personal finances (Allen & Kinchen, 2009) largely provided the basis for the present study's survey instrument. Because both surveys were first administered in the thick of the recession, answer comparisons between the present study and the two previous ones might lend some insight into the ways that student finance has evolved in post-recession years.

Although the analyses in this study are largely descriptive, a couple of methods were employed for the purpose of accomplishing the secondary objectives of the research. Some of the data gathered from students detailing their money managing techniques and perceptions were compared to findings from earlier studies to determine whether or not the results are comparable. This process was used to in the hopes of achieving one of the main research objectives – to determine whether or not the recession significantly impacted the way that millennials manage their money. The data were also cross tabulated to reveal any correlation between the financial behaviors of students and their performance perceptions and satisfaction with their financial position. This process was used to determine if a relationship existed between the financial management habits of students and the effectiveness of those habits as reported by the student.

Participants

The participants were undergraduates at the University of Nevada, Reno whose contact information was available to the public through the Office of the Provost. Students from all socioeconomic levels, degree programs, and class standings were given the opportunity to participate.

In response to the 15,821 invitations that were e-mailed, a total of 1,990 students answered questions in the survey. Before the data could be analyzed, though, the sample was refined for ease of use and to ensure the validity of results. First, the responses were checked for non-sample responses – this included any test responses from survey developers. Next, all responses gathered from non-millennials were separated from the sample. Because the contact information used to solicit participants did not include the ages of contacts, several students born before 1982 elected to participate in the study.

Lastly, responses were manually filtered to include only surveys with a 100 percent completion rate. This was done to simplify the analysis process and to clarify the results for dissemination.

A total of 1,135 usable responses remained after the refining process. Table 1 gives a brief overview of the demographics of students whose responses were used in the sample. The number of male to female responses gathered is not representative of the undergraduate population of the university, which is 47 percent male and 53 percent female (University of Nevada, Reno, 2016). However, the sample was roughly representative of the undergraduate population by most other demographic measures (University of Nevada, Reno, 2016).

Table 1: Demographics of participants

	Total (N = 1,135)	
	n	%
Gender		
Male	403	35.5
Female	732	64.5
Birth year		
1982-1986	42	3.6
1987-1990	76	6.6
1991-1995	609	53.8
1996-1999	406	35.8
Class standing		
Freshman	216	19.0
Sophomore	233	21.0
Junior	315	28.0
Senior	371	33.0
Ethnicity		
White or Caucasian	779	68.6
Black or African-American	31	2.7
Hispanic American	146	12.9
Asian-American	109	9.6
American Indian, Alaska Native, or Native Hawaiian	17	1.5
Other	53	4.7
Relationship status		
Single	886	78.1
Married or living with significant other	249	21.9
Person managing household finances if married or living with a significant other		
I do	72	6.3
My spouse/significant other does	17	1.5
We both do	184	16.2
I am not married or living with a significant other	862	75.9

The majority of participants were born between 1993 and 1997 (n = 904), as most students begin college within a few years of graduating from high school. As a result, millennials born in the 1980s were undersampled in this study.

Also worth noting is the discrepancy between the number of students who responded to the question of marital status with “Single” and the number of students who responded to the question of who manages household finances with “I am not married or living with a significant other.” These questions were asked together as a control. The gap suggests that some respondents may not have fully read or understood one of the questions.

Students currently pursuing undergraduate degrees at the University of Nevada, Reno were selected as the test group because this particular population, saturated with millennials, is familiar with tuition expenses and in some cases, related debt. The presence of these elements indicates a necessity for some type of money-management strategy, whether employed by the student or a parent overseeing the student’s finances. Research conducted by Lea, Webley, & Walker, (1995) indicates that an individual’s tendencies when managing money can affect his or her accrual of financial debt. Because links have been found between student debt and individual economic well-being (Pew Research Center, 2014), I expect that the present study’s results will provide some interesting insights into the overall economic well-being of UNR students. In addition, this group is considered to be educated and aware of the current and recent economic climates. Student’s perceptions of the recent Great Recession may have significantly impacted the way that they behave financially and how important they perceive active money management to be.

Findings

Students were asked questions from a variety of topics relating to demographics,

parental demographics and influences, career and schooling expectations, effects of the Great Recession, credit usage, debt levels and related anxiety, bank account management, bill payment, savings levels, tax preparation, and budgeting.

Demographics

Table 1 provides a basic demographic overview of students in the sample, but several other characteristics of participants were determined using the survey. Table 2 details the participant's majors or areas of interest in college. It also shows data gathered about the academic and related salary expectations of participants.

Table 2: Academic and career expectations

	Total (N = 1,135)	
	n	%
Degree program		
Arts	72	6.3
Business or Economics	209	18.4
Engineering Humanities	131	11.5
Nursing	72	6.3
Science	282	24.8
Social Science	160	14.1
Other	209	18.4
Highest expected level of education		
Associate degree (two-year)	33	2.9
Bachelor degree (four-year)	482	42.5
Master's degree	374	33.0
Doctorate, law or professional (six year or more)	246	21.7
Expected salary upon completing college		
Less than $20,000	24	2.1
$20,000 to $29,999	59	5.2
$30,000 to $39,999	109	9.6
$40,000 to $49,999	162	14.3
$50,000 to $59,999	208	18.3
$60,000 to $69,999	177	15.6
$70,000 to $79,999	121	10.7
$80,000 to $89,999	109	9.6
$90,000 to $99,999	42	3.7
$100,000 to $149,999	76	6.7
More than $150,000	48	4.2

Over 54 percent of students indicated that they plan to obtain a master's, doctorate, law or other professional degree, and almost 69 percent expect to earn more than $50,000 annually after completing their education. On the other end of the continuum, only 2.9 percent of students selected an associate degree as the highest level of education they expect to achieve, and only 2.1 percent of students expect to make less than $20,000 annually after finishing school. A similar question

asked students in a 2008 survey about their expected post-graduation earnings, but the limited choices given seemed to imply that students should select an expected starting salary rather than an expected salary for the duration of the career (Mandell). In response to this question, 32 percent of participants indicated that they planned to earn $50,000 or more annually after college, 51.6 percent of students expected to earn between $30,000 and $49,000 annually, and 16.5 percent expected to earn under $30,000 annually (Mandell).

Despite their high hopes for the future, a majority of students currently reside in the lower income brackets that are traditionally occupied by students and those just entering the workforce. Table 3 shows that just under 61 percent of the sample reported making less than $20,000 a year in earned income, gifts, loans, and financial aid, while 8.9 percent of students (or student households if the participants are married or living with a significant other) reported an income of over $50,000 a year.

Table 3: Student income and portion of income gifted or loaned

	Total (N = 1,135)	
	n	%
Average annual income		
Less than $20,000	690	60.8
$20,000 to $29,999	219	19.3
$30,000 to $39,999	76	6.7
$40,000 to $49,999	49	4.3
$50,000 to $59,999	37	3.3
$60,000 to $69,999	15	1.3
$70,000 to $79,999	14	1.2
$80,000 to $89,999	10	0.9
$90,000 to $99,999	7	0.6
$100,000 to $149,999	12	1.1
More than $150,000	6	0.5
Portion of income received as a gift or loan		
Less than 10 percent	409	36
10-20 percent	126	11.1
21-30 percent	77	6.8
31-40 percent	61	5.4
41-50 percent	77	6.8
51-60 percent	77	6.8
61-70 percent	48	4.2
71-80 percent	69	6.1
81-90 percent	88	7.8
More than 90 percent	103	9.1

In order to obtain a better understanding of the origins of participants' income, a follow-up question asked students to select the percentage of income that was obtained through gifts or loans from either the government, financial aid, parents, or other non-employment sources. For the purposes of

this study, a participant qualifies as financially dependent if a source other than the participant provides over 50 percent of the participant's income. While the majority of students reported financial independence, 34 percent reported reliance on another source for greater than half of their income. At 36 percent, a similar number of students indicated that less than 10 percent of their income was derived from other sources, and 16.9 percent of students indicated that over 80 percent of their income was derived from the same.

Participants were also asked to provide their best estimates of their parents' total income in 2015. While 8.2 percent of students indicated that they did not know, 36.7 percent of the students surveyed responded with an income of over $100,000. The responses were fairly evenly distributed between most of the remaining lower income brackets, with the exception of the $20,000 to $29,999 income range, which was selected by 3.8 percent of respondents. Table 4 outlines these findings below.

Table 4: Parent income and highest level of education received

	Total (N = 1,135)	
	n	%
Estimate of parents' income in 2015		
Less than $20,000	58	5.1
$20,000 to $29,999	43	3.8
$30,000 to $39,999	70	6.2
$40,000 to $49,999	72	6.3
$50,000 to $59,999	67	5.9
$60,000 to $69,999	80	7
$70,000 to $79,999	86	7.6
$80,000 to $89,999	69	6.1
$90,000 to $99,999	81	7.1
$100,000 to $149,999	236	20.8
More than $150,000	180	15.9
Don't know	93	8.2
Highest level of education received by either parent		
Neither completed high school	65	5.7
Completed high school	198	17.4
Some college	266	23.4
College graduate or more than college	597	52.6
Don't know	9	0.8

Students were also asked to report the highest level of education that either of their parents received. A little over half of respondents reported that their most highly educated parent completed college or more than college, while 23.4 percent reported some college, 17.4 percent reported the completion of high school, and 5.7

percent indicated that neither parent had completed high school. The data were then cross-tabulated to reveal that over half of students who plan on earning a bachelor degree or higher during their lifetime had at least one parent who graduated from college or completed more than an undergraduate degree program Only 5.81 percent of students who plan on earning at least a bachelor degree reported that neither of their parents completed high school.

Table 5 details the results of the Jump$tart Coalition survey conducted in 2008 to provide a comparison base for estimated parental income between mid-recession and post-recession studies. As shown by student-reported figures, it is evident that the parents of respondents are making significantly more money today than in 2008. It also seems that more students are aware of their parents' financial situation now than were in the 2008 study (Mandell).

Table 5: Expected education and estimated parent income comparison between studies

	Present Study (n = 1,320) %	2008 Study (n = 1,030) %
Highest level of education expected		
Associate degree (two-year)	2.9%	9.6%
Bachelor degree (four-year)	42.5%	46.4%
Master's degree	33.0%	27.1%
Doctorate, law, or professional (six-year or more)	21.7%	16.9%
Estimate of parent income last year		
Less than $20,000	5.1%	11.2%
$20,000 to $39,999	10.0%	14.4%
$40,000 to $79,999	26.8%	29.8%
$80,000 or more	49.9%	31.9%
Don't know	8.2%	12.7%

The comparison study was conducted in 2008 by the Jump$tart Coalition to gauge the financial literacy of college students in the US.

Table 5 also compares responses for the highest level of education that students expected to receive at the time of each survey. These figures have shifted upward substantially in recent years as well – the number of students who plan on getting a

master's degree or higher has increased over 10 percentage points in the last eight years. Unsurprisingly, the number of students who plan on getting a two-year degree is low at UNR, as the university overwhelmingly offers four-year degrees.

Effects of the Great Recession

Students were asked three questions regarding difficulties that they experienced as a result of the recent recession, difficulties that members of their immediate family experienced, and how significantly the event has impacted their financial behavior. Figure 1 shows how students' difficulties compared to those of their families.

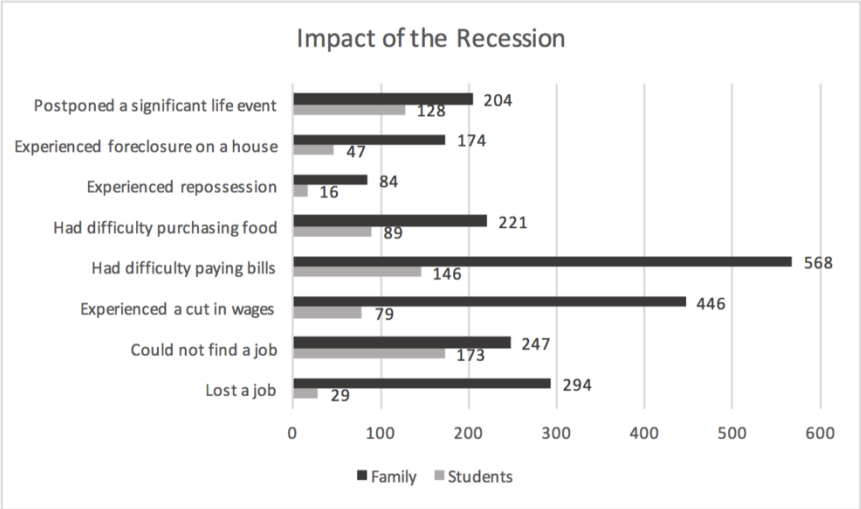

Figure 1: The reported impact of the Great Recession on students and their families

Table 6 shows results to a more general question regarding the recession. When asked how influential the Great Recession has been on their financial behaviors and decision-making on a scale from 'Not at all influential' to 'Extremely influential,' 16.3 percent of students responded that the recession had no effect, and 9.3 percent said that it was extremely influential. Seventy-four percent of students fell between the two poles, stating that they were slightly to moderately affected by the event.

Table 6: Self-reported influence of the Great Recession on financial behavior

	Total (N = 1,135)	
	n	%
Influence of recession on financial behavior		
Not at all influential	185	16.3
Slightly influential	297	26.2
Somewhat influential	301	26.5
Moderately influential	246	21.7
Extremely influential	106	9.3

When data concerning the amount of influence the recession had on participants' financial behaviors were cross-tabulated with specific hardships that they or their families endured, an interesting trend emerged. Figure 2 illustrates the results of a cross-tabulation conducted between the level of influence and hardships endured by parents.

Figure 2: Cross-tabulation of recession influence with family hardships

		In what ways were your immediate family members affected by the Great Recession?								
		Lost a job	Could not find a job	Experienced a cut in wages	Had difficulty paying bills	Had difficulty purchasing food	Experienced repossession of a car or household item	Experienced foreclosure on a house	Postponed a significant life event	Total
How influential was the Great Recession on the way that you spend money, save money, and manage your finances today?	Not at all influential	24 **25.81%**	18 **19.35%**	36 **38.71%**	47 **50.54%**	18 **19.35%**	7 **7.53%**	16 **17.20%**	13 **13.98%**	93 **100.00%**
	Slightly influential	54 **24.77%**	46 **21.10%**	102 **46.79%**	129 **59.17%**	34 **15.60%**	20 **9.17%**	35 **16.06%**	38 **17.43%**	218 **100.00%**
	Somewhat influential	81 **32.02%**	73 **28.85%**	136 **53.75%**	150 **59.29%**	47 **18.58%**	20 **7.91%**	42 **16.60%**	63 **24.90%**	253 **100.00%**
	Moderately influential	79 **35.91%**	65 **29.55%**	107 **48.64%**	163 **74.09%**	73 **33.18%**	23 **10.45%**	51 **23.18%**	55 **25.00%**	220 **100.00%**
	Extremely influential	56 **53.85%**	45 **43.27%**	65 **62.50%**	79 **75.96%**	49 **47.12%**	14 **13.46%**	30 **28.85%**	35 **33.65%**	104 **100.00%**
	Total	294 **33.11%**	247 **27.82%**	446 **50.23%**	568 **63.96%**	221 **24.89%**	84 **9.46%**	174 **19.59%**	204 **22.97%**	888 **100.00%**

Students who found the recession to be extremely influential observed each category of hardships endured by their parents in higher percentages than students who were less influenced by the recession. Figure 3 shows that this is somewhat true for students who personally experienced loss during the recession, but the data gathered on specific losses do not correlate as strongly to the degree of influence the Great Recession had on

respondents compared to specific losses experienced by parents.

Figure 3: Cross-tabulation of recession influence with student's hardships

		In what ways were you personally affected by the Great Recession?								
		Lost a job	Could not find a job	Experienced a cut in wages	Had difficulty paying bills	Had difficulty purchasing food	Experienced repossession of a car or household item	Experienced foreclosure on a house	Postponed a significant life event	Total
How influential was the Great Recession on the way that you spend money, save money, and manage your finances today?	Not at all influential	2 **5.88%**	15 **44.12%**	3 **8.82%**	6 **17.65%**	4 **11.76%**	2 **5.88%**	3 **8.82%**	7 **20.59%**	34 **100.00%**
	Slightly influential	8 **7.34%**	40 **36.70%**	17 **15.60%**	37 **33.94%**	17 **15.60%**	2 **1.83%**	6 **5.50%**	31 **28.44%**	109 **100.00%**
	Somewhat influential	8 **6.06%**	50 **37.88%**	19 **14.39%**	44 **33.33%**	24 **18.18%**	3 **2.27%**	13 **9.85%**	35 **26.52%**	132 **100.00%**
	Moderately influential	7 **5.65%**	46 **37.10%**	32 **25.81%**	32 **25.81%**	22 **17.74%**	5 **4.03%**	14 **11.29%**	31 **25.00%**	124 **100.00%**
	Extremely influential	4 **6.45%**	22 **35.48%**	8 **12.90%**	27 **43.55%**	22 **35.48%**	4 **6.45%**	11 **17.74%**	24 **38.71%**	62 **100.00%**
	Total	29 **6.29%**	173 **37.53%**	79 **17.14%**	146 **31.67%**	89 **19.31%**	16 **3.47%**	47 **10.20%**	128 **27.77%**	461 **100.00%**

Money-Management Practices

Credit Cards, Debt and Spending Habits

Students were asked several questions relating to credit cards, debt, and spending on bills. Table 7 provides an overview of responses to questions pertaining to credit cards and bill payment.

The data indicate that a greater number of students, almost 30 percent, received their first credit card sometime after completing their first year of college, but there was significant representation for all choices given. Seventeen percent of students had a credit card before graduating from high school, 22.1 percent got one upon graduating, another 22.2 percent got their first one upon starting college, and 10.4 percent got a card during their first year of college. A little over 60 percent of students claim to always pay off the full balance of their credit card accounts, and 13.6 percent admitted to occasionally not

paying the balance when they are low on funds. In contrast, 10.3 percent of respondents reported that they generally only pay the minimum balance due on their accounts.

Table 7: Credit cards and bill payment

	Total (N = 1,135)	
	n	%
Number of credit cards		
0	158	13.9
1	611	53.8
2	197	17.4
3	86	7.6
4	44	3.9
5	22	1.9
6 or more	17	1.5
Outstanding balance on all credit cards combined		
Less than $1,000	821	72.3
$1,000 to $2,499	121	10.7
$2,500 to $4,999	63	5.6
$5,000 to $10,000	31	2.7
More than $10,000	13	1.1
Don't know	86	7.6
Description of credit card payment habits		
I always pay off the total balance each month.	685	60.4
I occasionally do not pay off the balance for a month or so when I am short on funds.	154	13.6
I generally have an outstanding balance but occasionally am able to pay it off.	108	9.5
I seldom, if ever, pay off all my balances, but try to pay them down when I can.	71	6.3
I generally pay only the minimum required payment each month.	117	10.3
Use of direct withdrawal to pay bills		
Yes	451	39.7
No	684	60.3
Number of bills paid each month using a credit card		
0	695	61.2
1	280	24.7
2 to 3	100	8.8
4 or more	60	5.3
Bill payment habits		
Usually pay more than one bill late per month	11	1.0
Usually pay one bill late per month	25	2.2
Usually pay bills on time	641	56.5
Usually pay bills before they are due	458	40.4

When asked about the amount of debt respondents expect to have in student loans upon finishing their undergraduate education, 39 percent reported expecting to have none. Most others reported that they expect to have between $5,000 and $29,999 in debt, and only 5.6 percent expect to have over $50,000 worth. Table 8 details the debt levels that students reported in the survey and compares them to debt data gathered on undergraduates by the Jump$tart Coalition in 2008.

While the data indicate that a greater number of students graduating in the coming years expect to owe nothing upon graduation than students did in 2008, the distribution of responses in the two surveys are not too different from each other. Factors affecting the expected debt levels may include a greater availability of scholarships in 2016, yet a greater number of students desire to complete costlier, more advanced degree programs.

Table 8: Debt comparison between studies

	Present Study (n = 1,320) %	2008 Study (n = 1,030) %
Outstanding credit card balance		
Under $1,000	72.3	69.1
$1,000 to $2,499	10.7	15.4
$2,500 to $4,999	5.6	8.9
$5,000 to $9,999	2.7	5
More than $10,000	1.1	1.6
Don't know	7.6	0*
Time of opening first credit card account		
Before graduating high school	17.3	20.1
When I graduated from high school	22.1	21.5
When I started college	22.2	26.8
During my first year in college	10.4	14.2
After completing my first year of college	28	17.4
Student loan expectation		
Nothing	39	34.7
Less than $5,000	9	7.2
$5,000 to $9,999	11.5	11.1
$10,000 to $19,999	12.7	14.7
$20,000 to $29,999	13.3	12.7
$30,000 to $49,999	8.9	8.7
More than $50,000	5.6	8.3
Other debt not from student loans or credit cards		
Auto loans	43.3	12.5
Home mortgage	13.4	2.7
Personal debt or other debt	57.8	20.9
Frequency of worrying about debt		
Never	23.3	26.8
A little	24.8	25.5
Sometimes	23.2	22.1
Often	20.3	15.7
Nearly all the time	8.5	9.8

The choice "Don't know" was not available to respondents who participated in the 2008 JumpStart study for the question of total outstanding credit card balance.

Of the students who reported expecting to owe nothing in student loans after graduation, almost half reported that they were not at all or only slightly affected by the recession. Aside from credit card debt or student loans, 43.3 percent of students reported having auto loans, 13.4 percent reported having home mortgages, and 57.8 percent reported having other personal debt. These findings compare interestingly to data collected from students in 2008 who reported significantly lower levels of other debt. Given the recessionary economic climate surrounding the 2008 study, it seems safe to assume that the lower debt levels do not indicate greater wealth or cheaper pricing or goods, but rather lower purchasing rates. Greater than two times the number of students in 2008 reported having miscellaneous debt in 2016, and three times the amount of students reported having auto loans. Unsurprisingly, the number of students with homeowner debt today is nearly five times the amount of those during the recession.

Despite the fair amounts of debt found in the current sample of students, about 23

percent of students report never worrying about their debts. That figure is reasonable when compared to responses gathered by the Jump$tart Coalition's survey; in it, 26.8 percent of students surveyed reported never worrying about their debts, though this study has confirmed a significant gap between the non-credit card or non-student loan debt between the two groups of students from different years (Mandell, 2008). On the opposite pole, though, over one percentage point more students worried nearly all the time about their debts in 2008 than 2016.

Savings and Financial Monitoring Practices

Not surprisingly, the data suggest that the majority of students save small portions of their income and very few students save a large portion of it. Table 9 details survey findings.

As a percentage of monthly income, over 37 percent of students reported saving less than 10 percent of their income on average. About 26 percent reported saving between 10 and 20 percent, and almost 12 percent reported saving between 21 and 30 percent. Very few students, 2.8 percent, report saving over 80 percent of their income month to month. These student savings are mostly held in the form of savings accounts, which almost 98 percent of students claimed to use, as well as a fair amount of stocks, held by about 13 percent of students, and retirement funds, held by 16.6 percent.

Respondents were roughly split in half over their feelings about the adequacy of the savings that they hold now; on one hand, 15.8 percent of the millennials surveyed felt that their savings were more than adequate for their needs right now, and 32.2 percent felt that they were just adequate. On the other hand, 22.9 percent felt that their saving were slightly less than they should have right now, and 29.2 percent felt that they had much

less than they should at this point in their lives.

Table 9: Savings and investments

	Total (N = 1,135)	
	n	%
Monthly savings as a percentage of income		
Less than 10 percent	424	37.4
10-20 percent	296	26.1
21-30 percent	133	11.7
31-40 percent	84	7.4
41-50 percent	60	5.3
51-60 percent	57	5.0
61-70 percent	24	2.1
71-80 percent	25	2.2
81-90 percent	16	1.4
More than 90 percent	16	1.4
Forms of savings and investments held		
Savings account(s)	1067	97.8
Certificates of deposit	40	3.7
U. S. Savings Bonds	94	8.6
Stocks	141	12.9
Mutual funds	65	6.0
Bonds other than U. S. Savings Bonds	17	1.6
Retirement accounts such as 401k's and IRA's	181	16.6
Rating of current savings and investments		
More than adequate for my needs right now	179	15.8
Adequate for my needs right now	365	32.2
Slightly less than I should have right now	260	22.9
Much less than I should have right now	331	29.2

Some of the perceived inadequacy could very well be a product of minimally attentive financial management and monitoring practices. Table 10 describes several financial monitoring habits and the frequencies with which students claim to perform them. While a sizable portion of students do not monitor their credit scores, a very small number report an extreme neglect of their checking accounts. A larger – but still small – group of students monitors its bank accounts daily, and a similarly-sized group practices account reconciliation more than once a month. It is also important to note that a small group of respondents, 1.5 percent of the sample, reported that a spouse or significant other manages their household finances. As about 16 percent of the sample reported sharing those duties with a spouse or significant other, it is reasonable to suggest that some students who reported neglecting to monitor their finances may not have assumed those duties in their relationships.

Table 10: Financial monitoring

	Total (N = 1,135)	
	n	%
Frequency of checking credit score		
Never	410	36.1
Less than once a year	179	15.8
Once a year	229	20.2
More than once a year	317	27.9
Frequency of checking bank account balance(s)		
Never	12	1.1
Less than once a week	126	11.1
Once a week	267	23.5
2-6 times a week	485	42.7
Once a day	178	15.7
More than once a day	67	5.9
Frequency of reconciling checkbook/checking account		
Never	782	68.9
Once a year	83	7.3
A few times a year	67	5.9
Every two months	30	2.6
Every month	109	9.6
More than once a month	64	5.6
Presence of a written monthly budget		
Yes	274	24.1
No	861	75.9

While the number of respondents who reported never checking their bank account balances is the same as the number of respondents who reported not having a checking account, only half of them selected both responses.

Over three quarters of the sample reported the absence of a written monthly budget in their financial managing arsenal. Findings related to budgeting are consistent with those of previous studies in that students are more likely to have a budget when they are married, older, or female (Henry, Weber, & Yarbrough, 2001). Compared to the same study by Henry, Weber & Yarbrough (2001), however, the amount of students who use a budget now seems to have dropped by nearly eight percentage points in the last 15 years. The ratio of females who have budgets to those who do not in the present study is higher than that of male respondents, and 39.36 percent of those who were married or living with a significant other during the study reported having a budget, as compared to the significantly lower 19.86 percent of singles who reported the same. Further, a greater percentage of sampled millennials who were born in the 1980s had budgets than those who were born in the 1990s.

Students were also asked who prepared their income taxes. Because a 34 percent of respondents reported being financially dependent on outside sources, a reasonable

expectation was that a comparable portion may also be dependent on outside sources for financial requirements such as filing taxes. The survey determined that the amount of students who do not generally prepare their own income taxes exceeded the amount of students who rely on outside sources for over half of their income; almost 40 percent of students claimed that their parents filed for them. Another 20 percent indicated that a tax preparer does the work, while 40.6 percent of students surveyed prepare their own taxes. Of those, only 6.9 percent prepare them by hand as opposed to using computer software. Responses from students in Southeast Louisiana University in 2008 differed; the previous study determined that 46.5 percent of students' parents prepared their taxes, 21.3 percent used a tax preparer, 19.7 used a computer program, and 12.4 percent did it by hand (Allen & Kinchen, 2009). The data suggests that tax preparation software is growing in popularity and may be enabling students to prepare their own taxes, as opposed to letting their parents handle them.

Students were also asked about the most significant source of their financial knowledge, and over 63 percent claimed that their parents taught them more than other sources, including other family members, high school or college courses, financial institutions, faith-based organizations, celebrity financial advisors. The next largest group of respondents, 27.2 percent of the sample, reported figuring things out on their own.

This finding is consistent with other studies that have found parents to be the most important factor affecting student financial behavior (Allen & Kinchen, 2009; Cude, et al., 2006). In the research on which the present study is based, Allen & Kinchen found that 65 percent of participants reported learning their financial skills from their parents, and 23 percent of students reported learning them on their own (2009). The researchers

found their results comparable to a previous study by Cude, et al. (2006), where the largest percentile of respondents, about 70 percent, reported that both mother and father were the most important factors affecting their financial behavior.

Lastly, after answering all of the questions detailed above, students were asked to assess the way that they manage their personal finances in general terms. The majority of students, 48.5 percent of the sample, answered that they felt okay about their habits, and 40.4 percent reported that they felt that they have managed their finances well. Only about 11 percent of students felt that they have done a poor job of managing their finances.

Discussion of Results

The study's findings speak for themselves in answering the primary research question of what methods students use to manage their money. The majority of millennials sampled are not over-reliant on credit card usage based on the number of credit cards held and total outstanding balances. Students also are overwhelmingly paying their bills early or on time, but the fact that just under 40 percent of students reported paying at least one bill per month with a credit card is slightly disturbing. Because credit cards are debt instruments, students may be increasing their chances of accruing financial debt by using credit cards for bill payment. Further, 7.6 percent of students reported that they did not know the combined outstanding balances of their credit card accounts. Consistent with research conducted by Allen & Kinchen (2009), students surveyed in 2008 reported low rates of account reconciliation and budgeting despite indicating that

they believe themselves to be managing their finances well. The lack of financial monitoring and tracking could lead to financial mismanagement and future financial distress for millennials who do not take care to correct their habits before taking on more financial responsibilities, including additional debts and dependents.

Regarding an equally important objective of the research, the data suggest that the recession did have an effect on the financial behaviors of millennials. The most conclusive evidence was gathered in a direct inquiry of respondents; over 80 percent of students reported that the recession did have some measure of influence over the way that they spend money, save money, and manage their finances in the present, and 31 percent of respondents reported the level of influence of the recession on their financial behavior to be moderate to extreme. Students who reported higher levels of influence were more likely to use a budget and less likely to feel that they managed their finances poorly than those who reported lower levels of influence. Additionally, students who reported worrying about their debt often or nearly all of the time tended to be more highly influenced by the recession.

Another indicator of the event's influence is the variance between findings of the current and previous studies. In 2016, a greater amount of students reported paying off the total balances of their credit cards each month, using savings and checking accounts, planning on obtaining master's and doctoral degrees, and planning on owing less in student loans after graduation. A reduced number of students in 2016 reported having ever bounced a check in their lifetime, and a smaller number of students reported getting their first credit card before completing their freshman year of college. A variety of factors could explain the differences; changing technology, evolving values held by

society and the constraints and allowances of the current economic climate may have each had a hand in changing the reported financial habits of students. Even so, the economic crisis undoubtedly helped shape each of those factors, thereby indirectly affecting the behaviors and perceptions of society.

As other studies have suggested, parents are to be the most influential factor in determining the financial conduct of their children (Allen & Kinchen, 2009; Cude, et al., 2006). Because most of the millennials sampled in the survey were in their early teens during the recession, they may have experienced the recession through the losses of their parents more so than through losses of their own. The study findings support this notion; in total, students indicated that their immediate family members experienced 1,531 more hardships that they themselves experienced during the recession. Further, because students who found the recession to be influential observed hardships endured by their parents in increasingly higher percentages than students who were less influenced by the recession, it is reasonable to suggest that parents may be the primary link between younger millennials and the impact that the economic downturn has had on their financial behaviors.

Conclusion

In summary, the results of the study suggest that there are several significant differences between the self-reported money managing habits of a current sample of undergraduates and those who participated in similar studies during the recession. While the data does not substantiate a definite cause-and-effect relationship existing between

the economic event and financial behaviors of students, the majority of respondents directly indicated that the Great Recession influenced the way that they manage their finances in some way or another. Millennials who watched immediate, presumably older, family members experience financial hardship during the economic downturn were more likely to report increasing levels of influence than those who did not, and hardships faced by family members more strongly correlate to greater influence than hardships faced by the individual.

There were some limitations to the study that may make the results more difficult to duplicate in future research on millennial populations. Firstly, the sample taken only represents a population of undergraduate students at one Northern Nevada university during the week after spring break. Further studies sampling other university populations in different regions may discover results that vary from those of the present study. Additionally, because the sample only represents millennials who are pursuing undergraduate degrees, it may not be entirely representative of other millennials of similar ages. Significant differences may exist between this undergraduate subgroup and the subgroup of millennials who are not college students, as well as those who are pursuing master's or doctoral degrees. Further research should attempt to identify these differences for the purpose of promoting financial literacy and active financial management across generational subgroups.

Another notable limitation exists in the self-reporting style of surveying. Responses from students may be subject to recall bias and may not be entirely accurate in reflecting the behaviors of respondents. Several questions asked for estimated figures, which may also not be entirely representative of the truth. It would be interesting to

gather data from a more observational approach to help limit bias and potential for misstatement.

There is much more to be said about the impact of the recession on different demographics and students with varying financial habits based on findings of the survey, but the overwhelming amount of data necessitates a limitation of scope for the present study. Future research based findings of this survey may answer questions of who was most impacted by the recession as well as reveal why some people were impacted more than others.

Another suggestion for future research on the topic could include longitudinal studies that observe the same students past graduation and throughout their adult lives – data gathered from the same population at a later time could be useful in determining whether or not the effects of the recession are lasting or dulled as time progresses. Recency theory dictates that the latter would be true, but because many millennials viewed the effects of the recession through the lenses of youth, the primacy effect may imply lasting influence. Additionally, more research could be conducted on subgroups of the millennial generation at a later time to determine whether or not the last of the generation differs significantly from those born in the 1980s and early 1990s. In 2024, the millennials born in the last birth year of the generation will be 20 years old and likely working toward an undergraduate degree similarly to students who participated in the 2008 Jump$tart Coalition's study and the present study conducted in 2016. It would be interesting to know how those students were impacted by the post-recession economic climate that exists today as compared students who gained financial awareness mid-recession and even pre-recession.

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Appendices

Appendix A: E-Mailed Survey Invitation

From: Brienna Kemp NVstudents@unr.edu via qemailserver.com
Subject: Undergraduate Money Management Survey
Date: March 28, 2016
To: <recipients>

Hello [Student Name],

My name is Brienna Kemp and I am an undergraduate student at the University of Nevada, Reno pursuing a Bachelor of Science in Accounting. I am conducting a study on the financial habits of millennials for my Honors thesis and would greatly appreciate 5-10 minutes of your time completing a brief survey. At the end of the survey, you will be given the option to enter a drawing for a chance to win a $50 Amazon e-gift card or one of three $10 Starbucks e-gift cards.

Below you will find the link to a questionnaire consisting of 40 closed-ended questions relating to demographics, spending and saving habits, and financial management practices. Responses will be gathered confidentially using Qualtrics survey software.

Follow this link to the Survey:
Take the Survey
Or copy and paste the URL below into your internet browser:
[Individualized Link]

Participation in this study is completely voluntary. There will not be any consequences if you refuse to participate in this study or discontinue participation at any time. If you feel uncomfortable while answering any of the survey questions, you may take a break and come back later, choose to not answer a question, or stop the process altogether.

By completing the questionnaire, you are consenting to participate in this research study. The data and information provided from the survey will be used in my thesis study, but I assure you that you will not be identified individually in any way. No other attempts will be made to contact you unless you are chosen as a prize recipient.

For any questions or concerns regarding this project or your rights as a participant you can contact me any time via email at colston.bd@gmail.com. You may also contact the University of Nevada, Reno Research Integrity Office at (775) 327-2368.

Thank you in advance for your consideration in participation of this study.

Sincerely,
Brienna Kemp

Appendix B: Web-Based Survey

1. **In what year were you born?***

%	
3.6	1982-1986
6.6	1987-1990
53.8	1991-1995
35.8	1996-1999

2. **What is your gender?**

35.5	Male
64.5	Female

3. **How do you describe yourself?**

68.6	White or Caucasian
2.7	Black or African-American
12.9	Hispanic American
9.6	Asian-American
1.5	American Indian, Alaska Native, or Native Hawaiian
4.7	Other

4. **Which of the following best describes your relationship status?**

78.1	Single
21.9	Married or living with significant other

5. **If married or living with a significant other, who manages the household finances?**

6.3	I do
1.5	My spouse/significant other does
16.2	We both do
75.9	I am not married or living with a significant other

6. **What is your class standing?**

19.0	Freshman
20.5	Sophomore
27.8	Junior
32.7	Senior

7. **Which of the following best describes your major or area of interest in college?**

6.3	Arts
18.4	Business or Economics
11.5	Engineering Humanities
6.3	Nursing
24.8	Science
14.1	Social Science
18.4	Other

8. **What is the highest level of education you expect to achieve?**
   - **2.9** Associate degree (two-year)
   - **42.5** Bachelor degree (four-year)
   - **33.0** Master's degree
   - **21.7** Doctorate, law or professional (six year or more)

9. **What is your average annual income? (Your own personal income if single, joint income if married or living with significant other. Include money given or loaned to you by the government, financial aid, parents, etc.)**
   - **60.8** Less than $20,000
   - **19.3** $20,000 to $29,999
   - **6.7** $30,000 to $39,999
   - **4.3** $40,000 to $49,999
   - **3.3** $50,000 to $59,999
   - **1.3** $60,000 to $69,999
   - **1.2** $70,000 to $79,999
   - **0.9** $80,000 to $89,999
   - **0.6** $90,000 to $99,999
   - **1.1** $100,000 to $149,999
   - **0.5** More than $150,000

10. **How much of your income was gifted or loaned to you by the government, financial aid, parents, and/or other non-employment sources?**
   - **36.0** Less than 10 percent
   - **11.1** 10-20 percent
   - **6.8** 21-30 percent
   - **5.4** 31-40 percent
   - **6.8** 41-50 percent
   - **6.8** 51-60 percent
   - **4.2** 61-70 percent
   - **6.1** 71-80 percent
   - **7.8** 81-90 percent
   - **9.1** More than 90 percent

11. **When you start to work full-time, after you finish your education, how much do you expect to make per year before deductions for taxes and other items?**
   - **2.1** Less than $20,000
   - **5.2** $20,000 to $29,999
   - **9.6** $30,000 to $39,999
   - **14.3** $40,000 to $49,999
   - **18.3** $50,000 to $59,999
   - **15.6** $60,000 to $69,999
   - **10.7** $70,000 to $79,999
   - **9.6** $80,000 to $89,999
   - **3.7** $90,000 to $99,999
   - **6.7** $100,000 to $149,999
   - **4.2** More than $150,000

12. What is your best estimate of your parents' total income last year? Consider annual income from all sources before taxes.

- **5.1** Less than $20,000
- **3.8** $20,000 to $29,999
- **6.2** $30,000 to $39,999
- **6.3** $40,000 to $49,999
- **5.9** $50,000 to $59,999
- **7.0** $60,000 to $69,999
- **7.6** $70,000 to $79,999
- **6.1** $80,000 to $89,999
- **7.1** $90,000 to $99,999
- **20.8** $100,000 to $149,999
- **15.9** More than $150,000
- **8.2** Don't know

13. What is the highest level of schooling your father or mother completed?

- **5.7** Neither completed high school
- **17.4** Completed high school
- **23.4** Some college
- **52.6** College graduate or more than college
- **0.8** Don't know

14. In what ways were you personally affected by the Great Recession that took place in the US from 2007-2009? (Check ALL that apply)

- **6.3** Lost a job
- **37.5** Could not find a job
- **17.1** Experienced a cut in wages
- **31.7** Had difficulty paying bills
- **19.3** Had difficulty purchasing food
- **3.5** Experienced repossession of a car or household item
- **10.2** Experienced foreclosure on a house
- **27.8** Postponed a significant life event (attending college, getting married, buying a house, etc.)

15. In what ways were your immediate family members affected by the Great Recession that took place in the US from 2007-2009 (Check ALL that apply)

- **33.1** Lost a job
- **27.8** Could not find a job
- **50.2** Experienced a cut in wages
- **64.0** Had difficulty paying bills
- **24.9** Had difficulty purchasing food
- **9.5** Experienced repossession of a car or household item
- **19.6** Experienced foreclosure on a house
- **23.0** Postponed a significant life event (attending college, getting married, buying a house, etc.)

16. How influential was the Great Recession on the way that you spend money, save money, and manage your finances today?

- **16.3** Not at all influential
- **26.2** Slightly influential
- **26.5** Somewhat influential
- **21.7** Moderately influential
- **9.3** Extremely influential

17. How many credit card accounts do you currently have? (With or without an available balance.)

- **13.9** 0
- **53.8** 1
- **17.4** 2
- **7.6** 3
- **3.9** 4
- **1.9** 5
- **1.5** 6 or more

18. Which of the following statements best describes the way in which you make payments on your credit cards?

- **60.4** I always pay off the total balance each month.
- **13.6** I occasionally do not pay off the balance for a month or so when I am short on funds.
- **9.5** I generally have an outstanding balance but occasionally am able to pay it off.
- **6.3** I seldom, if ever, pay off all my balances, but try to pay them down when I can.
- **10.3** I generally pay only the minimum required payment each month.

19. What is the outstanding balance on all of your credit cards?

- **72.3** Under $1,000
- **10.7** $1,000 to $2,499
- **5.6** $2,500 to $4,999
- **2.7** $5,000 to $9,999
- **1.1** More than $10,000
- **7.6** Don't know

20. When did you get your first credit card?

- **17.3** Before graduating high school
- **22.1** When I graduated from high school
- **22.2** When I started college
- **10.4** During my first year in college
- **28.0** After completing my first year of college

21. How often do you use a credit card (not attached to your checking account) to pay a bill?

- **61.2** Never
- **24.7** About one bill each month
- **8.8** 2-3 bills each month
- **5.3** 4 or more bills each month

22. When you finish your undergraduate education, how much do you expect to owe in student loans?

- **39.0** Nothing
- **9.0** Less than $5,000
- **11.5** $5,000 to $9,999
- **12.7** $10,000 to $19,999
- **13.3** $20,000 to $29,999
- **8.9** $30,000 to $49,999
- **5.6** $50,000 or more

23. Aside from any credit card debt or student loans you might have, what other types of debt do you have? (check ALL that apply)

- **43.3** Auto loans
- **13.4** Home mortgage
- **57.8** Personal debt or other debt

24. How much do you worry about your debts?

- **23.3** Never
- **24.8** A little
- **23.2** Sometimes
- **20.3** Often
- **8.5** Nearly all the time

25. How often do you check your credit report or credit score?

- **36.1** Never
- **15.8** Less than once a year
- **20.2** Once a year
- **27.9** More than once a year

26. Do you have a checking account?

- **98.9** Yes
- **1.1** No

27. How often do you check your bank account balance(s)?

- **1.1** Never
- **11.1** Less than once a week
- **23.5** Once a week
- **42.7** 2-6 times a week
- **15.7** Once a day
- **5.9** More than once a day

28. How often do you use the debit card issued by your bank? (Instead of cash, check, or credit card)

- **3.9** Never
- **10.1** Less than once a week
- **9.4** Once a week
- **44.9** 2-6 times a week
- **14.0** Once a day
- **17.6** More than once a day

29. When paying your bills:

- **1.0** I usually pay more than one bill per month late.
- **2.2** I usually pay one bill per month late.
- **56.5** I usually pay my bills on time.
- **40.4** I usually pay my bills before they are due.

30. Do you use direct withdrawal by a business from your checking account to pay any of your bills? (Arranged through the business, not your bank.)

- **39.7** Yes
- **60.3** No

31. How many paper checks do you use each month?

- **64.8** 0
- **34.5** 1-5
- **0.5** 6-10
- **0.2** 11 or more

32. How often have you bounced a check (had it returned for insufficient funds)?

- **90.1** Never
- **8.6** Once or twice in my lifetime
- **0.8** Once or twice per year
- **0.4** More than twice per year

33. How often do you balance (reconcile) your checkbook/checking account?

- **68.9** Never
- **7.3** Once a year
- **5.9** A few times a year
- **2.6** Every two months
- **9.6** Every month
- **5.6** More than once a month

34. As a percentage of your monthly income, how much money do you save each month?

- **37.4** Less than 10 percent
- **26.1** 10-20 percent
- **11.7** 21-30 percent
- **7.4** 31-40 percent
- **5.3** 41-50 percent
- **5.0** 51-60 percent
- **2.1** 61-70 percent
- **2.2** 71-80 percent
- **1.4** 81-90 percent
- **1.4** More than 90 percent

35. In what form do you hold your savings and investments? (Check ALL that apply)

- **97.8** Savings account(s)
- **3.7** Certificates of deposit
- **8.6** U. S. Savings Bonds
- **12.9** Stocks
- **6.0** Mutual funds
- **1.6** Bonds other than U. S. Savings Bonds
- **16.6** Retirement accounts such as 401k's and IRA's

36. How would you rate the savings and investments that you have?

- **15.8** More than adequate for my needs right now
- **32.2** Adequate for my needs right now
- **22.9** Slightly less than I should have right now
- **29.2** Much less than I should have right now

37. Who prepares your income taxes?

- **6.9** I do it myself by hand.
- **33.7** I do it myself using a computer program.
- **20.1** A tax preparer
- **39.3** My parents

38. Do you have a written monthly budget?

- **24.1** Yes
- **75.9** No

39. Where (or from whom) did you learn your financial management skills? (Please check the one that provided the most guidance to you in your day-to-day financial management.)

- **63.2** Parents
- **2.9** Other family or friends
- **2.3** High school course
- **1.1** College course
- **0.5** Presentation by a financial institution
- **0.3** Church or other faith based organization
- **0.7** Celebrity financial advisor (Suze Orman, Dave Ramsey, etc.)
- **27.2** I've figured it out on my own.
- **1.8** Other

40. I feel that I manage my personal finances:

- **40.4** Well
- **48.5** Okay
- **11.2** Poorly

*(participants selected the exact year of birth from a dropdown menu)

Appendix C: Institutional Review Board Approval

University of Nevada, Reno

Research Integrity Office
218 Ross Hall / 331,
Reno, Nevada 89557
775.327.2368 / 775.327.2369 fax
www.unr.edu/research-integrity

DATE:	March 23, 2016
TO:	Richard Mason, PhD, JD
FROM:	University of Nevada, Reno Institutional Review Board (IRB)
PROJECT TITLE:	[859592-1] The Recession Generation: An Examination of Millennials' Money Management Habits
REFERENCE #:	
SUBMISSION TYPE:	New Project
ACTION:	DETERMINATION OF EXEMPT STATUS
DECISION DATE:	March 23, 2016
REVIEW CATEGORY:	Exemption Category #2

--

The Research Integrity Office, or the IRB reviewed this project and has determined it is EXEMPT FROM IRB REVIEW according to federal regulations. Please note, the federal government has identified certain categories of research involving human subjects that qualify for exemption from federal regulations.

Only the Research Integrity Office and the IRB have been given authority by the University to make a determination that a study is exempt from federal regulations. The above-referenced protocol was reviewed and the research deemed eligible to proceed in accordance with the requirements of the Code of Federal Regulations on the Protection of Human Subjects (45 CFR 46.101 paragraph [b]).

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Reviewed Documents

- Application Form - Exempt 2 Tests Surveys Interviews Observation 110515.pdf (UPDATED: 03/22/2016)
- Application Form - Request for Human Subject Research Determination.pdf (UPDATED: 03/14/2016)
- Cover Sheet - Participant Invitation E-Mail.pdf (UPDATED: 03/22/2016)
- Questionnaire/Survey - Financial Habits of Millennials Survey.pdf (UPDATED: 03/22/2016)
- University of Nevada, Reno - Part I, Cover Sheet - University of Nevada, Reno - Part I, Cover Sheet (UPDATED: 03/14/2016)

If you have any questions, please contact Nancy Moody at 775.327.2367 or at nmoody@unr.edu.

NOTE for VA Researchers: You are not approved to begin this research until you receive an approval letter from the VASNHCS Associate Chief of Staff for Research stating that your research has been approved by the Research and Development Committee.

Sincerely,

Richard Bjur, PhD
Co-Chair, UNR IRB
University of Nevada Reno

Janet Usinger, PhD
Co-Chair, UNR IRB
University of Nevada Reno

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within University of Nevada, Reno IRB's record.