Financial Literacy and College Students: An Exploration of College Students' Attitudes, Behaviors, Influences and Preparedness for Financial Decisions After Graduation

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ABSTRACT

Financial literacy is the level of understanding an individual has for different financial topics, including but not limited to, investment vehicles, retirement accounts, saving, budgeting, credit and taxes, and the use of such knowledge to change one's financial behavior to create a more positive financial position for the future. Past research has shown that college students consistently have low levels of financial literacy. They also lack knowledgeable influences on their financial education. Because many college students will soon enter the workforce after graduation and will be responsible for managing their own salary, retirement accounts and investment options, they can be considered the ideal recipients of financial education. After demonstrating the apparent need, I explore the current situation regarding college students and financial literacy through a survey. Focus will be given to college students' attitudes towards their finances, their financial behavior, financial influences and their preparedness for future financial situations. Through the development of three financial scores, demographic factors were tested to determine if they had a significant impact on college students' financial scores. It was found that gender had a specific impact on college students' financial attitude score. Specifically, males had a higher score, indicating a greater interest in their personal financial knowledge. Students who had previously taken an "Introduction to Financial Management" or "Personal Financial Management" course had significantly higher financial attitude, behavior and financial future scores. This study creates the potential for a collegiate level curriculum that could have a meaningful impact on college students, as it would be a relevant education experience that would cover topics students directly expressed an interested in learning about.

INTRODUCTION

Currently, the United States is experiencing a lackluster economy, with unstable retirement plans, shaky Social Security, increasing personal debt, misuse of credit cards and a lack of awareness about the consequences of money mismanagement. One solution to these poor financial behaviors is financial literacy, in particular, the knowledge of financial topics such as bank accounts, loans, interest, retirement plans and insurance and the understanding of how to implement the knowledge to change an individual's financial behavior. Targeting college students as the recipients of financial education can be beneficial because college students consistently have low levels of financial literacy, and consequently, make poor financial decisions. According to the Hartford Financial Services Group,

> "Students and parents agree that college students are not well prepared to deal with the financial challenges that lie ahead. Less than one-quarter of students … and only twenty percent of parents say students are prepared to deal with the financial challenges that await them in the real world. More than three-quarters of students…report that they wish they had more help preparing for their personal finances" (as cited by National Financial Educators Council, 2013a).

These statistics indicate that there is a great need to understand the current state of the financial literacy of college students, and to understand how college students plan to learn the skills necessary to become financially independent adults.

The purpose of this research project is to conduct a survey of college students that aims to explore the levels of attitudes toward financial literacy, financial behaviors, influences, and attitudes toward future financial decisions of college students. The following sections include a Literature Review, development of Research Questions, Methods, Results and Discussion.

LITERATURE REVIEW

The following literature review is structured to first define financial literacy holistically. The review will then explore the advantages and disadvantages of financial education, elaborate on financial education standards, outline what programs are available, and comment on the evaluation of those programs. The review will then focus specifically on why college students are an ideal recipient of financial education and explore further into the attitudes, behaviors and influences of college students toward financial education.

Financial Literacy Training

In order to explore the situation surrounding college students and financial education, it is necessary to define financial literacy and understand it holistically. According to the Organization for Economic Cooperation and Development, financial education is the "process by which financial consumers/investors improve their understanding of financial products and concepts and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being" (O'Connell, 2009, p.13). Through financial education, participants should be able to improve their financial knowledge and skills, change their financial behavior and experience a positive change in their personal financial position (O'Connell, 2009, p. 13).

Essentially, financial education should include topics such as budgeting, savings, retirement planning, loans, credit or others. Financial literacy is the degree to which an individual understands the concepts and can use them successfully in their daily life. Although personal finance can be taught in a classroom, learned through professional experiences, personal experiences, observing other individuals or by other means, it is evident that many still lack financial literacy. For example, proficiency in financial topics is not common among young people. Startling results were found in the 2008 Jumpstart Coalition for Personal Financial Literacy National Survey. This survey found that the average high school student scored a 48.3% proficiency on the survey, which had decreased from 58.3% in 1997-1998. The average college student scored 62.2% on the survey. While these college students were considered in the 'passing'range of the survey, they still scored low on the survey. Additionally, Jumpstart pointed out that only "28% of Americans graduate from college, leaving nearly three quarters ill-equipped to make critical financial decisions" (Jumpstart Coalition, 2008, p. 8-9). Furthermore, people have an unwillingness to learn about and manage their own finances because they are confusing or they would rather have someone do it for them (Rotfeld, 2008, pg. 307). This is problematic because the young individuals who participated in the study will soon enter the workforce, armed forces, higher education or become parents and will need the skills to be financially competent.

The lack of financial preparation is not a problem just in the United States. Viera (2012) conducted an extensive literature review on the existing sources about financial literacy. She based the review on several main topics: financial literacy in young adults, gender influences, parental influences, low-income people, investment decisions, retirement planning, socioeconomic conditions and global financial literacy. After completing the literature review, she concluded that financial literacy levels in young adults is lacking worldwide (Viera, 2012, p. 33). This is problematic because most young people will someday in the future encounter important financial decisions including saving for retirement and other needs, investing in real and financial assets, and financial decisions including mortgages, other loans and unwanted debt.

Because each individual has a unique financial situation, it is important to note that financial literacy can and should be taught in multiple methods. Presenting the material in new and interesting ways would enhance an individual's ability to learn and implement healthy financial practices.

To summarize, financial literacy training is dynamic field that integrates many different financial and economic topics with both understanding and practice. It is not just the degree to which an individual understands financial concepts, but how they use that knowledge to change their behavior in a positive way to impact their future financial position. It can include many topics, ranging from investment vehicles, saving, budgeting, credit, taxes and more. Young people, in the United States and abroad, have traditionally scored low on financial literacy aptitude tests. For this reason, it is important to educate them so they can one day become successful, financially responsible adults.

Need for Financial Education of College Students

As seen in the research, there have been consistent levels of low financial literacy among college students. For this reason, and several others, college students are the ideal recipients of financial education programs. First, many college students many accept a job and enter the workforce upon graduation. They will be responsible for managing their salary, investment options and retirement accounts, likely for the first time. Educating college students before they begin making decisions that can impact their financial well-being will allow them to make more responsible financial decisions later on and mature into financially independent adults because they have been exposed to financial topics.

Another reason college students are the ideal recipients of financial education is due to the large amount of student loan debt they hold. The total amount of student loan debt in the United States is above one trillion dollars (Council of Independent Colleges, 2014). Furthermore, the average college senior will graduate from a higher education intuition not only with a degree, but also with about $29,000 in student loan debt (Institute for College Access and Success, 2014). This is problematic because while the students have accepted a large amount of debt through student loans, the average starting salary of a college graduate in 2013 was only $45,327 (National Association of Colleges and Employers, 2013). Students are being saddled with a large amount of debt, salaries that do not allow for full payment of that debt quickly, and a lack of education on how the debt and loan interest could impact their credit score. By being exposed to financial education, students can learn techniques and strategies to ensure that they have the resources available to manage their debt responsibly, effectively pay it off and understand how their credit score can have lifelong consequences (National Financial Educators Council, 2013b).

College students would also benefit from financial education as they seek to become financially independent adults. The College Savings Foundation found that college students are delaying many life milestones such as marriage, purchasing a home and having children because of financial reasons (College Savings Foundation, 2012). Furthermore, 37% college students stated that their finances are a significant cause of stress in their lives (Inceptia, 2013). By educating college students and increasing their financial literacy levels, these students will be able to approach their personal and professional lives with confidence and tackle financial situations with knowledge.

Finally, educating college students on financial topics is also necessary due to the impact demographic shifts have on for economic reality. In some countries such as the United States, Japan, Canada and Western Europe, birth rates are declining and individuals are living longer (South China Morning Post, 2014). Because of this, less money is being paid into social security programs and more is being distributed out per beneficiary over time. This means that as individual approach retirement, less monetary benefits will be paid out per retiree because the Social Security Fund needs to be able to support a larger amount of retirees (United States Social Security Administration, 2006). This situation is not unique to the United States, but to all countries with aging populations. Monticone offered the following statement regarding this economic phenomenon in Italy. While the author of this quote spoke about young Italians, tie situations of preparing for retirement is applicable to youth worldwide.

> "Social security benefits of younger cohorts will be reduced the most and therefore younger Italians will have a greater need for pension plans or private savings to build up their own retirement wealth. Thus, educational initiatives should target this group who will have a greater need to develop financial skills than its older counterpart…a higher degree of financial literacy will be needed by generations not yet in the labor market… financial education in schools is appropriate to spread a deeper financial culture and raise awareness of financial issues" (Monticone, 2010, 417-418).

Therefore, is important that young individuals prepare for their financial futures by educating themselves on retirement alternatives besides Social Security. They can no longer rely solely on government assistance during retirement. Instead, young workers must consider self-funded retirement accounts or employer-sponsored retirement programs now in order to supplement their income in future retirement. Financial education is an important component in this preparation because it can teach young individuals the concepts and strategies they will need as they enter the workforce, and for their eventual retirement.

Besides being ideal recipients, college students would also benefit from receiving financial education due to their misuse of credit. According to a 2009 study by Sallie Mae, 50% of college students have four or more credit cards. Furthermore, these students hold, on average, $4100 in credit card debt (Sallie Mae, 2009). Additionally troubling is the fact that 81% of college students underestimate how long it will take to pay off their credit card balance (Survey of the States, 2014). Credit cards are an easy way for college students to make purchases instantly, even if they may not be financially responsible choices. For this reason, college students overspend on unnecessary items such as food, travel and entertainment (Tenaglia, 2010, pg.7). Because college students have not been properly trained about credit, they are overconfident in their ability to pay back their debt and then find themselves in a financial situation in which they cannot escape their increasing debt. This is challenging because college students use credit as a means to purchase things that are not necessities, but then do not understand the cost of paying it back or its effect on their credit score and ability to gain financing in the future.

A final reason why college students need financial education revolves around who influences their financial decisions. Students learn through observing others and understanding their behaviors. Many different parties influence students each day: parents, other family members, friends, peers and the media. By being exposed to each of these mediums of

influence, students hear many different messages that can affect their educational experience, even if the influence is not a reliable source of information. Research has shown that both parents and peers have a significant influence on college students' financial behaviors and attitudes (Jorgensen 2007, Viera 2010, Schuchardt 2009).
While it is encouraging that college students are reaching out to trusted individuals in their lives for financial guidance, these individuals may not always be the best teachers on the subject. First, peers may not be the most ideal teacher because peers of college students are most likely to be other college students. These students are likely to also have low levels of financial literacy, or low levels of understanding of personal finance topics. If college students reach out to one another for guidance on finances, it could lead to a situation of the uneducated teaching the uneducated.

Parents may also not be the proper teachers for financial education. First, some parents do not have the ability to teach personal financial topics because they themselves do not have the knowledge or understanding. Without a solidified understanding of the topics, parents may not feel comfortable trying to explain topics to their children. Furthermore, some parents feel that their finances are a private matter that should only be discussed between spouses, not with children. Finally, according to the 2008 Charles Schwab Parents and Money Survey, "More than two-thirds (69%) of parents feel less prepared to give their teen advice and guidance about investing than they do the ""birds and bees"" (Charles Schwab, 2008). Without appropriate education, "students (ages 15 to 21) feel unprepared to face the complex world of the 21st Century" (The American Dream Project, 2007). This is problematic because if students are not receiving any financial education in schools, and are not receiving proper guidance form parents, students may not know other resources to turn to in which they can receive financial advice or example.

In review, college students are the ideal recipients of financial education for several reasons. First, they consistently score low on financial aptitude tests. Without proper knowledge, they are not prepared to manage their salary, investment opportunities or retirement accounts when entering the work force. Additionally, college students have a large amount of student debt that they must responsibly manage and effectively pay back. They also misuse credit that can result in the accumulation of credit card debt. The economic arena is also changing for college students, as they need alternatives to Social security for the retirement income. Finally, the influences students turn to for financial guidance are not always the best teachers. By targeting college students as the recipients of financial education, these individuals will be given the tools and resources they need to tackle the financial challenges they face.

Advantages and Disadvantages of Financial Education Programs

Financial education programs are one way in which college students can receive the education they need to become financially responsible and independent adults. These programs have received both kudos and criticism in the research. The following section outlines what the existing research has found regarding the advantages and disadvantages of financial education programs.

Becoming literate in financial topics can have many benefits to students. Not only is the student completing an educational course, they are also learning a valuable life skill. The value gained from learning financial skills is immense. According to Kapoor, Dlabay and

Huges (2012), students who complete a comprehensive course are able to engage in the personal financial planning process: determining their current financial situation, developing their own financial goals, identifying courses of action to take, evaluating alternative courses of action, creating and implementing a financial plan and revising and reviewing their own personal financial plan (Kapoor, Dlabay and Huges, 2012, p.3). The personal financial planning process is a life-long learning resource that students can use repeatedly as their financial situation changes. As students mature and take on different financial responsibilities, this skill has the potential to guide the student through a lifetime of necessary financial decisions.

In addition to allowing students to participate in the personal financial planning process, educating students on financial topics has other proven benefits. According to the Council for Economic Education, students who participate in financial education are more likely to save money, less likely to max out credit cards, less likely to make late credit card payments, more likely to pay of credit card balances in full each month, are less likely to be compulsive buyers and are more likely to take reasonable financial risk (Council for Economic Education, 2014). This finding was echoed in a study that tried to explain poor credit management behavior of college students. Tenaglia and Yobaccio (2010) found that while financial literacy training in high school was insignificant, taking just a one-hour seminar on financial literacy as freshmen, (with a correlation coefficient of -.344 and a t-statistic of -6.75), was significantly negatively related to poor credit management behaviors. Even just one hour of education had a significant impact on the likelihood that college students would improve their credit behavior. This finding is extremely valuable to the body of research literature because it shows that college students actually find value in learning about financial topics. It can be a common perception that students are not interested in their schooling at times, but this research helped to show that the students were actually engaged in this topic because it provided value to them. This is important because it shows that if the topic is presented in a meaningful way, students can realize the value that it can have for them. The attitude a student has toward a topic can be changed if the information is useful and has value for their life.

Another benefit can be seen through schools that had mandated financial literacy programs. Students who participated in these programs experienced greater savings and net worths as adults (Sun, 2013). Bernheim, et al (2001) investigated the long-term effect on high school financial curriculum mandates. The study involved surveying adults about their demographic information, financial and financial behavior information and high school information. Upon analysis of the survey results, it was determined that the curriculum mandates "significantly increased exposure to financial education, and ultimately elevate the rates at which individuals save and accumulate wealth during their adult lives" (Bernheim, 2001, p. 462).

This finding was also true in the 2009 Schuchardt study in which it was concluded that those students or employees who received financial education had more financial knowledge and made better financial decisions. Additionally, it was found that students of high schools that mandated a consumer education class be taken by all students had higher savings rates and net worth several years after taking such a course (Schuchardt, 2009, p. 87). This is important to note because as previously indicated, many states do not require financial education as a mandated course, but it has significant lifelong value for students.

Jorgensen (2007) also examined the behavior of college students toward finances. After conducting a survey, Jorgensen tested if gender, academic class level or socioeconomic level had an impact on financial behaviors of college students. The researcher found that academic class level had a significant impact on the financial behavior score of an individual. Their positive financial behaviors increased as their academic class rank rose. In other words, as students experienced more college classes and progressed in their collegiate career, their financial behaviors and habits became more positive. No other factors has a significant impact on the behavior (Jorgensen 2007, pg. 47).

This conclusion was also mimicked by Varcoe, et al. (2005). While students did not need to complete a mandatory high school financial education course, after a group of students completed a financial literacy curriculum developed by the researchers, they experienced an increase in their overall amount of savings. Females saw a greater increase in savings than males did. A final conclusion was that students knew more about car insurance and reported better shopping practices, such as comparing prices, after completing the curriculum (Varcoe, 2005, pps. 68-70).

It is interesting that females experienced a greater increase in savings than males did. While the research did not speak on this topic greatly, the gender difference could be related to gender differences that are present in society. Women have generally experienced lower wages than men and have often been portrayed as the minority in social situations. Perhaps women are using their finances as a way to regain power in society. Having control over finances can give an individual the ability to be financially independent and support themselves.

Although the potential benefits of financial education are clear, the research has shown that this area has not come without criticism. One area of concern is necessary funding for implementing financial education courses. A current issue a lack of funds for mandating financial education programs (Billitteri, 2009, p. 724). In order for a mandate to be successful, funding needs to be present. Another criticism is whether the program should be practical in nature (teaching about budgets, credits and bank accounts) or whether it should be theoretical (teaching economic principles like supply/demand). A third criticism is that some people feel that mandating the program will do little or nothing to improve financial literacy, but will take away valuable class time from other subjects (Billitteri, 2009, pg. 725). Furthermore, some critics think that the topic should not have its own class, but be included in other classes. There is also debate over whether financial education should begin in elementary school or should only be taught in high schools. Finally, there is much controversy over whether or not outside resources such as banks and credit unions should be utilized in sponsoring programs. Some critics argue that these institutions have a vested interest in the success of the program because they want to promote their own products such as credit cards, or bank accounts with their institution.

In addition, although evidence indicates that financial education enhances financial literacy and thereby self-confidence, this alone does not always translate into better financial decisions (Willis, 2008). Additionally, Willis argues that in order for people to become financially literate, they need to be taught the intricate details of the complicated financial system today. It could be a waste of time for people to become financially literate if they can just use a financial planner. Furthermore, it was noted that current financial education programs can have their results skewed because of self-assessment or a self-selection bias among participants.

While these points are valid, it is important to note that Willis is not an expert in the financial field, but instead a law professor. Her stance is interesting, but does not take into account that these are opinions that have flaws present. For example, while it may be easier for an individual to have a financial planner make important financial decisions on their behalf, it is still important that the individual receive the necessary education to make day-to-day financial decisions that can impact their current and long-term financial situation.

Despite some concerns about financial education, the literature has shown many more benefits to individuals. For this reason, educational institutions and other groups have begun to introduce and incorporate financial education into their curriculums. This decision has resulted in the need for educational and learning standards about financial education, along with plans as to how educational institutions will ensure that students are meeting learning objectives and that teachers are adequately prepared to teach their pupils.

Financial Education Standards

As educational standards have changed in the United States, more states have begun integrating economics and financial literacy standards in their school systems. This provides evidence that the subject of financial literacy has become increasingly important in recent years. However, although progress has been made, it has been occurring at a slow rate. For example, according to the 2014 Council for Economic Education Survey of the States, while all 50 states have standards for economics, only 45 have these standards implemented and less than half have a required class. Even more discouraging, although only 43 states have standards for financial education, only 35 require implementation of those standards and less than 20 that require a course be taken by students. (Council for Economic Education, 2014). The means by which standards will be implemented is determined at the state level. Some states have financial education and economics included as part of the Common Core standards program. These standards are considered fully implemented when the teachers have incorporated the standards into their classroom instruction for a full year (Common Core State Standards Initiative, 2015). Other states have adopted voluntary standards from the Council for Economic Education. One example is Rhode Island, in which a group of high school students reached out to the local government and the Council on Elementary and Secondary Education to adopt financial literacy standards (Borg, Linda, 2014).

Because many states have different approaches on implementing standards related to financial education, many students are not exposed to critical topics that can impact their future financial success. Furthermore, since many students are not receiving this information in high school, these students enter college and oftentimes graduate without receiving adequate education that informs them of pertinent financial information. This is a challenging dichotomy that young adults need to face: they are preparing themselves through education in college for a career that provides financial security, but are not receiving the education and understanding necessary to use their new economic resources to their fullest potential.

Overview of Financial Education Programs

There are many different financial education programs available to students. While many schools offer financial literacy classes, education is also available through public seminars sponsored by banks or credit unions, after-school clubs or collegiate courses. Furthermore, the government also provides extensive educational resources to the public through websites, pamphlets or collaborations with community groups.

The United States government offers educational programs that have specific goals in terms of outcomes for the students. The FTC program was aimed to inform both consumers and businesses about ways to protect against identity theft, financial fraud and scams, among other things (Federal Trade Commission, 2015). The FDIC program contains different educational modules that can be tailored to either adults or young adults that contain information to help make individuals more financially independent (Federal Deposit Insurance Corporation, 2013). My Money is an online site that allows individuals to research the "My Money Five": Earn, Save and Invest, Protect, Spend, Borrow. Users can also take money quizzes to test their knowledge of the five principles. Furthermore, a valuable resource on the site is the capability to view research articles on different life events that can affect one's financial situation, such as a marriage, birth of a child, or new job (Financial Literacy and Education Commission, 2014).

Besides programs through governmental agencies, other programs are available that educate on financial topics. One example of another program is EverFi, a computer-based, financial simulation program that students, grades 9-12, can use to learn about financial topics and interact with different scenarios. According to EverFi's website, the program covers the following topics: credit score, insurance, credit cards, taxes, investing, savings, 401Ks and mortgages. The program is no cost to the state or to the participating schools. Instead, outside groups like banks and credit unions sponsor the programs in schools.

Westerly Community Credit Union, located in Southern Rhode Island, explained more in-depth the purpose:

> "…EverFi, a new online Financial Education Program that uses the latest technology- video, animations, 3-D gaming, avatars and social networking- to bring financial concepts to life for today's digital generation. Students learn from mistakes made by Rufus, the program's leading character, as they follow him through real life experiences. After completing 10 modules on banking, credit scores, insurance, credit cards, student loans, mortgages, taxes, stocks, savings, 401Ks and more, students earn a Certification in Financial Literacy. Students can log onto the program for life, which will allow them to review specific topics before making important financial decisions in adulthood… EverFi is the nation's leading online Financial Education program used in over 3500 high schools across the country." (Westerly Community Credit Union, 2015).

This type of program is beneficial to schools because they can implement a program at no cost to them because the financial institution will bear the financial cost of the software. Additionally, if teachers do not feel confident in their ability to prepare an entire lesson plan regarding financial education, they can utilize the online modules to enhance their classroom instruction. Furthermore, the program covers a comprehensive area of topics that are integral to financial education. There is some concern about these type of school-institution partnership. While Westerly Community Credit Union claims to want this partnership to educate young adults, it is important for schools to evaluate potential sponsors for their credibility. Some institutions may want to target students with credit card applications or banking promotion. Schools will need to ensure that the financial education is the priority, not the agenda of the partnering financial institution.

Another alternative program available is the Jumpstart Coalition for Personal Financial Literacy. This is "an organization of organizations that share a commitment to advancing financial literacy among pre-school through college-age youth and working collaboratively toward effective financial education" (Jumpstart Coalition for Personal Financial Literacy, 2015). One of the group's most notable achievements in the financial education space is the development of a national financial literacy survey that has been given to many high school seniors and college students. The results of this annual survey helped lead to the creation of the National Standards in K-12 Personal Finance Education (Jumpstart Coalition for Personal Financial Literacy, 2015).

An additional resource available through the community is programming through banks and credit unions. These institutions offer different workshops and seminars that are open to the public. These workshops pertain not only to banking topics, but also to other personal finance topics that could be of value to their clients.

In addition to government, community group and online programs, states and schools districts across the United States have also adopted their own financial literacy programs to be used in schools. Two states, Utah and South Carolina, were identified by the National Association of State Boards of Education in their report "Who Will Own Our Children", as having exceptional programs (National Association of State Boards of Education, 2006). Utah has a General Financial Literacy course for high school juniors or seniors that is required in order for these students to graduate. The standards for this course include Decision Making and Goals, Income and Careers, Principles of Money Management and Savings, Investing and Retirement Planning. Teachers must have a secondary teaching license and an additional teaching endorsement in certain fields (Finance in the Classroom, 2015). The South Carolina State Department of Education has adopted financial literacy standards and has implemented them through the Financial Literacy Instruction Act of 2005. This law stated that financial literacy topics would be included in other current courses in accordance with the National K-12 Standards. Training is available for teachers as well to ensure they are up-to-date on the topics (South Carolina Department of Education, 2009).

These programs are noteworthy because the Utah course is a requirement for high school graduation. This means that each student who obtains a high school degree in Utah public schools will have received some training on financial education. The South Carolina program is significant because the Department of Education implemented financial education standards into other disciplines: mathematics, English/language arts and social studies (South Carolina Department of Education, 2009). These ideas are repeatable because if states already have standards in place, they can incorporate them into different disciplines and can make those standards a graduation requirement.

In addition to high school programs, colleges are also offering financial education resources to students through different means. Some colleges mandate that each student take a financial education course. Other colleges offer an elective course, such as Bryant University's "Personal Financial Planning" course. Additionally, colleges typically offer programming through on-campus offices such as Financial Aid or Student Affairs.

Evaluation of Financial Education Programs

Since the implementation of educational initiatives and programs can be a costly endeavor, there has been reasonable concern about the effectiveness of such programs. Individuals want to be sure that the money, labor and other resources deployed for these programs are used wisely. While there are many financial education programs available, unless they are relatable to the students' financial situation, the program may not be useful. Upgrades could be made to these programs to make them more effective.

It is imperative that there be a standardized way to evaluate the effectiveness of a financial education program. At the 2009 National Research Symposium on Financial Literacy and Education, it was concluded that in order for financial education programs to be more successful, they need to consider what behaviors consumers have, how they are formed and how they can be changed (Schuchardt, 2009, p. 85). It was found that there was not a systematic way to evaluate programs because each program had different content, delivery methods and target populations. Because each program was different, researchers could not identify the impact of the programs. The participants suggested that a standard of core financial literacy topics be created. It is also important to determine what method of financial education is the most effective for students in order to optimize learning and positive behavior changes (Schuchardt, 2009, p. 88).

Evaluation of financial education programs is necessary in order to determine what types of programs work best, how effective financial education programs are and to determine the value for money from financial education (O'Connell, 2009, p.15). There are three main types of evaluation: evaluation built into programs like a pre and post-test, evaluation of the effect of financial education on national populations, and evaluation based on past experiments (O'Connell, 2009, p.16). The need for a standardized financial education evaluation system is extremely important because there are currently issues with data integrity, practical difficulties such as cost of evaluating, isolation of factors that could affect participants' learning and a lack of benchmarks to compare programs to (O'Connell, 2009, p.19).

The call for evaluation and validation of financial education programs is central to the significance of these programs because without evaluation, there is no way to determine if a program is providing any service to participating students. Some necessary components of evaluation should include comparing current programs to one another to identify similarities and differences. Evaluation should also analyze student learning at both the local and national level. It may be necessary to collect data from students years after they participate in a financial education program to see what the long-term impact of their education was. This would help evaluate the current models of programs to see if students are actually gaining knowledge that will help them achieve long-term financial security. Finally, it is necessary to include the input of students in the evaluation of programs. Part of what this study investigates is what topics students have already learned about and what further interest students have in different financial topics. Students have preferences in the topics that they wish to learn about, and they know directly which financial decisions they will be facing in the near future. Who better to assist in the evaluation of a program than the actual program participants? These criteria would help to ensure that financial education programs are providing value to students and are worthwhile of the resources that they require.

Attributes and Implementation of Effective Financial Education Programs

The literature has exhibited several themes regarding the efficacy of financial education programs. First, financial education should be modernized, motivational and needs to begin earlier than high school (McCormick, 2009, p.74). Second, standards should be implemented in all school systems so teachers can provide the best education to students (McCormick, 2009, pg.79). In terms of the programs themselves, it was noted that programs are more effective if they are targeted and have a specific topic focus (i.e. credit card counseling) (Hathaway & Khatiwada, 2008, p.2).

One way to implement standards and evaluate programs could be through education administration. The NASBE report "Who Will Own Our Children," concluded that state boards of education have the power to implement financial literacy programs in schools. In particular, NASBE cited activities such as preparing and integrating programs, evaluating programs and the teacher's ability to teach financial education as problems with today's financial literacy curriculums. Some ways to fix these problems include critically evaluating financial education programs, exposing students earlier to financial topics, training and recertifying teachers and partnering with outside groups (National Association of State Boards of Education, 2006). Administration in all educational arenas have the power to adopt new curriculum to ensure that financial topics become an area that students are proficient in.

The implementation of financial education programs is central to the movement towards financial education of college students. With programs that are modern, applicable to students' lives, standardized and targeted, students will have the opportunity to receive education that can impact their lives and their financial well-being.

RESEARCH QUESTIONS

Based upon the literature review, this study is designed to explore what the current situation is regarding college students and their financial literacy. The research questions and hypotheses are situated among four themes found in the 2007 Jorgensen dissertation: personal attitudes of college students towards their finances, current financial behaviors of college students, who/what influences college students' financial decisions in the past and future and whether college students have an understanding about what future financial situations they may experience. Based upon the survey, scores will be created to measure financial attitudes, financial behaviors and financial future. The following demographic factors will be analyzed to see if they have a significant impact on the scores of respondents: Gender, Age, Academic Class, Degree, Concentration, Minor, Years of Working Experience, Taken an introduction to financial management course (Yes/No) and Taken an introduction to personal financial management course (Yes/No).

It is hypothesized that gender will be a significant factor on scores because males may be more likely to engage in risky behavior, thus affecting their financial behavior score. It is hypothesized that the number of years working experience a respondent has will be significant because the longer an individual has worked, the more aware of their financial behaviors and decisions they will be. As demonstrated in the literature review, it is predicted that academic class will be a significant factor because as students rise in their academic rank, they are becoming more responsible and thinking about their future more seriously. It is also predicted that whether or not participants have taken an introduction to financial management or personal finance class will have a significant impact on scores because they will have gained important financial knowledge from such courses. Finally, it is predicted that age, degree, concentration and minor will not have a significant impact on the scores.

For financial attitudes, it is hypothesized that college students will have high levels of confidence in their ability to manage their own finances and handle their financial future. Despite high levels of confidence, the students will have an interest in learning more about different financial topics. Furthermore, despite having high levels of confidence, it is hypothesized that college students will not feel in control of their financial situation, possibly due to large amounts of student debt.

In terms of financial behaviors, it is hypothesized that gender will have a significant impact because males may be more likely to engage in riskier behaviors. it is hypothesized that college students are spending-oriented individuals, perhaps due to a lack of financial responsibilities, peer pressure and a larger amount of free time. Despite being spending oriented, the students will not budget or track spending thoroughly and will maintain minimal financial records through online or mobile applications. The students will have debt consisting of mainly student loans and credit card debt. It is hypothesized that most students will pay off this debt themselves, but will use their parents as a "bail-out" if necessary.

It is predicted that college students are influenced by their parents, other family members, peers, high school/ college education, the media and the internet. The students grew up learning about topics such as budgeting, being honest in all dealings and working for what they receive. Even though they learned about different topics from their influences, college students were not included in making financial decisions in their families. This is because in their families, finances were kept private or were argued about.

Lastly, college students expect to learn about finances in the future again from their families and friends, but also from further schooling, life experiences and their future employers. College students do not have a strong understanding on different upcoming financial situations, such as job offers, retirement accounts, when loans payments start and rental agreements.

METHODS

Measures

The measure used in this research is based upon Dr. Bryce Jorgensen's survey, "College Student Financial Literacy Survey". This was taken from Dr. Jorgensen's dissertation "Financial Literacy of College Students: Parental and Peer Influences". This survey, which Dr. Jorgensen created, has the purpose of measuring the personal financial literacy levels of college students, the impact of parental and peer influences, and how knowledge and attitude is correlated to financial behavior. Specifically, impacts of gender, academic class ranking and socioeconomic status were examined. (Jorgensen, 2007).

This study uses portions of the "College Student Financial Literacy Survey", as well as additional questions created by the researcher that were used in supplement to the original survey. In total, thirty five questions are included in the survey. This total encompasses demographic questions, as well as questions probing four content areas: financial attitudes, financial behaviors, influences and financial future of college students. The survey was distributed online via a Qualtrics survey link. Participants were notified of any risks involved with taking the survey through an informed consent form at the beginning of the survey.

Permission to use all or portions of the "College Student Financial Literacy Survey" was granted to the researcher by Dr. Jorgensen via email. Additionally, the Institutional Review Board for the sample university approved the research survey. Copies of the permission email, IRB Approval, Informed Consent Form and survey questions can be viewed in the Appendix.

Procedure

The survey was distributed via a Qualtrics online survey link. The survey was activated on January 15, 2015. The survey was distributed to university students via email and Facebook. With the survey link, emails and Facebook posts indicated that the survey could be completed by anyone identifying as a college student (pursuing an undergraduate, graduate or doctorate level degree). While the survey was primarily distributed to undergraduate and graduate level students at a university in the New England region of the United States, since the survey was posted on Facebook, there is the potential that students outside of this university responded. After the survey had been active for one month, the online link was shut down on February 15, 2015 and the results were aggregated and downloaded into Microsoft Excel using the Qualtrics software. The data was then analyzed using the statistics software SPSS.

Participants

While the majority of the study participants were from a university in the Northeastern region of the United States, since the survey was distributed via email and social media, some of the participants were from outside this university. A total of 101 students responded to the survey, but only 75 completed the survey. Due to missing values for some questions, only 67 of the completed 75 responses were used for analysis.

Of the 67 usable responses, the respondents were broken into 64.2% females and 35.8% males (See Appendix F- Descriptive Statistics of Response Demographics). The respondents were on average 21 years old, with the next highest response among 18 and 19 year olds. The highest response was received among second semester seniors, followed by second semester freshmen and second semester sophomores. For the full demographic responses of the 67 usable surveys, please see Appendix F.

Of the 26 participants that partially completed the survey, there were 13 females, 4 males and 9 that did not disclose their gender. These students were on average 19 years old and mainly freshmen and sophomore students. It is not possible to determine exactly why these 26 students did not complete the survey, but some possible explanations could be that they were put off by the survey length, had limited time in their schedule to complete it or simply lacked interest in the topics.

Analyses

For the purposes of analyzing the data, only the participants who completed the survey entirely will be analyzed. An exploration into the 26 participants that only partially completed the survey will be included in the Discussion section of this paper. 75 participants completed the survey entirely, but 8 respondents were removed due to too many missing values for some questions. A total of 67 respondents were analyzed.

Data was downloaded into Microsoft Excel and recoded in order to enter it into SPSS. Scores were also created for financial attitude, financial behavior and financial future. In order to create these scores, questions were designed for each category that captured the essence of that factor. Responses were then assigned a numeric point value. Each respondents' answers to each question were summed to form the three scores.

For the financial attitudes score, questions 11 (How do you feel about your ability to manage your own finances?), 12 (How interested are you in increasing your financial knowledge?), 13 (Would you take a personal finance course as an elective?), 14 (What topics would be of interest to you [for a personal finance elective]?), 15 (regarding rating the importance of different financial behaviors) and 16 (using a Likert scale to rate how true different financial statements are to the respondent). Points were assigned to each answer of each question. For a breakdown of the points assignment, please see Appendix E. A higher financial attitude score is better because it indicates a greater interest in financial knowledge, topics and recognition of important financial scenarios.

For the financial behavior score, questions 17(saving-oriented versus spending-oriented), 20 (How do you maintain your financial records?) and 26 (using a Likert scale to rate how true different financial behaviors are of the respondent). A higher financial behavior score is better because it indicates more responsible financial habits.

For the financial future score, question 35 (Answer the following questions about your understanding of the following financial situations) was used. A higher financial future score is better because it indicates that the respondent had a larger reported understanding of the given financial situations.

Data analysis was conducted using the IBM SPSS Statistics Software package. Frequencies of each question were run to determine how the respondents answered each question. Descriptive statistics such as overall means were computed for the financial scores. A correlations test was run on the financial scores. One-way ANOVAs and a MANOVA were also run to determine if any of the demographic factors had a significant impact on the scores.

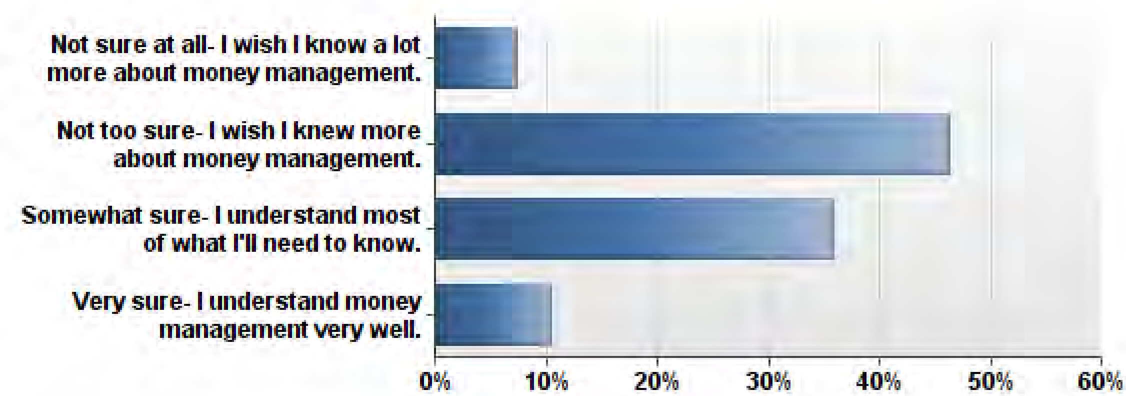
RESULTS

The results section of this study is split into two portions: the General Survey Results and the results of the Financial Scores Analysis. The General Survey Results will present graphics regarding key questions from the survey. The Financial Scores Results will present the findings of the statistical analyses of variances of the three scores.

General Survey Results

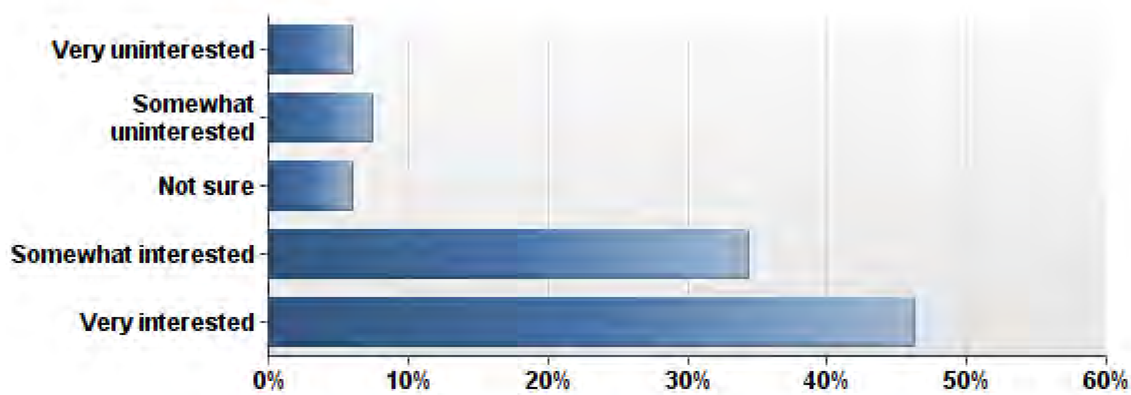
Concerning financial attitudes of college students, several questions are key to illustrate the attitudes of the respondents. First, as exhibited in the graph below, only 10.4% of the students surveyed feel very sure about their ability to manage their own finances. The majority of students responded that they were not too sure and wished they knew more about money management.

Question 11- How Do You Feel About Your Ability to Manage Your Own Finances?



Because many students expressed that they wish they knew more about money management, it is not surprising that over 80% of the respondents expressed some interest in increasing their financial knowledge.

Q12- How Interested Are You in Increasing Your Financial Knowledge?



Students also indicated that they had an interest in learning about many different financial topics in a personal finance course, but the most prominent areas of interest can be seen in the table below. Students expressed an interest in topics that they will soon encounter such as investing their salary, contributing to a retirement account and budgeting.

Q14: Top Five Topics of Interest for a Personal Finance Course

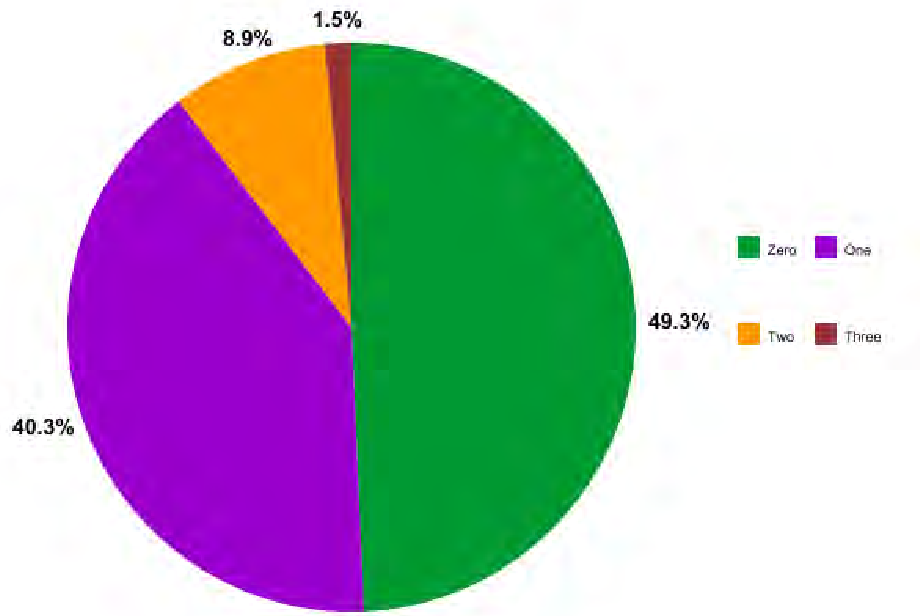
Rank	Topic	Percentage of Respondents
1	Investing	79%
2	Budgeting	76%
3	Taxes	67%
3	Saving	67%
4	Retirement Accounts	61%
5	Loans/ Debt	60%

Consistent with the data found in the literature review, college students own a large amount of debt, with over one third owing more than $20,000.

Q19: How Much Debt Do You Own, Including Student Loans, Credit Cards and Other Loans (not including mortgages)?

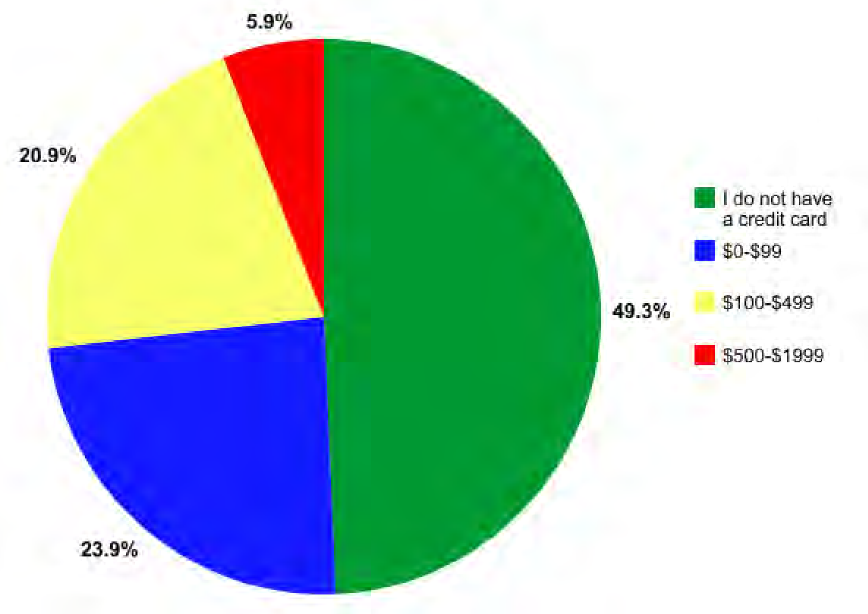
Concerning credit, the students surveyed seemed to have more responsible behavior than their demographic, in general. Almost half of the respondents reported not having a credit card at all and only about ten percent had more than one credit card.

Q22- How Many Credit Cards Do You Have?



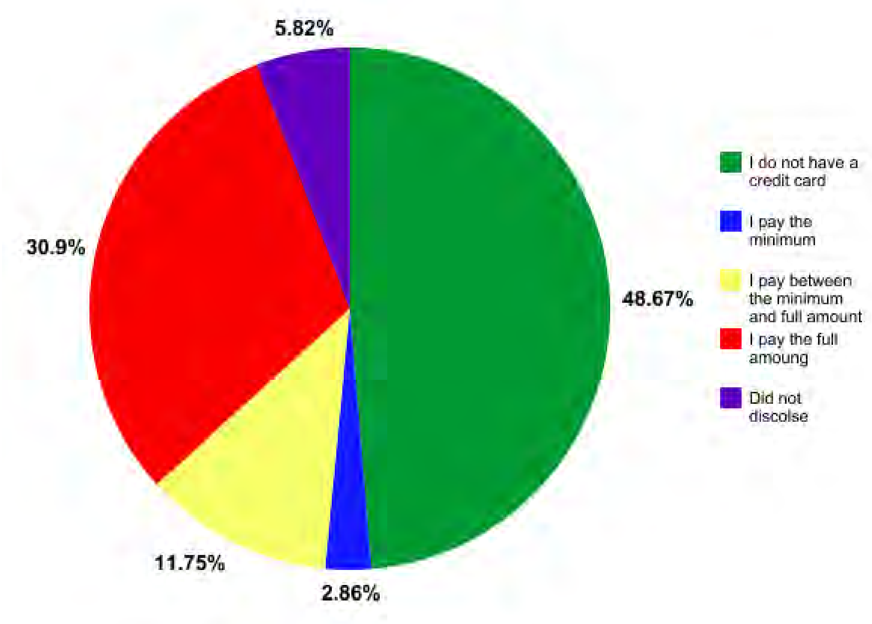
When compared to the 2009 Sallie Mae survey, respondents of this survey appeared to be more responsible with their credit card use, indicating lower than expected amounts of outstanding credit card debt. In fact, most respondents who had a credit card self-reported debt amounts that are more manageable. Over 44% of the respondents indicated that their credit card debt was between $0 and $499. Only a small amount had debt levels over $500.

Q23- What is the Combined Total Balance on Your Credit Card?



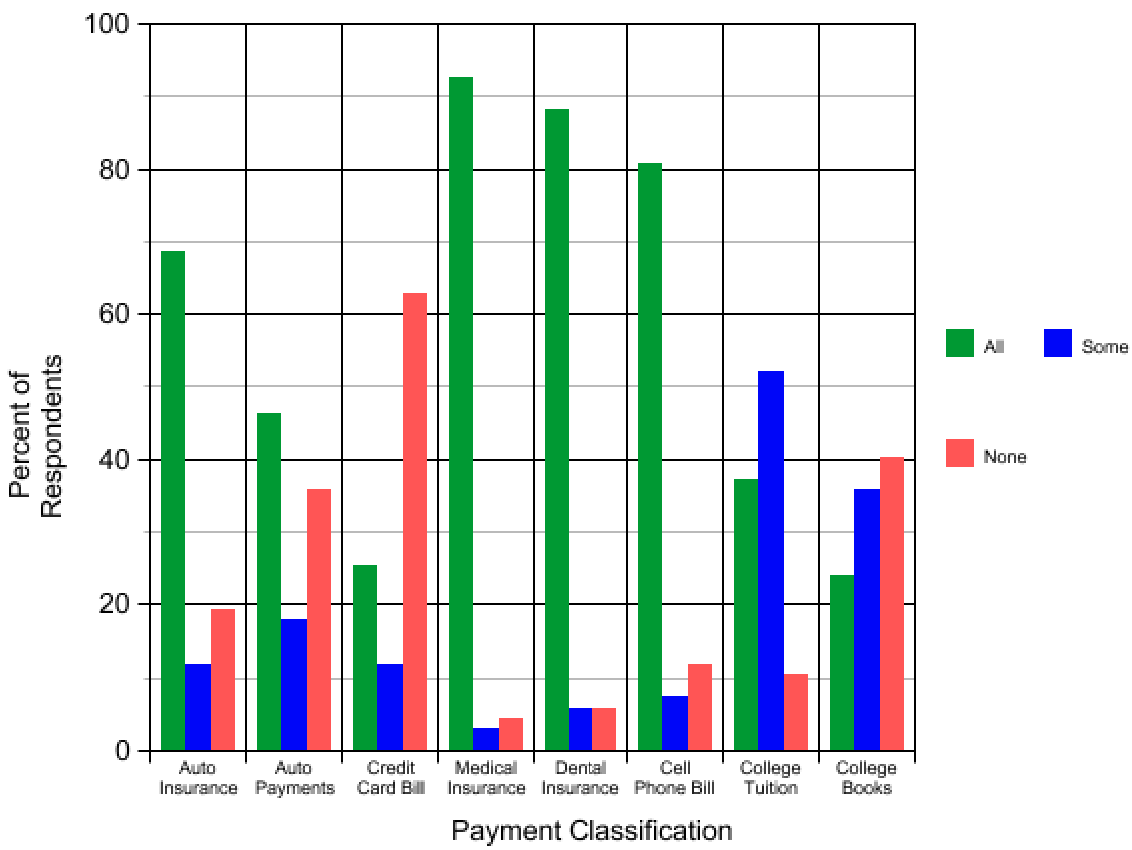
Roughly one third of the respondents indicated that they pay the full amount due on their monthly credit card statement. A promising response was that only 2.86% of respondents pay the minimum and no respondents indicated that they skip payments.

Q25- If you pay for your credit card balance, how do you usually pay for your monthly credit card bills?

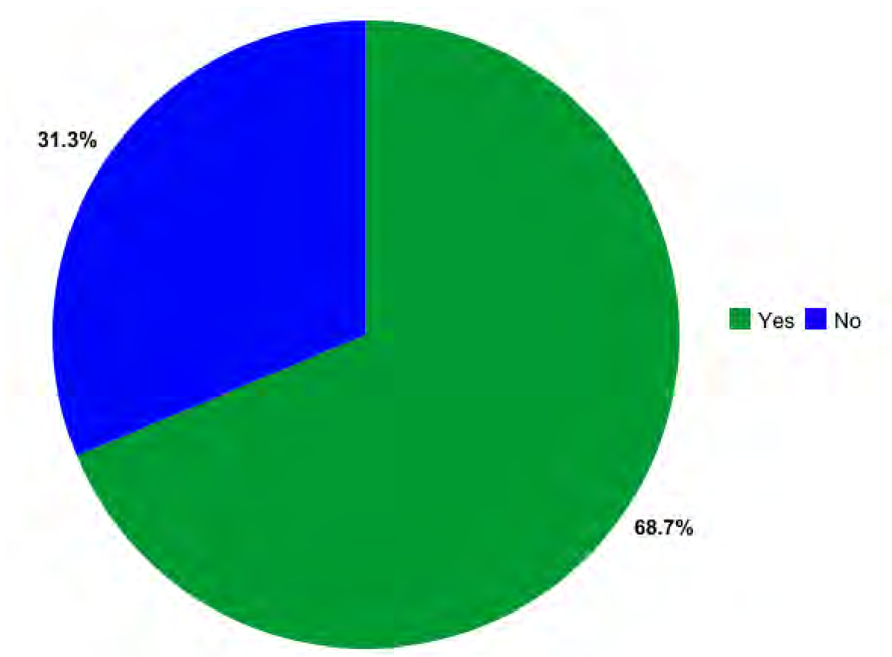


Students were also asked to indicate to which extent their parent or guardian pays for different expenses. Based upon the responses, the majority of parents of the responding students pay for all of their child's auto insurance, auto payments, medical insurance, dental insurance and cell phone bill. Parents only assist for some of the costs regarding college tuition and college books. The majority of students also responded that their parents does not pay for any of their credit card bill.

Q27- My parent/guardian pays for:

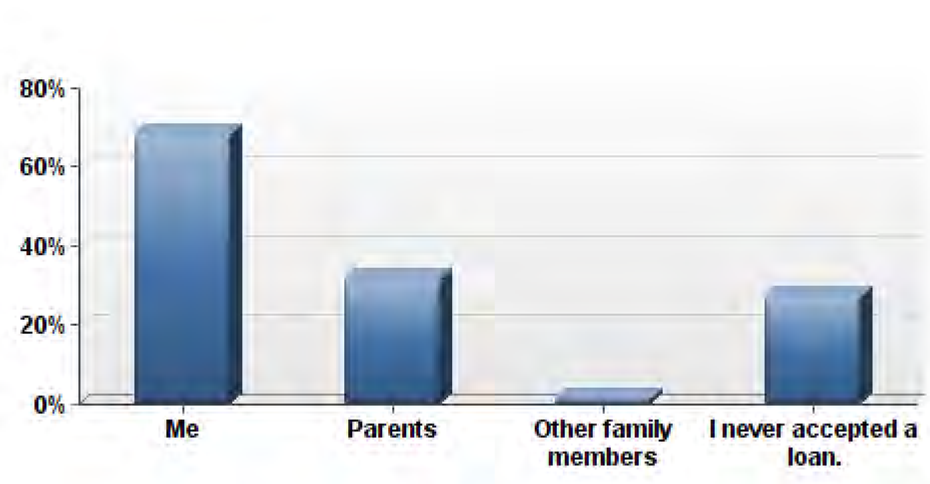


Q28- Do You Have Student Loans?



About two thirds of the students in the survey reported having student loans. Concerning payment of the loans, the financial responsibility will be that of the students themselves and sometimes their parents.

Q29- Who Will Pay Off Your Student Loans?



Students also indicated who they felt had influenced them in the past regarding personal financial management, and who they felt they could go to in the future to increase their financial knowledge.

Q30- Where Do You Feel You Have Learned About Personal Financial Management?

Rank	Answer	Percentage
1	Parents	96%
2	College	45%
3	Internet	45%
4	High School	28%
5	Other Family Members/Books/Media	25% (Tie)

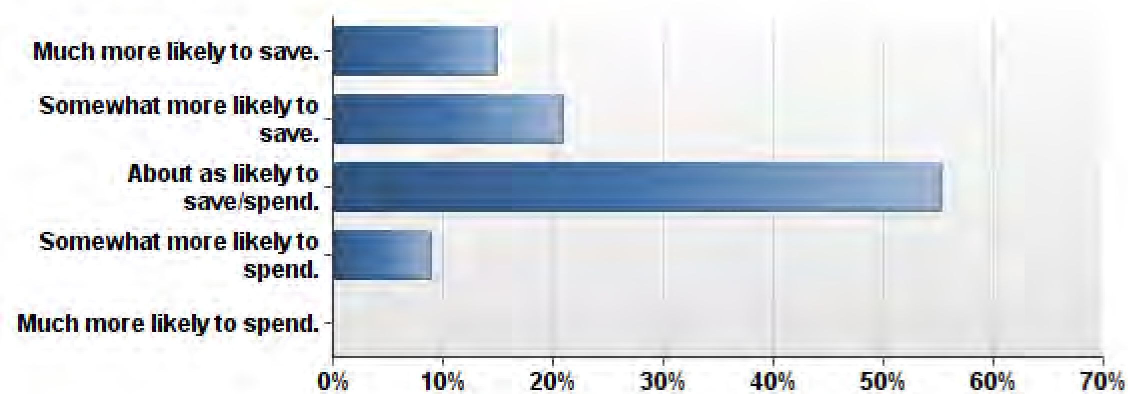
Q34- Where Do You Expect to Learn More About or Increase Your Financial Knowledge?

Rank	Answer	Percentage
1	Life Experiences	75%
2	Parents	67%
3	Future Job/ Employers	57%
4	Additional Schooling	55%
5	Books	43%

It is interesting to note that in the past, students tended towards education to gain knowledge, but for the future, report that life experiences will teach them what they need to know.

To investigate further the influence of parents, one question asked students to compare their saving and spending habits to those of their parents. Most students responded that they will be about as likely to save or spend as their parents, but the next largest group of respondents indicated that they will be more likely to save than their parents, perhaps indicating a hope to not repeat some financial situations that their parents may have experienced.

Q33- Compared to Your Parents, Would You Say That You Are:



Finally, the last question of the survey presented different financial situations that college students may experience in their short-term futures. Students were asked if they understood each of the scenarios. For graphics concerning student responses to each question, please see Appendix G.

Of the eleven scenarios, the majority of respondents only understood the six following situations (The percentage of respondents who answered "Yes" is in parentheses):

- What factors are used to determine a loan (62.7%)
- The concept of compound interest (74.6%)

- When they are no longer covered under their parent's insurance (74.6%)
- Feel comfortable reading a job offer and understanding their benefits (67.2%)
- How to apply for a credit card (59.7%)
- When to begin paying off student loans (62.5%)

Of the eleven scenarios, the majority of respondents did not understanding the five following situations (The percentage of respondents who answered "No" is in parentheses).

- Terms of auto insurance (52.2%)
- How to obtain a credit score and understand its meaning (58.2%)
- Where to go to investment in the stock market and other securities (59.7%)
- The difference between retirement accounts and how to start investing in them (67.2%)
- How to file their own taxes (76.1%)

Financial Score Results

First means and standard deviations calculations were performed for the three financial scores.

Figure 1- Descriptive Statistics of Financial Scores

	N	Minimum	Maximum	Mean	Std. Deviation
FINANCIAL ATTITUDE SCORES	67	49	89	71.18	8.816
FINANCIAL BEHAVIOR SCORE	67	15	33	25.27	3.788
FINANCIAL FUTURE SCORE	67	0	11	5.40	2.796
Valid N (listwise)	67				

For each of the scores, a higher score is better because it indicates a higher level of positive attitude associated with financial education and topics, better financial habits and behaviors and a greater understanding of future financial situations.

A correlation test was also performed for the three financial scores. Correlations is a statistical tool to determine if there are any underlying relationships between variables.

Figure 2- Correlations of Financial Scores

		FINANCIAL ATTITUDE SCORES	FINANCIAL BEHAVIOR SCORE	FINANCIAL FUTURE SCORE
FINANCIAL ATTITUDE SCORES	Pearson Correlation	1	.465**	.512**
	Sig. (2-tailed)		.000	.000
	N	67	67	67
FINANCIAL BEHAVIOR SCORE	Pearson Correlation	.465**	1	.310*
	Sig. (2-tailed)	.000		.011
	N	67	67	67
FINANCIAL FUTURE SCORE	Pearson Correlation	.512**	.310*	1
	Sig. (2-tailed)	.000	.011	
	N	67	67	67

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The test indicated that there was a highly positive correlation between the three scores. Specifically, financial attitude score was positively correlated with the financial behavior score (r =0.465, p=0.01) and the financial future score (r =0.512, p=0.01). The financial behavior score was also positively correlated with the financial score (r =0.310, p=0.05). The Pearson Correlation statistic, if positive and greater than one, indicates the degree to which two variables are associated with one another. A positive correlation indicates that as one variable increases in value, the variable it is correlated with will also increase (Lund Research, Ltd., 2013).

Next One-Way ANOVAs (analysis of variances) were run for each demographic characteristic by each score. This was done to determine if any demographic factors had a significant impact on the differences in financial scores. The entire ANOVA results are outlined in Appendix F.

There was a significant difference found between financial attitudes score and gender, F (1, 65) = 5.083, p=0.028. Specifically, the difference was that males had a higher financial attitudes score than females (See Appendix H- Post-Hoc Tests). There was also a significant different between the financial attitude score and whether or not a student had taken a financial management course, F (1, 64) =9.132, p=0.004. Specifically, the different was that those students who had taken a financial management course had a higher financial attitude score. Another significant different was found between the financial attitude score and whether or not a student had taken a personal finance course, F(6,65)=10.258, p=0.002.

Specifically, the different was that those students who had taken a personal finance course had a higher financial attitude score.

The only significant ANOVA for the financial behavior score was found between the financial behavior score and whether or not a student had taken a financial management course $F(1,64)=11.059$, $p=0.001$. Specifically, the different was that those students who had taken a financial management course had a higher financial behavior score.

Finally, there were two significant ANOVAs for the financial future score. First, there was a significant different between the financial future score and whether or not a student had taken a financial management course, $F(1,64)=6.935$, $p=0.011$. The difference was that those students who had taken a financial management course had a higher financial future score.

Additionally, there was a significant difference between the financial future score and whether or not a student had taken a personal finance course $F(1,65)=6.303$, $p=0.015$. It was found that students who had taken a personal finance course experienced a higher financial future score than those who did not take such a course.

In addition to the one-way ANOVAs, a MANOVA (multiple analysis of variance) to determine if there is significance between the financial scores and the demographic factors. The results of the MANOVA can be seen in Appendix G. The MANOVA was not significant.

DISCUSSION

The survey provided interesting results about college students and their attitudes, behaviors, influences and understanding of the financial future. This discussion section will examine each area individually and then describe limitations of the study and areas for future research.

Financial Attitudes

The three significant factors on the financial attitudes score were gender, financial management course and personal finance course. It is interesting that gender had a significant impact of the financial attitudes of college students. Specifically, it was interesting that on average, males were found to have higher financial attitudes scores. This indicates that males have higher confidence in their ability to manage their own finances, have a greater interest in increasing their financial knowledge, are more likely to take a personal finance course and identify more with different financial statements.

One possible explanation for this difference in gender scores could be social norms. Historically, men have made more money than women. Some industries are male-saturated and many high-level executive positions are held by majority males. Because of this culture in which men are associated with financial management, females may feel it is more socially acceptable for males to handle the management of finances. Females may also not value their own ability to take an active management approach with their finances if males in their lives may do it for me. It may also be possible that because of this social norm, women do not feel welcome or do not feel it is important to be engaged in their own financial world. Previous studies, such as the 2007 Jorgensen study, did not find that gender had a significant impact on the financial attitude of college students. The discrepancy in findings may be due to the smaller scale of this study. Additionally, a majority of females participated in this study, which may have impacted the significance of the gender variable.

Whether or not a student had taken a financial management or personal finance course also had an impact on the respondents' financial attitudes score. It was found that those students who had taken either of those courses had a higher financial attitudes score. This finding seems logical because by taking such courses, students are exposed to many financial topics and scenarios that may have educated them about the importance of being aware of one's financial situation. By taking the courses, students may also have realized an interest in their own financial welfare which can raise their financial attitudes scores. This finding is notable because it indicates that financial education, whether it focuses on financial management or personal finance, truly does have an impact on college students. This strengthens the existing body of research that claims financial education had positive benefits to recipients.

Financial Behaviors

The financial behavior of the survey respondents was better than expected when compared to the college student demographic, in general. The survey respondents indicated lower numbers of credit cards and lower amounts of debt than found in the 2009 Sallie Mae survey. This could possibly be explained by the 2009 Credit CARD Act (Credit Card Accountability, Responsibility and Disclosure Act). This law allowed for the reform of the relationship between college students and credit card companies. After this act became law, it became illegal for credit card companies to offer prizes or gifts to students if they applied for a credit card. It also became more difficult for credit cards companies to solicit and market directly to college students on their college campuses. Furthermore, if a student under twenty one years of age wanted to apply for a credit card, they would now need an adult over twenty one years old to co-sign with them (Acosta Scott, 2009). Because of this reformation, it is logical that students now hold less credit cards and consequently, accumulate less credit card debt.

Another important result to note was that the majority students indicated that it was somewhat important or very important to maintain adequate financial records, spend less than their income, maintain adequate insurance coverage and plan and implement a regular savings or investment program. While this study did not conduct any primary research with students to gain better insights into their individual habits, in general, the survey respondents seemed to have the ability to recognize and initiate positive financial behaviors.

It was found that the financial management course had a significant impact on the financial behavior score of respondents. Those respondents who had taken a financial management course experienced higher financial behavior scores. The higher score indicates students that are more saving-oriented, maintain detailed or highly detailed financial records and recognize the importance of their own positive financial behaviors. Again, it is significant that the financial management course was the significant factor because it supports the existing claims that financial education can impact financial behaviors. While this study did not measure the level of financial behaviors before and after students took the financial management course, it indicates that when compared with students who had not taken a financial management course, the educated students had more positive, responsible financial behaviors. More research still needs to be conducted in order to determine the pre and post education levels of financial behavior, and the lasting impact of the financial education years down the road.

Financial Influences

Concerning influences, students indicated that in the past, they used parents, high school and collegiate education and the Internet as ways that they learned about personal financial management. This is logical because while college students may have not experienced many financial situations themselves, they may have witnessed their parents or other family members experience situations. This would have been an excellent learning experience for college students. Additionally, formalized education such as high school and college are also logical responses to this question because college students will likely see educational institutions as reliable sources of information.

There is an interesting, but logical, contrast from past influences to future influences. Students indicated that while parents would still provide a key role in influencing their financial knowledge, life would also play a role. Students felt that by experiencing financial situations themselves and making their own decisions, this would influence their financial knowledge. On this same point, students viewed their future employers as a source of influence. By working and gaining experience, students may base some of their financial decisions off of their professional career.

Another key point is that in both situations, past and future, students indicated education (high school, college or additional schooling) as influences to their financial knowledge. Not only does this support the claim that students are viewing education as a reliable source of influences, but it also indicates that there is a desire by students to learn more about their finances. Financial education appears to be highly valued by college students as a source of influence regarding their personal financial management and financial knowledge.

Financial Future

One of the most interesting findings from the survey revolves around college students and their preparedness for financial situations in the near future. The financial future score measured whether or not the respondent had an understanding of eleven different financial situations that they could experience in the near future after college graduation. It was found that students who took either a financial management course or a personal finance course experienced a higher financial future score.

This observation is extremely relevant to the purpose of this study because it again supports the claim in the existing research that financial education can have benefits to participants, including preparation for different financial situations. Those students who were exposed to different financial situations such as student loan dent, filing taxes and auto insurance were able to report a higher understanding of these topics because of their education. Students who were not exposed to these topics due to education were left to rely on other means of learning about these topics, or did not understand them at all.

Additionally, it is interesting to note that the overall mean financial future score was 5.40. This number indicates that out of a possible eleven scenarios, students only felt comfortable in their understanding of about half of them. For students that had taken a financial management or personal finance course, their means scores were 6.44 and 6.41, respectively. For the students that did not take a financial management or personal finance course, their means scores were 4.67 and 4.73, respectively. These numbers show that by taking a financial management or personal finance course, the financial future score was able to be raised by almost two points. This signifies an understanding of two more financial scenarios because of financial education.

Understanding of Future Financial Situations

To delve further into the financial future scores, an exploration is needed into which questions college students felt they understood and which they did not and why they may have answered as they did. About two thirds of the respondents answered that they understood which factors are used to determine a loan. This is logical because roughly two thirds of the respondents indicated that they had student loans, thus giving them exposure in the loaning process. Compound interest was another topic of understanding. This is most likely due to students having common financial accounts such as checkings or savings accounts that would pay them interest, thus exposing them to compounding effects.

Students also indicated an understanding of when they will no longer be covered under their parent's insurance plans. This can possibly be explained by the enactment of "ObamaCare" in 2010, which received national attention in the United States by allowing children to remain covered under their parents' insurance plans until age 26 (ObamaCare Facts, 2015). Students most likely heard about this reform through the media, thus increasing their awareness surrounding insurance coverage. Additionally, about two-thirds of the respondents indicated an understanding a job offer and benefits. This is also logical, as college years are a time when students receive their first full-time job offer. These offers are oftentimes presented by a Human Resources professional who can guide the student through their employment package. Finally, about 60% students indicated an understanding of how to apply for credit cards. This may be due to the fact that some colleges and universities have marketing agreements with credit card companies in which the companies can market debit or prepaid cards to college students (United States Government Accountability Office, 2014). Because of such agreements, college students are exposed to the credit card application process.

Lack of Understanding of Financial Future Situations

It was alarming that many students did not understand some of the financial future scenarios. It is understandable that about half of the respondents indicated that they do not understand the terms of their auto insurance because as found in this study, almost 70% of the respondent's parents pay for their auto insurance. Students, by not paying for their auto insurance, may have never viewed their own policy. Another situation which over half of the respondents did not understand was how to obtain a credit score and understand its meaning. This is reasonable because credit scores college students have likely not been involved in financial situations that require a credit score, such as applying for a large loan. However, even if students have not needed their credit score up to this point in their lives, it is imperative that they understand its importance and the impact it can have on their ability to receive credit.

Participants also indicated a lack of understanding in the process of investing in stocks and other securities. College students may have not been exposed to this process, but should consider these investments as alternatives to bolster their income and long-term financial planning. An area of concern is that almost 70% of students indicated a lack of understanding in different retirement accounts and how to begin investing in them. Students need to develop a working knowledge of these accounts in order to prepare for their eventual retirement. It is also important that college students begin to contribute to their retirement accounts as soon as possible in order to receive the benefit of compounding and monetary growth for as long as possible. Finally, over 75% of the participants indicated that they did not understand how to file their own taxes. This is an important concept for college students to be aware of since they will need to pay taxes annually.

These topics only represent eleven of the many different financial situations college students will encounter in the near and distant future as financial citizens. While it is disheartening that many students do not understand these topics, there is hope that students will use their available resources to continue their financial education in order to become more responsible and financially-independent adults. The financial learning process is life-long, so while students may not understand these topics at this stage in their lives, they can still acquire this knowledge in the future.

Non-Significant Factors

The non-significant demographic factors in this study were age, academic class, degree, concentration, minor and years of working experience. There are some possible explanations as to why these factors did not significantly impact the financial scores.

First, it is rational that degree, concentration and minor were not significant factors. This is because financial education is not a discipline that is specific to one area of education focus. Finances impact all individuals regardless of their expertise. Everyone will need to make financial choices in their lifetime. For this reason, it is not conceivable that degree, concentration or minor would significantly impact any of the financial scores.

While other studies found academic class to be a significant factor, this study did not. This could be due to the curriculum at the university at which the survey was conducted. While all students at that university were required to take an introductory financial management course before graduation, a personal finance course is only required for accounting majors. It is open as an elective to other majors. Because the personal finance class covers topics that are more inclusive of those topics seen in a financial literacy course, is makes sense that academic class was not significant. Even if students amass more college credits, if their courses do not include personal finance topics, their academic class will not have a significant impact on their financial scores. This logic can also be applied to the age of the student. If the student has not been exposed to financial topics, then their age would also not be a significant factor.

The Monticone (2010) study found that working experience had an impact on an individual's financial literacy; however, this study did not echo this finding. Years of working experience was not a significant factor. This could be due to the type of work in which college students are participating. A part-time job on campus may not provide students the same financial education value as a professional internship. Because this study did not ask students to disclose their type of working experience, it is understandable that working experience was not a significant factor.

Implications

The most important take-away from this study is the potential for the development of college curriculum. Through this study, it was identified which topics students have a direct interest in learning about. It was also identified which scenarios students already have an understanding of, and which the majority do not understand. This information can be used to create a curriculum that will have an impact on college students because it was created using their direct input.

It is a common frustration among college students that their coursework does not relate to their work or personal lives. This is not the case with personal finance. Personal finance is an extremely relevant educational experience that impacts each person, no matter what their academic discipline is. Every person, including college students, makes financial decisions in their daily lives. By educating students on personal finance topics, they will receive an education that has a direct correlation to their lives. It is an educational discipline that holds great weight, but is unfortunately overlooked. However, with more research done surrounding personal finance and educational experiences, there is hope that this educational branch will grow in popularity, acceptance and incorporation into educational settings, especially at the collegiate level.

Limitations

This study has several limitations associated with it. First, the sample size of this survey was small, with only 67 of the total 101 responses being able to be used for the analysis. While 67 respondents is still greater than the 50 respondents that would be needed for the results to be considered statistically significant in traditional statistics, the sample size was still small, thus limiting the amount of data and inferences that could be collected.

Another limitation of the study was that respondents were of similar demographics. A majority of the survey was conducted at a primarily business university in the Northeast region of the United States. None of the respondents were international students and many were business majors. It can be argued that many of the respondents had similar educational backgrounds which could have given them a bias in their responses. For future research, a wider variety in the demographics of respondents should be a goal.

A final limitation of the study is the possibility of a self-selection bias in the respondents. Students were given an informed consent form at the beginning of the survey indicating the purpose of the study. Students who have a greater interest in financial education may have chosen to continue the survey while students with little interest may have exited the survey. It is also possible that students may have inflated their financial capabilities in the survey by answering untruthfully in order to appear more knowledgeable about certain topics. If this type of respondent bias occurred, it could sway the results of the study.

Future Research

For future research, it would be interesting to investigate further the amount of understanding college students have regarding future financial situations. A more comprehensive list of scenarios could be presented to the students to investigate what topics are "common knowledge" for them, and which topics need more time spent educating. These findings could be valuable to create a college level curriculum regarding personal financial management.

Another interesting component of future research could be primary research involving interview with college students to hear from them why they are interesting in particular topics and how they may want the material presented to them. This information could also be included if creating education material for college students. Additionally, it may be interesting to include a psychological component and investigate if different personality traits have an impact on the financial scores of students. Could personality types such as introvert/ extrovert have an impact on the financial scores? Furthermore, could the Myers-Briggs personality characteristics be used as factors of financial scores?

Finally, the geographic location of where a student lives or what their family occupations are could be studied as factors of the financial scores. If students are from a geographic area with higher income or lower income levels, would this significantly impact their financial scores? Also, if family members have higher or lower paying occupations, would this have a significant impact on the financial scores of students?

A large amount of factors could be investigated to see if they help determine the financial scores of students. All of the observations recorded from such studies could be very helpful if colleges decide to create more education courses regarding financial management, personal finance or other financial education disciplines.

CONCLUSION

College students are an area of the population who would benefit greatly from receiving financial education, but are not always receiving the training they need to boost their levels of financial literacy. Students have an interest in increasing their personal financial knowledge, have the ability to recognize healthy financial behaviors and have identified parties from whom they can seek financial guidance. Despite this, students still have a lack of understanding of important personal finance topics and scenarios that they will likely encounter in their lives. This study helped to explore the landscape surrounding college students and their financial education, demonstrated a need for college students to receive financial education and explored implication of the research. It is the hope of the researcher of this study that more work will be done in the field of financial education to ensure that college students are properly educated on these important topics before they graduate from a higher education institution.

APPENDICES

Appendix A – Survey Permission

Kerry Quirk <kquirk1@bryant.edu> 11/10/14
to jorgensenb

Good afternoon Dr. Jorgensen,
My name is Kerry Quirk. I am a senior at Bryant University in Smithfield, RI. As part of my participation in the Honors Program, I am completing a senior year honors capstone research project. My project focuses on describing the attitudes of college students toward financial education, and how prepared they are to become financially independent after graduation.
In my research, I came across your dissertation "Financial Literacy of College Students: Parental and Peer Influences". I am interested in surveying students, and felt that your survey was inclusive of many of the questions I wanted to ask. Would it be possible to use some of your survey questions as part of my survey? I understand you have a 2007 copyright and wanted to gain your permission.

Thank you.

Sincerely,

...

Jorgensen, Bryce <JORGENSENB@ecu.edu> 11/10/14
to me

Hi Kerry,

Yes, you have permission to use all or a portion of my survey.

Best of luck,
Dr. J

From: Kerry Quirk [mailto:kquirk1@bryant.edu]
Sent: Monday, November 10, 2014 12:25 PM
To: Jorgensen, Bryce
Subject: Permission for Financial Literacy Survey

...

Kerry Quirk <kquirk1@bryant.edu> 11/11/14
to Bryce

Dr. Jorgensen,
Thank you for your permission. It is greatly appreciated.

Sincerely,

...

Kerry Quirk

Appendix B – IRB Approval Form

January, 2015

Kerry Quirk

RE: IRB Proposal #2015-0105b:
TITLE: Financial Literacy and College Students: An Exploration of College Students' Attitudes, Behaviors, Influences and Preparedness for Financial Decisions after Graduation

Dear Kerry:

Your proposal, entitled "Financial Literacy and College Students: An Exploration of College Students' Attitudes, Behaviors, Influences and Preparedness for Financial Decisions after Graduation" was considered under IRB Guidelines for expedited review. The IRB Committee of Bryant University approved the proposal January 5, 2015.

Bryant University is strongly committed to adhering to the basic ethical principles related to the conduct of research involving human subjects as set forth in *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research*. The submission of your proposal to the IRB Committee supports the goals of Bryant University and the IRB Committee and ensures that research involving any members of the Bryant community is in strict accordance with these ethical principles and guidelines.

Thank you for your submission, and good luck with your research.

Very truly yours,

Sukki Yoon
Chair, IRB Committee

Appendix C- Informed Consent Form

Informed Consent

You are invited to participate in a study of the personal financial management attitudes, behaviors and influences of college students. I hope to learn about the financial management patterns evidenced in college students and explore their preparedness for becoming financially independent after graduation.
Your participation in this survey is completely voluntary. There are no foreseeable risks with completing this survey. If at any time, you do not feel comfortable with a question, you may omit that question or exit the survey.
Any information obtained in connection with this study will remain confidential and will not be traced to you. All responses will be pooled to continue the protection of anonymity of respondents. Additionally, in any written reports or presentations, information will be presented in aggregate form.

If you any questions about the survey or study, please contact Kerry Quirk at kquirk1@bryant.edu or Dr. Betty Yobaccio at byobacci@bryant.edu.

Thank you for your time and support of my research! It is greatly appreciated.

Appendix D- Survey Questions

Survey Questions

Q1 What is your gender?
- ❍ Male
- ❍ Female

Q2 What is your age?
- ❍ 17 or younger
- ❍ 18
- ❍ 19
- ❍ 20
- ❍ 21
- ❍ 22
- ❍ 23 or older

Q3 What is your academic standing?
- ❍ First Semester Freshman
- ❍ Second Semester Freshman
- ❍ First Semester Sophomore
- ❍ Second Semester Sophomore
- ❍ First Semester Junior
- ❍ Second Semester Junior
- ❍ First Semester Senior
- ❍ Second Semester Senior
- ❍ Graduate Student
- ❍ Other

Q4 What degree are you pursuing?
- ❑ Bachelor of Science in Business Administration
- ❑ Bachelor of Science in Information Technology
- ❑ Bachelor of Science in International Business
- ❑ Bachelor of Science
- ❑ Bachelor of Arts
- ❑ Master of Business Administration
- ❑ Master of Professional Accountancy
- ❑ Master of Science in Taxation
- ❑ Master of Arts in Communication
- ❑ Master of Arts in Teaching
- ❑ Master of Science in Global Environmental Studies
- ❑ Other

Q5 What is your concentration(s)?
- ❑ Accounting
- ❑ Computer and Information Systems
- ❑ Entrepreneurship
- ❑ Finance
- ❑ Financial Services
- ❑ Global Supply Chain Management
- ❑ Management
- ❑ Marketing
- ❑ Actuarial Mathematics
- ❑ Applied Economics
- ❑ Applied Mathematics and Statistics
- ❑ Biology
- ❑ Environmental Science
- ❑ Applied Psychology
- ❑ Chinese
- ❑ Communication
- ❑ Economics
- ❑ Global Studies
- ❑ History
- ❑ Literary and Cultural Studies
- ❑ Politics and Law
- ❑ Sociology
- ❑ Spanish
- ❑ Organizational Communication
- ❑ Health Communication
- ❑ Other

Q6 What is your minor(s)?

- ❑ Business Administration
- ❑ Computer Information Systems
- ❑ Entrepreneurship
- ❑ Finance
- ❑ Global Supply Chain Management
- ❑ Human Resource Management
- ❑ International Business
- ❑ Management
- ❑ Marketing
- ❑ Marketing Analytics
- ❑ Sales
- ❑ Actuarial Mathematics
- ❑ Africana/Black Studies
- ❑ Applied Statistics
- ❑ Biology
- ❑ Biotechnology
- ❑ Chinese
- ❑ Communication
- ❑ Economics
- ❑ Environmental Science
- ❑ Film Studies
- ❑ French
- ❑ History
- ❑ International Affairs
- ❑ Italian
- ❑ Latin American and Latina/Latino Studies
- ❑ Legal Studies
- ❑ Literary and Cultural Studies
- ❑ Literature
- ❑ Mathematics
- ❑ Media and Cultural Studies
- ❑ Political Science
- ❑ Professional and Creative Writing
- ❑ Psychology
- ❑ Sociology
- ❑ Sociology and Service Learning
- ❑ Spanish
- ❑ Women, Gender and Sexuality Studies
- ❑ Other
- ❑ I do not have a minor

Q7 How many years of working experience do you have? (Include full or part-time experience, internships, co-ops, summer jobs, etc.)
- None
- Less than 2 years
- 2 to less than 4 years
- 4 to less than 6 years
- 6 or more years

Q8 Are you an international student?
- No
- Yes, less than 2 years in the US
- Yes, 2 to 4 years in the US
- Yes, 4 to 6 years in the US
- Yes, 6 or more years in the US

Q9 Have you taken Financial Management or Global Dimensions of Financial Management (FIN 201/G), or a similar introductory course to financial management?
- Yes
- No

Q10 Have you ever taken a course or seminar about personal finance management or financial literacy? (This could include a college course, speaker, high school course, community program, etc.)
- Yes
- No

Financial Attitudes Please answer the following questions about your personal attitudes toward finances.

Q11 How do you feel about your ability to manage your own finances?
- Not sure at all- I wish I know a lot more about money management.
- Not too sure- I wish I knew more about money management.
- Somewhat sure- I understand most of what I'll need to know.
- Very sure- I understand money management very well.

Q12 How interested are you in increasing your financial knowledge?
- Very uninterested
- Somewhat uninterested
- Not sure
- Somewhat interested
- Very interested

Q13 Would you take a personal finance course as an elective?
- Yes
- No

Q14 Which topics would be of interest to you?

- ❑ Budgeting
- ❑ Investing
- ❑ Taxes
- ❑ Credit
- ❑ Wills
- ❑ Life Insurance
- ❑ Auto Insurance
- ❑ Loans/debt
- ❑ Credit cards
- ❑ Saving
- ❑ Interest rates
- ❑ Retirement accounts (401k, IRA, Roth IRA, etc.)
- ❑ Mortgages
- ❑ Rental agreements
- ❑ Leases
- ❑ Pre-nuptial agreements

Financial Attitudes, Continued

Q15 Using the scale below, please rate the importance of items to you.

	Not Important (1)	Somewhat Unimportant (2)	Neutral (3)	Somewhat Important (4)	Very Important (5)
Maintaining adequate financial records (a)	❑	❑	❑	❑	❑
Spending less than your income (b)	❑	❑	❑	❑	❑
Maintaining adequate insurance coverage (c)	❑	❑	❑	❑	❑
Planning and implementing a regular savings/ investment program (d)	❑	❑	❑	❑	❑

Q16 Rate the following items on a scale of 1-5.1=Not at all true of me2=Somewhat not true of me3=Neutral4=Somewhat true of me5=Very much true of me

I feel in control of my financial situation. (1)	❍	❍	❍	❍	❍
I feel capable of using my future income to achieve my financial goals. (2)	❍	❍	❍	❍	❍
My finances are a significant source of worry or "hassle" for me. (3)	❍	❍	❍	❍	❍
I am uncertain where my money is spent. (4)	❍	❍	❍	❍	❍
Purchasing things is very important to my happiness. (5)	❍	❍	❍	❍	❍
I feel capable of handling my financial future (buying insurance, investments, etc.) (6)	❍	❍	❍	❍	❍
I feel putting away money each month for savings or investments is important. (7)	❍	❍	❍	❍	❍
I feel confident that I can continue my lifestyle after graduation. (8)	❍	❍	❍	❍	❍
I feel confident in my understanding of apartment leases and loan agreements. (9)	❍	❍	❍	❍	❍
I enjoy thinking about and have interest in reading about money management (10)	❍	❍	❍	❍	❍
I enjoy talking to my peers about money management issues (taxes, credit cards, investments, etc.) (11)	❍	❍	❍	❍	❍
I am comfortable with not paying my credit card bills in full each month as long as I make the minimum payment. (12)	❍	❍	❍	❍	❍

Financial Behaviors Please answer the following questions about your personal financial behavior and money management style.

Q17 Some people tend to be very thrifty, saving money whenever they have the chance while others are spending-oriented, buying whenever they can and even borrowing to consume more. How would you classify yourself?
❍ Very thrifty- saving money whenever I can.
❍ Somewhat thrifty, often saving money.
❍ Neither thrifty nor spending-oriented.
❍ Somewhat saving oriented, seldom saving money.
❍ Very spending-oriented, hardly ever saving money.

Q18 What kind of financial accounts/holdings do you have? (Check all that apply).
❑ Savings
❑ Checking
❑ Money Market
❑ Certificate of Deposit (CD)
❑ Stocks
❑ Bonds
❑ Mutual Funds
❑ Other

Q19 How much debt do you own, including student loans, credit cards and other loans (do not include mortgages, if applicable).
❍ $0
❍ $1-$4999
❍ $5000-$9999
❍ $10,000-$19,999
❍ $20,000-$39,000
❍ $40,000 or more
❍ I don't know

Q20 How do you maintain your financial records?
❍ I maintain no records.
❍ I maintain minimal records.
❍ I maintain very detailed records.

Q21 What types of tools do you use to help with money management?
❑ Online/mobile banking
❑ Budgeting application
❑ Paper records
❑ Other
❑ None

Financial Behaviors, Continued Please answer the following questions about credit cards.

Q22 How many credit cards do you have?
❍ 0
❍ 1
❍ 2
❍ 3
❍ 4
❍ 5 or more

Q23 What is the combined total balance owed on your credit cards?
❍ I do not have a credit card.
❍ $0-$99
❍ $100-$499
❍ $500-$1999
❍ $2000-$4999
❍ $5000 or more

Q24 Who pays for your credit card bills? (Please choose all that apply).
❑ I do not have a credit card.
❑ Myself
❑ Parents
❑ Other family members
❑ Significant other
❑ Other

Q25 If you pay for your credit card balance, how do you usually pay for your monthly credit card bills?
❍ I do not have a credit card.
❍ I pay the minimum.
❍ I pay between the minimum and the full amount.
❍ I pay the full amount.
❍ I skip some payments.

Financial Behaviors, Continued

Q26 Rate the following items on a scale of 1-5.1= Not at all true of me2=Somewhat true of me3=Neutral4=Somewhat

	1	2	3	4
I budget and track spending.	❍	❍	❍	❍
I use credit cards to make purchases that I can't afford and I don't have the money in the bank to pay back the bill.	❍	❍	❍	❍
I have my parents "bail me out" of credit card debt.	❍	❍	❍	❍
I work extra hours (in excess of 20 hours per week) to meet bills and expenses.	❍	❍	❍	❍
I compare prices when shopping for purchases.	❍	❍	❍	❍
I read to increase my financial knowledge.	❍	❍	❍	❍

Q27 My parent/guardian pays for:

	All	Some	None
Auto insurance	❍	❍	❍
Auto payments	❍	❍	❍
Credit card bill	❍	❍	❍
Medical insurance	❍	❍	❍
Dental insurance	❍	❍	❍
Cell phone bill	❍	❍	❍
College tuition	❍	❍	❍
College books	❍	❍	❍

Q28 Do you have student loans?
❍ Yes
❍ No

Q29 Who will pay off your student loans? (Please choose all that apply).
❑ Me
❑ Parents
❑ Other family members
❑ Other
❑ I never accepted a loan.

Influences Please answer the following questions about people or places that may have influenced your financial management style or behaviors.

Q30Where do you feel you have learned about personal financial management? (Check all that apply).
❑ Parents
❑ Other Family Members
❑ Peers
❑ High School
❑ College
❑ Community Programs (bank seminars, outreach programs, etc.)
❑ Books
❑ Media
❑ Internet
❑ Informal public seminar or class
❑ Financial planner or counselor (professional)

Q31 Which of the following did you learn about in your home while growing up? (Please check all that apply).

- ❑ Budgeting
- ❑ Auto insurance
- ❑ Investing
- ❑ Taxes
- ❑ Credit
- ❑ Wills
- ❑ Life Insurance
- ❑ Disability Insurance
- ❑ Renter's/homeowner's insurance
- ❑ Loans/debt
- ❑ Giving to Charities
- ❑ Interest rates
- ❑ Keeping records
- ❑ Being honest in all dealings
- ❑ Working for what your receive

Q32 How would you describe how finances were handled in your family? (Please check all that apply).

- ❑ My parents usually argued about finances.
- ❑ Within the family, we openly discussed finances.
- ❑ My parents explicitly taught me about finances (debt, saving,etc.)
- ❑ We didn't talk much about finances but I learned from my family's example.
- ❑ My parents didn't include me in their various financial decisions.
- ❑ One parent had the primary responsibility of "dealing" with finances.
- ❑ Other

Q33 Compared to your parents, would you say that you are:

- ❍ Much more likely to save.
- ❍ Somewhat more likely to save.
- ❍ About as likely to save/spend.
- ❍ Somewhat more likely to spend.
- ❍ Much more likely to spend.

Financial Future Please answer the following questions about your future financial decisions.

Q34 Where do you expect to learn more about or increase your financial knowledge? (Please check all that apply).

- ❑ Parents
- ❑ Friends
- ❑ Other family members
- ❑ Additional schooling
- ❑ Books
- ❑ Media
- ❑ Life experiences
- ❑ Future job/employer
- ❑ Financial planner or counselor (professional)
- ❑ Other

Q35 Please answer the following questions about your understanding of the following financial situations:

	Yes	No	N/A	
I know what age I am no longer covered under my parents' insurance policies (medical, dental, etc.)	❍	❍	❍	❍
I feel comfortable reading a job offer and understanding my benefits.	❍	❍	❍	❍
I know the difference between different retirement accounts and how to start investing in them	❍	❍	❍	❍
I know when I need to begin paying off my student loans.	❍	❍	❍	❍
I know how to file my own taxes.	❍	❍	❍	❍
I know how to apply for a credit card.	❍	❍	❍	❍
I know how to obtain my credit score and understand its meaning.	❍	❍	❍	❍
I know where to go to invest in the stock market, bonds or other financial instruments.	❍	❍	❍	❍
I understand the concept of compound interest.	❍	❍	❍	❍
I know what factors are used to determine if I am eligible for a loan.	❍	❍	❍	❍
I understand the terms of my auto insurance policy.	❍	❍	❍	❍

Thank you for taking the time to participate in this survey. I truly appreciate your patience and honest answers. Your participation will further my research and provides valuable data. Thanks again!

Appendix E- Score Points Distribution

Financial Attitude Score Breakdown

Question Number	Question	Response Type	Points
11	How do you feel about your ability to manage your own finances?	Likert scale (4 choices)	1-4 based on answer
12	How interested are you in increasing your financial knowledge?	Likert scale (5 choices)	1-5 based on answer
13	Would you take a personal finance course as an elective?	Yes or No	1 point for yes, 0 for no
14	Which topics would be of interest to you?	Choose all that apply	1 point for each topic chosen
15	Rate the importance of different financial behaviors	Likert scale (5 choices)	1-5 based on answer
16	Rate the following financial statements based on how true they are of you	Likert scale (5 choices)	1-5 based on answer for each statement

Financial Behavior Score Breakdown

Question Number	Question	Response Type	Points
17	Saving-oriented vs. spending-oriented	Likert scale (5 choices)	5-1 based on answer
20	How do you maintain financial records?	Single choice	1-3 based on answer
26	Rate how true different financial behaviors are to you	Likert scale (5 choices)	1-5 based on answer (some were inverted to 5-1 based on wording)

Financial Future Score Breakdown

Question Number	Question	Response Type	Points
35	Answer questions regarding your understanding of the following financial situations.	Yes No N/A	1 for yes 0 for no, N/A

Appendix F- Descriptive Statistics of Response Demographics

Figure 1: Gender of Responses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	24	35.8	35.8	35.8
	Female	43	64.2	64.2	100.0
	Total	67	100.0	100.0	

Figure 2: Age of Responses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18	14	20.9	20.9	20.9
	19	15	22.4	22.4	43.3
	20	7	10.4	10.4	53.7
	21	19	28.4	28.4	82.1
	22	8	11.9	11.9	94.0
	23 or older	4	6.0	6.0	100.0
	Total	67	100.0	100.0	

Figure 3: Academic Class of Responses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Semester Freshman	1	1.5	1.5	1.5
	Second Semester Freshman	18	26.9	26.9	28.4
	First Semester Sophomore	1	1.5	1.5	29.9
	Second Semester Sophomore	12	17.9	17.9	47.8
	First Semester Junior	3	4.5	4.5	52.2
	Second Semester Junior	1	1.5	1.5	53.7
	Second Semester Senior	26	38.8	38.8	92.5
	Graduate Student	5	7.5	7.5	100.0
	Total	67	100.0	100.0	

Figure 4: Academic Degrees of Responses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor of Science in Business Administration	32	47.8	47.8	47.8
	Bachelor of Science in International Business	10	14.9	14.9	62.7
	Bachelor of Science	11	16.4	16.4	79.1
	Bachelor of Arts	4	6.0	6.0	85.1
	Master of Business Administration	7	10.4	10.4	95.5
	Master of Science in Global Environmental Studies	1	1.5	1.5	97.0
	Other	2	3.0	3.0	100.0
	Total	67	100.0	100.0	

Figure 5: Academic Concentration of Responses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Accounting	10	14.9	14.9	14.9
	Computers and Information Systems	1	1.5	1.5	16.4
	Finance	15	22.4	22.4	38.8
	Financial Services	1	1.5	1.5	40.3
	Global Supply Chain Management	2	3.0	3.0	43.3
	Management	8	11.9	11.9	55.2
	Marketing	10	14.9	14.9	70.1
	Actuarial Mathematics	3	4.5	4.5	74.6
	Applied mathematics and statistics	1	1.5	1.5	76.1
	Biology	2	3.0	3.0	79.1
	Environmental Science	1	1.5	1.5	80.6
	Communications	1	1.5	1.5	82.1
	Global Studies	1	1.5	1.5	83.6
	Literary and Cultural Studies	2	3.0	3.0	86.6

	Other	9	13.4	13.4	100.0
	Total	67	100.0	100.0	

Figure 6: Academic Minor of Responses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Business Administration	10	14.9	15.9	15.9
	Computer and Information Systems	3	4.5	4.8	20.6
	Entrepreneurship	1	1.5	1.6	22.2
	Finance	2	3.0	3.2	25.4
	International Business	1	1.5	1.6	27.0
	Marketing	2	3.0	3.2	30.2
	Marketing Analytics	1	1.5	1.6	31.7
	Applied Statistics	2	3.0	3.2	34.9
	Chinese	2	3.0	3.2	38.1
	Communication	6	9.0	9.5	47.6
	Economics	4	6.0	6.3	54.0
	French	1	1.5	1.6	55.6
	International Affairs	1	1.5	1.6	57.1
	Legal Studies	1	1.5	1.6	58.7
	Mathematics	1	1.5	1.6	60.3
	Political Science	1	1.5	1.6	61.9
	Psychology	2	3.0	3.2	65.1
	Sociology	1	1.5	1.6	66.7
	Sociology and Service Learning	1	1.5	1.6	68.3
	Spanish	7	10.4	11.1	79.4
	No minor	11	16.4	17.5	96.8
	Other	2	3.0	3.2	100.0
	Total	63	94.0	100.0	
Missing	-99.0	4	6.0		
Total		67	100.0		

Figure 7: Years Working Experience of Responses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	1	1.5	1.5	1.5
	Less than 2 Years	11	16.4	16.4	17.9
	2 to less than 4 Years	28	41.8	41.8	59.7
	4 to less than 6 Years	18	26.9	26.9	86.6
	6 or more Years	9	13.4	13.4	100.0
	Total	67	100.0	100.0	

Figure 8: International Demographic of Responses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	67	100.0	100.0	100.0

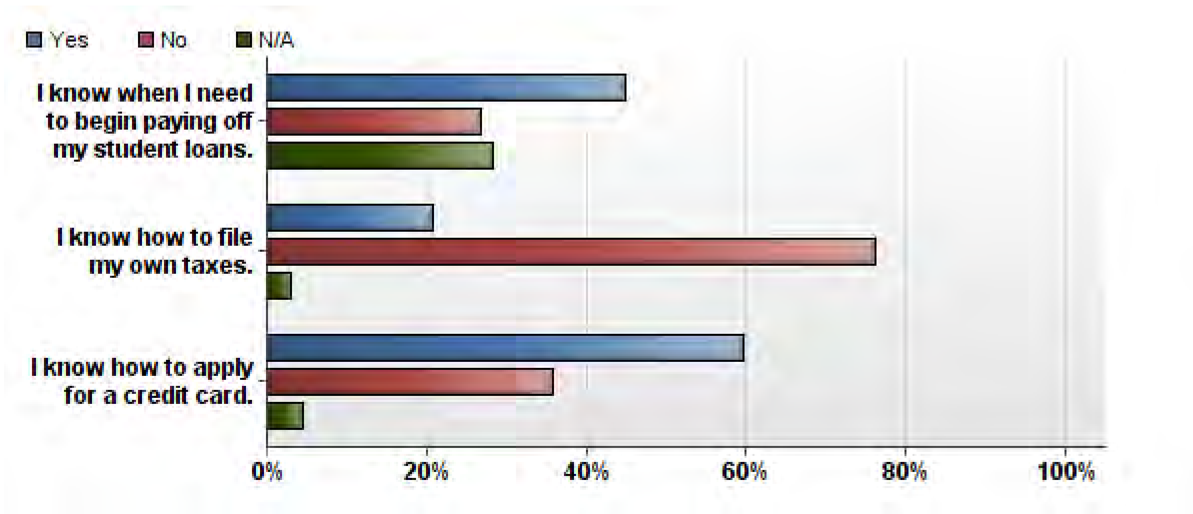
Figure 9: Taken Financial Management Course of Responses

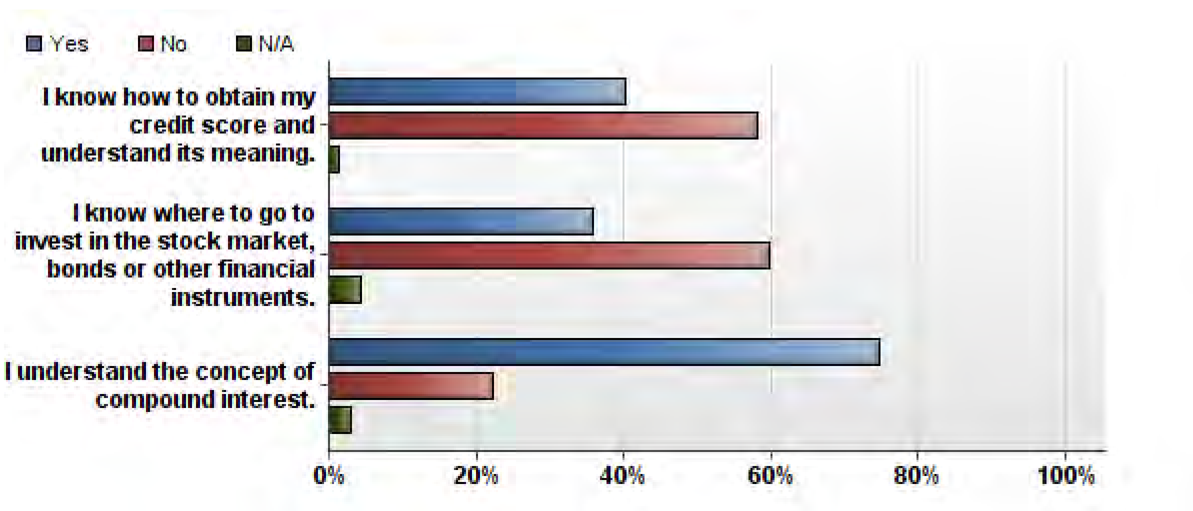
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	27	40.3	40.9	40.9
	No	39	58.2	59.1	100.0
	Total	66	98.5	100.0	
Missing	-99.0	1	1.5		
Total		67	100.0		

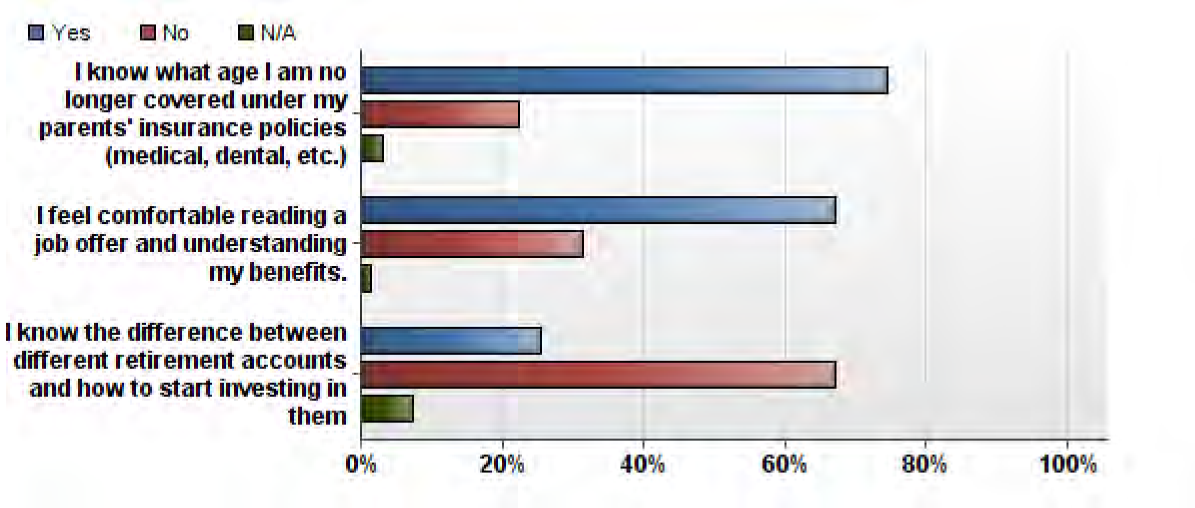
Figure 10: Taken Personal Finance Course of Responses

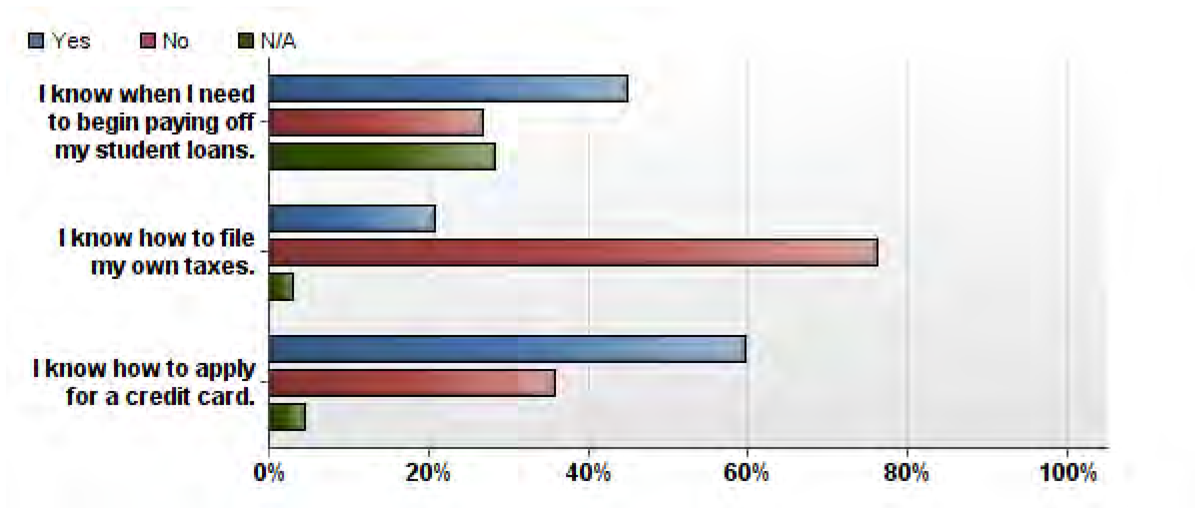
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	27	40.3	40.3	40.3
	No	40	59.7	59.7	100.0
	Total	67	100.0	100.0	

Appendix G- Results of Financial Future Questions






Yes
No
N/A
I know what age I am no longer covered under my parents' insurance policies (medical, dental, etc.)
I feel comfortable reading a job offer and understanding my benefits.
I know the difference between different retirement accounts and how to start investing in them
0%
20%
40%
60%
80%
100%


Yes
No
N/A
I know when I need to begin paying off my student loans.
I know how to file my own taxes.
I know how to apply for a credit card.
0%
20%
40%
60%
80%
100%

Appendix H- One-Way ANOVA Results

Figure 1- One- Way ANOVA: Financial Attitude (DV) and Gender (IV)

FINANCIAL ATTITUDE SCORES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	372.052	1	372.052	5.083	.028**
Within Groups	4757.798	65	73.197		
Total	5129.851	66			

Figure 2- One-Way ANOVA: Financial Attitude (DV) and Age (IV)

FINANCIAL ATTITUDE SCORES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	263.364	5	52.673	.660	.655
Within Groups	4866.487	61	79.778		
Total	5129.851	66			

Figure 3- One-Way ANOVA: Financial Attitude (DV) and Class (IV)

FINANCIAL ATTITUDE SCORES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	629.818	7	89.974	1.180	.328
Within Groups	4500.033	59	76.272		
Total	5129.851	66			

Figure 4- One-Way ANOVA: Financial Attitude (DV) and Degree (IV)

FINANCIAL ATTITUDE SCORES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	772.288	6	128.715	1.772	.120
Within Groups	4357.562	60	72.626		
Total	5129.851	66			

Figure 5- One-Way ANOVA: Financial Attitude (DV) and Concentration (IV)

FINANCIAL ATTITUDE SCORES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1671.887	14	119.420	1.796	.065
Within Groups	3457.964	52	66.499		
Total	5129.851	66			

Figure 6- One-Way ANOVA: Financial Attitude (DV) and Minor (IV)

FINANCIAL ATTITUDE SCORES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1453.174	21	69.199	.946	.542
Within Groups	3000.254	41	73.177		
Total	4453.429	62			

Figure 7- One-Way ANOVA: Financial Attitude (DV) and Years Working (IV)

FINANCIAL ATTITUDE SCORES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	154.210	4	38.553	.480	.750
Within Groups	4975.641	62	80.252		
Total	5129.851	66			

Figure 8- One-Way ANOVA: Financial Attitude (DV) and Financial Management Course (IV)

FINANCIAL ATTITUDE SCORES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	640.530	1	640.530	9.132	.004**
Within Groups	4489.288	64	70.145		
Total	5129.818	65			

Figure 9- One-Way ANOVA: Financial Attitude (DV) and Personal Finance Course (IV)

FINANCIAL ATTITUDE SCORES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	699.209	1	699.209	10.258	.002**
Within Groups	4430.642	65	68.164		
Total	5129.851	66			

Figure 10- One-Way ANOVA: Financial Behavior (DV) and Gender (IV)

FINANCIAL BEHAVIOR SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.423	1	.423	.029	.865
Within Groups	946.741	65	14.565		
Total	947.164	66			

Figure 11- One-Way ANOVA: Financial Behavior (DV) and Age (IV)

FINANCIAL BEHAVIOR SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	149.649	5	29.930	2.289	.057
Within Groups	797.515	61	13.074		
Total	947.164	66			

Figure 12- One-Way ANOVA: Financial Behavior (DV) and Degree (IV)

FINANCIAL BEHAVIOR SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	101.143	6	16.857	1.196	.321
Within Groups	846.021	60	14.100		
Total	947.164	66			

Figure 13- One-Way ANOVA: Financial Behavior (DV) and Concentration (IV)

FINANCIAL BEHAVIOR SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	216.264	14	15.447	1.099	.381
Within Groups	730.900	52	14.056		
Total	947.164	66			

Figure 14- One-Way ANOVA: Financial Behavior (DV) and Minor (IV)

FINANCIAL BEHAVIOR SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	206.949	21	9.855	.624	.876
Within Groups	646.988	41	15.780		
Total	853.937	62			

Figure 15- One-Way ANOVA: Financial Behavior (DV) and Years Worked (IV)

FINANCIAL BEHAVIOR SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	74.021	4	18.505	1.314	.275
Within Groups	873.143	62	14.083		
Total	947.164	66			

Figure 16- One-Way ANOVA: Financial Behavior (DV) and Financial Management Course (IV)

FINANCIAL BEHAVIOR SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	133.677	1	133.677	11.059	.001**
Within Groups	773.595	64	12.087		
Total	907.273	65			

Figure 17- One-Way ANOVA: Financial Behavior (DV) and Personal Finance Course (IV)

FINANCIAL BEHAVIOR SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10.079	1	10.079	.699	.406
Within Groups	937.085	65	14.417		
Total	947.164	66			

Figure 18- One-Way ANOVA: Financial Future (DV) and Gender (IV)

FINANCIAL FUTURE SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.926	1	6.926	.884	.351
Within Groups	509.194	65	7.834		
Total	516.119	66			

Figure 19- One-Way ANOVA: Financial Future (DV) and Age (IV)

FINANCIAL FUTURE SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	53.700	5	10.740	1.417	.231
Within Groups	462.419	61	7.581		
Total	516.119	66			

Figure 20- One-Way ANOVA: Financial Future (DV) and Degree (IV)

FINANCIAL FUTURE SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	32.148	6	5.358	.664	.679
Within Groups	483.971	60	8.066		
Total	516.119	66			

Figure 21- One-Way ANOVA: Financial Future (DV) and Concentration (IV)

FINANCIAL FUTURE SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	82.031	14	5.859	.702	.762
Within Groups	434.089	52	8.348		
Total	516.119	66			

Figure 22- One-Way ANOVA: Financial Future (DV) and Minor (IV)

FINANCIAL FUTURE SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	234.266	21	11.156	1.717	.068
Within Groups	266.338	41	6.496		
Total	500.603	62			

Figure 23- One-Way ANOVA: Financial Future (DV) and Years Worked (IV)

FINANCIAL FUTURE SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	21.499	4	5.375	.674	.613
Within Groups	494.620	62	7.978		
Total	516.119	66			

Figure 24- One-Way ANOVA: Financial Future (DV) and Financial Management Course (IV)

FINANCIAL FUTURE SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	50.424	1	50.424	6.935	.011**
Within Groups	465.333	64	7.271		
Total	515.758	65			

Figure 25- One-Way ANOVA: Financial Future (DV) and Personal Finance Course (IV)

FINANCIAL FUTURE SCORE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	45.626	1	45.626	6.303	.015**
Within Groups	470.494	65	7.238		
Total	516.119	66			

Appendix I- MANOVA Results

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.819	4.531[b]	3.000	3.000	.123
	Wilks' Lambda	.181	4.531[b]	3.000	3.000	.123
	Hotelling's Trace	4.531	4.531[b]	3.000	3.000	.123
	Roy's Largest Root	4.531	4.531[b]	3.000	3.000	.123
Q1Gender	Pillai's Trace	.732	2.730[b]	3.000	3.000	.216
	Wilks' Lambda	.268	2.730[b]	3.000	3.000	.216
	Hotelling's Trace	2.730	2.730[b]	3.000	3.000	.216
	Roy's Largest Root	2.730	2.730[b]	3.000	3.000	.216
Q2Age	Pillai's Trace	1.773	1.444	15.000	15.000	.243
	Wilks' Lambda	.014	2.113	15.000	8.683	.133
	Hotelling's Trace	19.890	2.210	15.000	5.000	.195
	Roy's Largest Root	17.467	17.467[c]	5.000	5.000	.003**
Q3AcademicStanding	Pillai's Trace	1.807	1.262	18.000	15.000	.328
	Wilks' Lambda	.011	1.967	18.000	8.971	.151
	Hotelling's Trace	23.228	2.151	18.000	5.000	.203
	Roy's Largest Root	20.272	16.893[c]	6.000	5.000	.004**
Q4Degree	Pillai's Trace	1.927	1.796	15.000	15.000	.134
	Wilks' Lambda	.017	1.943	15.000	8.683	.162
	Hotelling's Trace	14.557	1.617	15.000	5.000	.312
	Roy's Largest Root	12.151	12.151[c]	5.000	5.000	.008**
Q5Concentration	Pillai's Trace	2.207	1.265	33.000	15.000	.321
	Wilks' Lambda	.003	1.786	33.000	9.543	.172
	Hotelling's Trace	38.760	1.958	33.000	5.000	.234

	Roy's Largest Root	33.368	15.167[c]	11.000	5.000	.004**
Q6Minor	Pillai's Trace	2.435	1.196	54.000	15.000	.365
	Wilks' Lambda	.001	1.454	54.000	9.755	.272
	Hotelling's Trace	45.610	1.408	54.000	5.000	.382
	Roy's Largest Root	37.745	10.485[c]	18.000	5.000	.008**
Q7YearsWorkingExp	Pillai's Trace	1.693	1.619	12.000	15.000	.187
	Wilks' Lambda	.035	1.750	12.000	8.229	.214
	Hotelling's Trace	9.206	1.279	12.000	5.000	.418
	Roy's Largest Root	6.961	8.702[c]	4.000	5.000	.018**
Q9TakenFIN201	Pillai's Trace	.921	11.736[b]	3.000	3.000	.036**
	Wilks' Lambda	.079	11.736[b]	3.000	3.000	.036**
	Hotelling's Trace	11.736	11.736[b]	3.000	3.000	.036**
	Roy's Largest Root	11.736	11.736[b]	3.000	3.000	.036**
Q10Takenpersonalfin .Course	Pillai's Trace	.883	7.580[b]	3.000	3.000	.065**
	Wilks' Lambda	.117	7.580[b]	3.000	3.000	.065**
	Hotelling's Trace	7.580	7.580[b]	3.000	3.000	.065**
	Roy's Largest Root	7.580	7.580[b]	3.000	3.000	.065

a. Design: Intercept + Q1Gender + Q2Age + Q3AcademicStanding + Q4Degree + Q5Concentration + Q6Minor + Q7YearsWorkingExp + Q9TakenFIN201 + Q10Takenpersonalfin.Course

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	FINANCIAL ATTITUDE SCORES	4243.599[a]	56	75.779	1.811	.264
	FINANCIAL BEHAVIOR SCORE	695.759[b]	56	12.424	.525	.892
	FINANCIAL FUTURE SCORE	490.725[c]	56	8.763	4.627	.046**
Intercept	FINANCIAL ATTITUDE SCORES	908.042	1	908.042	21.699	.006**
	FINANCIAL BEHAVIOR SCORE	180.997	1	180.997	7.641	.040**
	FINANCIAL FUTURE SCORE	25.064	1	25.064	13.235	.015**
Q1Gender	FINANCIAL ATTITUDE SCORES	100.411	1	100.411	2.399	.182
	FINANCIAL BEHAVIOR SCORE	.697	1	.697	.029	.871
	FINANCIAL FUTURE SCORE	9.284	1	9.284	4.903	.078**
Q2Age	FINANCIAL ATTITUDE SCORES	406.226	5	81.245	1.941	.242
	FINANCIAL BEHAVIOR SCORE	31.134	5	6.227	.263	.916
	FINANCIAL FUTURE SCORE	49.986	5	9.997	5.279	.046**
Q3AcademicStanding	FINANCIAL ATTITUDE SCORES	357.166	6	59.528	1.422	.358
	FINANCIAL BEHAVIOR SCORE	25.934	6	4.322	.182	.969
	FINANCIAL FUTURE SCORE	46.694	6	7.782	4.109	.071**
Q4Degree	FINANCIAL ATTITUDE SCORES	263.337	5	52.667	1.259	.403
	FINANCIAL BEHAVIOR SCORE	88.898	5	17.780	.751	.620

	FINANCIAL FUTURE SCORE	24.463	5	4.893	2.584	.160
Q5Concentration	FINANCIAL ATTITUDE SCORES	664.806	11	60.437	1.444	.360
	FINANCIAL BEHAVIOR SCORE	93.395	11	8.490	.358	.927
	FINANCIAL FUTURE SCORE	93.580	11	8.507	4.492	.055
Q6Minor	FINANCIAL ATTITUDE SCORES	1138.030	18	63.224	1.511	.343
	FINANCIAL BEHAVIOR SCORE	187.828	18	10.435	.441	.909
	FINANCIAL FUTURE SCORE	101.322	18	5.629	2.972	.116
Q7YearsWorkingExp	FINANCIAL ATTITUDE SCORES	293.047	4	73.262	1.751	.275
	FINANCIAL BEHAVIOR SCORE	22.321	4	5.580	.236	.907
	FINANCIAL FUTURE SCORE	18.075	4	4.519	2.386	.183
Q9TakenFIN201	FINANCIAL ATTITUDE SCORES	4.774	1	4.774	.114	.749
	FINANCIAL BEHAVIOR SCORE	5.760	1	5.760	.243	.643
	FINANCIAL FUTURE SCORE	32.418	1	32.418	17.118	.009**
Q10Takenpersonalfin. Course	FINANCIAL ATTITUDE SCORES	135.692	1	135.692	3.243	.132
	FINANCIAL BEHAVIOR SCORE	1.384	1	1.384	.058	.819
	FINANCIAL FUTURE SCORE	20.092	1	20.092	10.609	.023**
Error	FINANCIAL ATTITUDE SCORES	209.240	5	41.848		
	FINANCIAL BEHAVIOR SCORE	118.434	5	23.687		
	FINANCIAL FUTURE SCORE	9.469	5	1.894		

Total	FINANCIAL ATTITUDE SCORES	323848.000	62				
	FINANCIAL BEHAVIOR SCORE	40672.000	62				
	FINANCIAL FUTURE SCORE	2278.000	62				
Corrected Total	FINANCIAL ATTITUDE SCORES	4452.839	61				
	FINANCIAL BEHAVIOR SCORE	814.194	61				
	FINANCIAL FUTURE SCORE	500.194	61				

a. R Squared = .953 (Adjusted R Squared = .427)

b. R Squared = .855 (Adjusted R Squared = -.775)

c. R Squared = .981 (Adjusted R Squared = .769)

Appendix J- Post-Hoc Tests

Figure 1: Means Differences: Financial Attitude Score by Gender

FINANCIAL ATTITUDE SCORES

Q1-Gender	Mean	N	Std. Deviation
Male	74.33	24	9.291
Female	69.42	43	8.125
Total	71.18	67	8.816

Figure 2: Means Differences: Financial Attitude Score by Financial Management Course

FINANCIAL ATTITUDE SCORES

Q9-Taken FIN 201	Mean	N	Std. Deviation
Yes	74.93	27	7.834
No	68.59	39	8.726
Total	71.18	66	8.884

Figure 3: Means Differences: Financial Attitudes Score by Personal Finance Course

FINANCIAL ATTITUDE SCORES

Q10-Taken personal fin. Course	Mean	N	Std. Deviation
Yes	75.11	27	9.803
No	68.52	40	7.038
Total	71.18	67	8.816

Figure 4: Means Differences: Financial Behavior Score by Financial Management Course

FINANCIAL BEHAVIOR SCORE

Q9-Taken FIN 201	Mean	N	Std. Deviation
Yes	27.07	27	3.088
No	24.18	39	3.720
Total	25.36	66	3.736

Figure 5: Means Difference- Financial Future Score by Financial Management Course

FINANCIAL FUTURE SCORE

Q9-Taken FIN 201	Mean	N	Std. Deviation
Yes	6.44	27	2.532
No	4.67	39	2.804
Total	5.39	66	2.817

Figure 6: Means Differences: Financial Future Score by Personal Finance Course

FINANCIAL FUTURE SCORE

Q10-Taken personal fin. Course	Mean	N	Std. Deviation
Yes	6.41	27	2.965
No	4.73	40	2.491
Total	5.40	67	2.796

REFERENCES

Acosta Scott, Jennifer. (2009, Sept. 30). *Students, Credit Cards and the New Reform Law: The Fine Print. Details of Changes in Marketing of, Access to Student Credit Cards.* Retrieved from: < http://www.creditcards.com/credit-card-news/college-student-credit-card-law-1279.php>

The American Dream Project. (2007). *American Dream Education Campaign.* Retrieved from <http://americandreamproject.org/campaigns/college/index.php>

Bernheim, Douglas B., Garrett, Daniel M., Maki, Dean M., (2001). Education and Saving: The Long-Term Effects of High School Financial Curriculum Mandates. *Journal of Public Economics, 80*, 435-465.

Billitteri, Thomas J. (2009). Financial Literacy: Should Courses be Mandatory in Schools? *CQ Researcher, 19,* 717-739.

Borg, Linda. (2014, November 28). East Greenwich Students Credited with Push to Elevate Students' Financial Literacy. *The Providence Journal.*

Charles Schwab. (2008). *Charles Schwab 2008 Parents and Money Survey Findings.* Retrieved from <http://www.schwabmoneywise.com/public/file/P4054111/Parents_Money_Survey_Factsheet.pdf>

College Savings Foundation. (2012). *College Savings Foundation Survey Shows Delay in Life Milestones for Recent College Graduates.* Retrieved from <http://www.collegesavingsfoundation.org/pdf/GradsSurveyPressReleaseFinal5-23-12Updated.pdf>

Common Core State Standards Initiative. (2015). *Standards in Your State.* Retrieved from < http://www.corestandards.org/standards-in-your-state/>

Council for Economic Education. (2014). Survey of the States: Economic and Personal Finance Education in Our Nation's Schools. Retrieved from <http://www.surveyofthestates.com/#2014>

Council of Independent Colleges. (2014, April). *Student Debt: Myths and Facts.* Retrieved from <http://www.cic.edu/Research-and-Data/Research-Studies/Documents/Student-Debt-Fact-Sheet.pdf>

Federal Deposit Insurance Corporation. (2013, July 25). *Money Smart: A Financial Education Program.* Retrieved from <https://www.fdic.gov/consumers/consumer/moneysmart/index.html>

Federal Trade Commission. (2015). *National Consumer Protection Week.* Retrieved from <http://www.ncpw.gov/>

Finance in the Classroom. 2015. *Utah's Required Financial Literacy Course.* Retrieved from < http://financeintheclassroom.org/teacher/course.php>

Financial Literacy and Education Commission. 2014. *MYMONEY.GOV.* Retrieved from < http://www.mymoney.gov/mymoneyfive/Pages/mymoneyfive.aspx>

Hathaway, Ian & Khatiwada, Sameer. (2008, April 1). Do Financial Education Programs Work? Working paper No. 08-03. *Federal Reserve Bank of Cleveland.*

Inceptia. (2013). A Division of the National Higher Education Loan Program, Inc. *First-Year College Students Score Poorly in Basic Financial Literacy, Inceptia Survey Reports.* Retrieved from <https://www.inceptia.org/about/news/jan-22-2013/>

Institute for College Access and Success. (2014, March). *Quick Facts About Student Debt.* Retrieved from <http://projectonstudentdebt.org/files/pub/Debt_Facts_and_Sources.pdf>

Jorgensen, Bryce L. (2007). Financial Literacy of College Students: Parental and Peer Influences. (Masters Dissertation). Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

Jumpstart Coalition for Personal Financial Literacy. (2008). *The Financial Literacy of Young American Adults: Results of 2008 National Jumpstart Coalition Survey of High School Seniors and College Students.* Retrieved from <http://www.jumpstart.org/assets/files/2008SurveyBook.pdf>

Jumpstart Coalition for Personal Financial Literacy. (2015). *About the Jumpstart Coalition for Personal Financial Literacy.* Retrieved from < <http://www.jumpstartcoalition.org/about-us.html>

Lund Research, Ltd. (2013). *Pearson Product-Moment Correlation.* Laerd Statistics. Retrieved from < https://statistics.laerd.com/statistical-guides/pearson-correlation-coefficient-statistical-guide.php>

McCormick, Martha Henn. (2009). The Effectiveness of Youth Financial Education: A Review of the Literature. *Journal of Financial Counseling and Planning, 20*, 70-83.

Monticone, Chiara. (2010). How Much Does Wealth Matter in the Acquisition of Financial Literacy? *The Journal of Consumer Affairs, 44*, 403-422.

ObamaCare Facts (2015). *ObamaCare Facts: Facts on the Affordable Care Act.* Retrieved from < http://obamacarefacts.com/obamacare-facts/>

O'Connell, Alison (2009). Evaluating the Effectiveness of Financial Education Programs. *OECD Journal, 8*, 9-51.

National Association of Colleges and Educators. (2013, Sept. 4). *Salary Survey: Average Starting Salary for Class of 2013 Grads Increases 2.4 Percent*. Retrieved from <http://naceweb.org/s09042013/salary-survey-average-starting-class-2013.aspx>

National Association of State Boards of Education. (2006). *Who Will Own Our Children? The Report of the NASBE Commission on Financial and Investor Literacy.* Retrieved from <http://www.nasbe.org/wp-content/uploads/Financial_Literacy_Final_NASBE.pdf>

National Financial Educators Council. (2013a). Financial Literacy Statistics, Research and Resources. Retrieved from <http://www.financialeducatorscouncil.org/financial-literacy-statistics/>.

National Financial Educators Council. (2013b). Students Who Takes College Personal Finance Courses May Benefit Greatly. Retrieved from <http://www.financialeducatorscouncil.org/college-personal-finance-courses/>

Rotfeld, Herbert Jack. (2008). Financial Aliteracy. *Journal of Consumer Affairs, 42,* 306-309.

Sallie Mae. (2009). *How Undergraduates Use Credit Cards. Sallie Mae's National Study of Usage Rates and Trends 2009.* Retrieved from: <http://static.mgnetwork.com/rtd/pdfs/20090830_iris.pdf>

Schuchardt, Jane, Hanna, Sherman D., Hira, Tahira K., Lyons, Angela C., Palmer, Lance and Xiao, Jing Jian. (2009). Financial Literacy and Education Research Priorities. *Journal of Financial Counseling and Planning, 20*, 84-95.

South Carolina Department of Education. (2009). *Standards, Guidelines and Classroom Resources for the Instruction of Financial Literacy.* Retrieved from < https://ed.sc.gov/agency/programs-services/59/documents/FinancialLiteracy.pdf>

South China Morning Post (2014, May 12). *Economists Fear Low Birth Rates in Developed World Will Choke Growth.* Retrieved from: <http://www.scmp.com/business/economy/article/1510742/economists-fear-low-birth-rates-developed-world-will-choke-growth>

Sun, Chris. (2013). Policy Update: Financial Education: Providing Students with the Tools for Financial Success. *National Association of State Boards of Education, 17.*

Tenaglia, Lisa. (2010). Financial Literacy: The Impact of Financial Training in High School on the Credit Behavior of College Students. *Bryant University Digital Commons, Senior Honors Capstone Projects.*

United States Government Accountability Office (2014, Feb.). *COLLEGE DEBIT CARDS Actions Needed to Address ATM Access, Student Choice, and Transparency.* Retrieved from < http://www.gao.gov/assets/670/660919.pdf>

United States Social Security Administration. (2006). *Coping with the Demographic Challenge: Fewer Children and Living Longer (Social Security Bulletin Vol, 6 No. 4).* Office of Policy. Retrieved from <http://www.ssa.gov/policy/docs/ssb/v66n4/v66n4p37.html>

Viera, Elizabete Fatima Simoes. (2012). What Do We Know About Financial Literacy? A Literature Review. *Mamara Journal of European Studies, 20*, 23-38.

Varcoe, Karen P., Martin, Allen, Devitto, Zana and Go, Charles. (2005). Using a Financial Education Curriculum for Teens. *Journal of Financial Counseling and Planning, 16*, 63-71.

Westerly Community Credit Union. (2015). *School Programs.* Retrieved from < https://www.westerlyccu.com/EverFi_136.html>

Willis, Lauren E. (2008). Against Financial Literacy Education. *Iowa law Review, 94,* 197-285.