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Financial Literacy in High School Education

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The University of Southern Mississippi

Financial Literacy in High School Education

by

Chelsea Simmons

A Thesis
Submitted to the Honors College of
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of the Requirements for the Degree of
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Abstract

Personal finance has become increasingly complicated in the past thirty years due to globalization and financial engineering. Americans are faced with new financial products and decisions, and many do not have the knowledge or expertise to successfully manage their finances. Financial literacy is especially low among young adults. Individual states have responded by introducing a personal finance course into the high school curriculum. This course may be an elective or a requirement for graduation. This study begins to examine personal finance curriculum in high schools and the effect such coursework has on overall financial literacy when students reach college.

Key terms: finance, financial education, financial literacy, high school, college students, debt, investment, savings, credit

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Chapter 1: Introduction

In recent years, there has been increased concern over the lack of financial literacy in the United States. Most studies that look at financial literacy agree “consumers lack the financial literacy to make important financial decisions in their own best interests” (Mandell & Klein, 2009, p. 15). The lack of financial literacy is even more problematic in young adults between the ages of 23 and 35 (de Bassa Scheresberg & Lusardi, 2014, p. 4). Lusardi and Wallace (2013) reported that the young are often the subgroup with the lowest level of financial literacy. Though the financial behavior of all subgroups is low, it is particularly concerning among young adults who are just beginning to make financial decisions that will impact the rest of their lives. This also suggests that it becomes increasingly important to educate citizens at a young age on the basics of financial concepts.

Unfortunately, many young adults do not recognize their need for financial knowledge. Many either feel confident they know the effects of their decisions or they are simply ignorant, making it harder to engage them on the basics of personal finance (de Bassa Scheresberg & Lusardi, 2014). This is the first step in finding a solution to the low literacy scores, as you cannot educate or influence young adults’ financial decisions if they do not even acknowledge there is a need. A study conducted by de Bassa Scheresberg (2013) found that the respondents scored their financial understanding as being high, but their scores on the survey did not demonstrate this high understanding. Overconfidence and awareness are barriers that will have to be knocked down before any form of financial literacy education can have an impact.

Though many young adults do not recognize that they lack knowledge in the area of personal finance, some have a desire for the knowledge but no source for reliable

information. One study found that its young respondents specifically “wish(ed) they had more financial knowledge” (Lusardi, Mitchell, & Curto, 2010, p. 360). Another study concluded “many young adults do not feel adequately prepared to make good financial decisions” (de Bassa Scheresberg, 2013, p. 3). If financial education is critical for success, incorporating it into the curricula is essential.

Much of the concern over financial literacy has been brought about due to a change in the financial services sector that has left individuals responsible for their own financial planning. With a shift from defined benefit plans to defined contribution plans, many today are responsible for deciding how to save for their retirement and how much they should invest in their chosen plan (Bumcrot, Lin, & Lusardi, 2013). Many employers have shifted financial planning responsibility to individuals without providing adequate education. Mandell and Klein (2009) argue that deregulation provides greater opportunity but also greater danger for consumers lacking financial literacy. New forms of investment are emerging all the time, which increases the importance of continued financial education. With the increased responsibility citizens have for their own saving and investing comes a greater responsibility to prepare citizens for the future.

A lack of financial literacy can have other detrimental effects. Young adults are found to be “characterized increasingly by high levels of debt” (Lusardi, Mitchell, & Curto, 2010, p. 359). One study also found that 72% of young adults used at least one credit card to finance everyday expenses (de Bassa Scheresberg, 2013). Such high levels of credit and debt issues among the young are alarming. Young adults identified that student loans are their main form of long-term debt, and the chance that they will be able to repay this debt is decreasing (de Bassa Scheresberg & Lusardi, 2014; de Bassa

Scheresberg, 2013). If the largest sources of debt are occurring in college years, then it becomes critical to educate the population before they enter into these contracts; meaning high school curricula are a more viable option.

Financial illiteracy not only worsens an individual's situation, but also has a negative effect on the economy as a whole. One study suggested "Gen Yers' personal finances are more relevant to the state of the economy than those of any preceding generation" (de Bassa Scheresberg & Lusardi, 2014, p. 6). Generation Y includes those born in the late 1970s through the mid-1990s. Some effects that finance decisions have on the economy include prolonged business cycles, increase in distribution of wealth inequality, weakening dollar value, and inadequate retirement savings (Mandell & Klein, 2009). If personal finances play such a large role in the economy, then personal financial literacy should play a large role in our high schools. Mississippi's United States Senator Thad Cochran claimed that financial literacy education is an "individual means of aiding in the nation's economic recovery" (2010). Ensuring financial literacy among the population is not just a personal issue but an issue of a national importance. Reaching the population as a whole is critical in finding a solution, and high school is a critical point for incorporating financial education into the curriculum. Based on motivations outlined in the previous discussion, this study aims to address the following question: does the presence of personal finance courses in high schools increase the level of young adults' financial literacy? This study will discuss current research that is available on this topic and provide a study that analyzes the correlation between the financial literacy of college students who took a personal finance course while in high school and those who did not.

Chapter 2: Literature Review

Though the academic sectors are beginning to realize the issue and the importance in finding a solution, there is still little research done to determine whether personal finance education in secondary schools actually has a positive impact. As Tennyson and Nguyen (2001) suggested, “coupled with Americans’ low rates of saving, heavy use of credit and high rates of bankruptcy, have fueled public concerns that teens need educational preparation to successfully manage their finances in adulthood” (p. 241). A number of studies established the fact that financial literacy in our country is a problem but, since that has previously been established, it is now time to find a solution.

Defining Financial Literacy

Before determining if high school courses cause an increase in financial knowledge, it is essential to understand exactly what financial literacy is. As Huston (2010) pointed out, there is no uniform definition of financial literacy nor a standardized instrument for measuring financial literacy scores. This creates a problem and makes it harder to achieve a united goal for increasing personal financial understanding. Creating a uniform and broadly accepted definition is a crucial step in remedying the bigger problem. One study claimed “financial education is defined as knowledge that helps people make sound, informed financial decisions” (Valentine & Khayum, 2005, p. 1). Another researcher suggested defining it as “a combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing” (Cameron et al, 2014, p.13). The suggested outcome of each of these is that individuals need to be able to make educated choices about their own financial situations. There is less agreement on the decision-making

process. One group of researchers simply suggested “knowledge” as the tool used while the other claimed that it is more—a combination of tools that allows better financial decisions to be made. More often in other studies, the idea of a combination technique is presented when discussing financial literacy. This combination suggests knowledge and ability as the two necessary factors that an individual needs to be able to use concerning their personal finances (Huston, 2010; Lusardi, Mitchell, & Curto, 2010). For the purposes of this study, financial literacy is defined as having the knowledge and ability to make informed personal financial decisions.

Personal Finance as a High School Course

Research into the effect of education on financial literacy has mixed results. Lusardi and Wallace (2013) suggested that acquiring financial literacy in any form is beneficial over time. If this is true, then the concern is in determining if the most efficient and effective way to provide financial literacy to the public is in high school education.

Some researchers argue that courses in personal finance management do not increase a student’s literacy on the topic. One study conducted by Mandell and Klein (2009) found that “there was virtually no difference between those who had taken the course and those who had not” (p. 19). While this study suggested no correlation, the researchers also provided that there may be no immediate impact from a course and that “the effects of various forms of financial education on financial behavior are less certain” (Mandell & Klein, 2009, p. 17). Though we hope to have definitive findings from all studies so that we can create a better solution, the uncertainty shown in this study still provides that education may impact long-term financial literacy.

Many other researchers believed that a correlation does exist between financial knowledge and receiving personal finance instruction in high school. One study found that “Ceteris paribus, students who have previously completed an economics or business studies course have significantly higher financial literacy” (Cameron et al, 2014, p. 17). Likewise, the results of Walstad, Rebeck, and MacDonald’s (2010) test concluded that financial education does have an impact on high school students’ personal finance knowledge. These are just two examples of literature that provide a strong argument for the need of personal finance inclusion into high school curricula. It should also be noted that the latter study looked specifically at the effects of a standardized curriculum (Walstad, Rebeck, & MacDonald, 2010). This is another arena that has received a lot of discussion among financial researchers, and rightly so. To have the best understanding we can of the correlation between education and financial understanding, we need to know if just having concepts incorporated into existing curricula (i.e. math and economics) is effective or if there must be a course designated specifically for the purpose of teaching personal finance basics. Studies suggest that having a separate course for this purpose is not only the most effective method, but also the only one that has any positive effect. Tennyson and Nguyen (2001) made the following claim:

When curriculum mandates are considered as a whole, students in mandate states did not perform significantly better than other students. However, when broken down separately, curriculum mandates that require the teaching of personal finance concepts within a specific course are significantly and positively related to student test scores (p. 253).

Based on their findings, one can conclude that unless a course is specifically for the purpose of educating youth in personal finance, then any other avenue within the realm of education is ineffective. Another study provided similar results and the researchers found “more specific state mandates for personal finance education to have a more positive effect on student understanding than those more broadly defined” (Walstad, Rebeck, & MacDonald, 2010, p. 338). With this knowledge, it becomes imperative that we recognize the solution to financial illiteracy as a specific course designated to educating students in the basic of personal finance, not just including it in other high school courses.

Other Financial Literacy Determinants

Some studies show that there may be other determinants aside from educational instruction that play a role in one’s financial knowledge. Some researchers believed that there are “considerable differences among demographic groups” (de Bassa Scheresberg, 2013, p. 10). The characteristics of race and sex are mentioned as factors that affect one’s financial literacy. One group of researchers suggested that “there is now fairly robust evidence confirming that many women do not do well in financial calculations” and their study also found that “whites were more likely than black and Hispanic respondents to answer all three financial literacy questions correctly” (Lusardi, Mitchell, & Curto, 2010, p. 367). Though these findings are somewhat discouraging, it allows us to see specific groups that may need to be targeted with financial tools. A larger argument lies in the role of educational attainment as a factor in youth’s financial literacy. Valentine and Khayum (2005) showed that plans to pursue post-secondary education are significant in a student’s overall financial literacy score. Students who have professional goals may

already have a higher ability to understand and apply financial topics as well as an appreciation for their importance. Data also suggests that parents with college degrees have more financially literate children (Lusardi, Mitchell, & Curto, 2010, p. 363). Parents with a higher education level are more likely to instill financial knowledge in their children and encourage higher education. It is seen that overall, education plays a large role in the financial literacy.

Issues when Incorporating Financial Education into High Schools

Unfortunately, there are potential problems that arise when studying the correlation between high school education and personal financial literacy. One common problem discussed among researchers is that the effectiveness of curricula may be compromised if the teachers are not properly trained. One researcher suggested “teachers may have inappropriate or inadequate qualifications” and another claimed “mandate effectiveness also could be compromised if mandates create negative learning environments or if teachers are untrained in the subject area” (Bernheim, Garrett, & Maki, 2001, p. 436; Tennyson & Nguyen, 2001, p. 242). It will be difficult to increase the financial knowledge of our students if our teachers are not educated as well. Training teachers and providing them adequate tools to educate students is a crucial element when incorporating a financial course into a curriculum.

Student interest and engagement are additional issues in education. Bernheim, Garrett, and Maki (2001) argued, “students may fail to take the material seriously” (p. 436). Though this is a possibility as with any other subject, students have expressed a desire for this form of knowledge, which decreases the chances of this occurrence. Also, if a personal finance course is a graduation requirement and the importance of the class

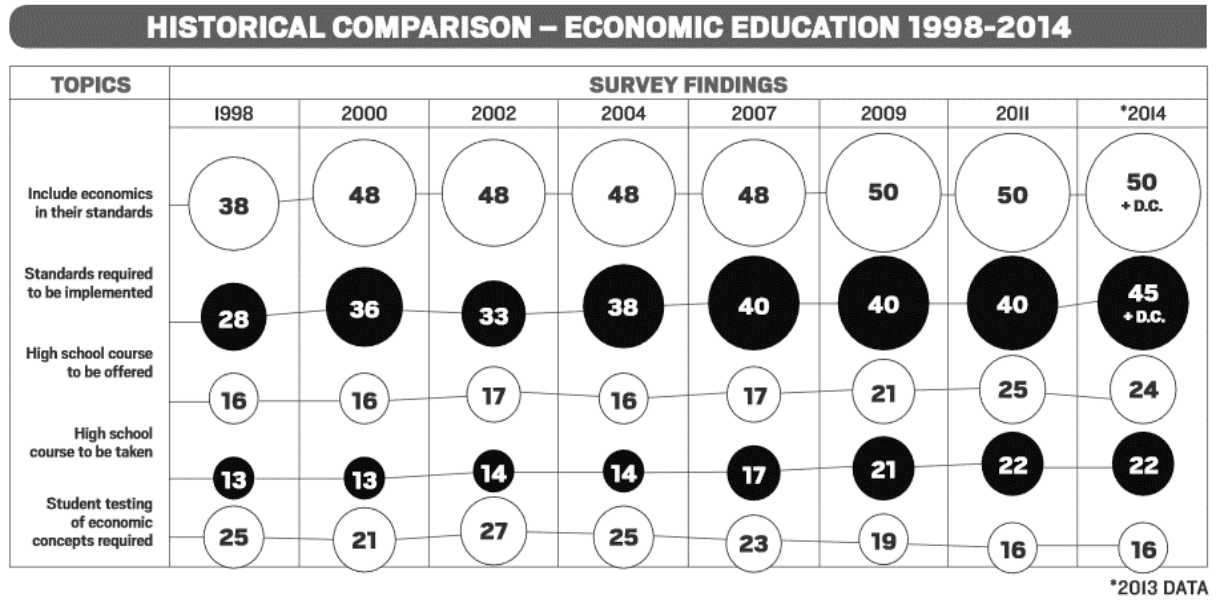
material is stressed, they will be able to fall back on this knowledge later. Another issue that we have already discussed is that of differences in curricula between states and schools. One researcher said “there is substantial variation in personal finance curriculum mandates across the states” (Tennyson & Nguyen, 2001, p. 246). This suggests a more standardized curriculum needs to be created so that students across the nation have the same exposure to financial education and the same opportunity to succeed.

There are going to be hurdles in any platform that attempts to increase financial literacy. Incorporating financial literacy into high school curricula, however, should be attainable. Having an understanding of the issues ahead of time allows us to better understand how to implement the proposed solution.

The Current Presence of Personal Finance in Curricula and Legislation

With a better grasp on what current research shows about the effects that high school courses have on young adults and an understanding of other possible factors and problems, there is a strong case in favor of required personal finance courses. As Figure 1 displays, finance has been taught more in high school classrooms over the past two decades, but the presence of specifically designated personal finance courses is still low (CEE, 2014). Though some researchers argued that having finance basics taught in any manner may be helpful, it is suggested that the best approach is a single specified course for that purpose. So, we should encourage its presence in our high school curricula. However, one problem that lies ahead of us is equipping the community and policy makers with this knowledge. Few consumer education policies address personal finance (Bernheim, Garrett, & Maki, 2001, p. 439).

Figure 1: Historical Comparison - Economic Education, 1998-2014 (Council for Economic Education, 2014)



Government officials have begun to recognize the need for personal finance education in American schools. The Financial and Economic Literacy Improvement Act of 2011 is a piece of legislation that has been introduced to the United States Senate and aims to provide grants to schools for “the development of financial literacy standards in not less than 3 grade levels” (S. 787, 2011). The proposed bill also requires that the 3 grade level minimum be spread out and include one course in elementary school, one course in middle school, and one course in high school. (S. 787, 2011). Closer to home, the Mississippi State Legislature was presented with a house bill that encouraged the implementation of a “financial literacy curriculum for students in grades 9 through 12” (H.B. 747, 2011). Though this bill was thrown out, it too shows that there is recognition of the need and, though slow, action is beginning. United States Senator for Mississippi, Thad Cochran, was an important player in establishing April as Financial Literacy Month and stated “a proficient understanding of personal finances can be the difference between financial security and ruin for individuals and families” (U.S. Senate, 2010). Though the

discussion at the government level is still limited, evidence has shown that it is beginning to make it on the agenda.

With our current understanding of what financial literacy is, its current role in high schools, and the potential problems that may exist, we can create the most effective solution. Previous research has shown that there is positive correlation between receiving personal finance education in a high school setting and having a higher financial literacy; this proposed study seeks to find if this holds true. The study will investigate the relationship between having a secondary school course devoted to personal finance and the level of financial literacy young adults have.

Chapter 3: Methodology

To determine whether or not a correlation exists between personal finance courses in secondary schools and a higher level of financial literacy, we created a survey based on questions presented in the Ever-Fi program. Ever-Fi was the basis for the questionnaire since it is a program that is currently used in high schools to educate students on personal finance. We consulted some high teachers in Mississippi who use Ever-Fi and decided the questions should come from the curriculum that is actually used in schools.

The survey contained 23 questions related to financial literacy as well as demographic questions. A copy of the survey is included in Appendix A. The survey was administered to students in the College of Business through the Qualtrics software system. After removing incomplete data, there were a total of 82 responses.

The data were analyzed for overall correct responses that demonstrated financial literacy. An ordered logit regression model was employed to determine what factors

statistically impacted the overall demonstrated level of financial literacy. Table 1 provides a summary of the respondent group's demographic characteristics.

Chapter 4: Results

Table 2 reports the percentage of respondents correctly answering each financial literacy question. This chart shows that students did well in most sections of the survey with only one question having a correctness response of less than 50%. This question, receiving 49%, concerned the factors that impact one's credit history. Students did particularly well with the questions concerning ATM fees (96%), taxes on pay (92%), and identity theft (90%).

The data was then extracted from Qualtrics and organized into the following five variables: FINLIT, AGEUNDER22, AGEOVER22, HSFIN, and COLLEGEFIN. These summary statistics are presented in Table 3. FINLIT is the measure of financial literacy measured as a total number of correct answers. AGEUNDER22 is a dummy variable represented by a 1 if the respondent is under the age of 22, and AGEOVER22 is a dummy variable represented by a 1 if the respondent is over the age of 22. HSFIN is a dummy variable represented by a 1 if the respondent took a finance course in high school, and likewise, COLLEGEFIN is a dummy variable represented by a 1 if the respondent took a finance course in college. FINEXP represents the respondent's level of financial experience measured by the total number of financial activities reported in the survey. From the data, one can see that the average financial literacy of the students is higher than previous research suggests, with students answering an approximate 14 questions correct out of the total 18. The majority of the students were over 22 years old (70.7%). A small portion (20.7%) claimed to have taken a finance course in high school while a

much higher proportion (79.3%) have taken a finance course in college. Outside of coursework, students appear to have little practical financial experience. Though the average is nearing four out of the eight optional financial tools, the standard deviation of two suggests that some students have very little experience at all.

Regression Data

Table 4 reports the ordered logit regression results. Taking a college finance course and having financial experience are both positive and significant. A variable's significance is indicated when the probability greater than t is less than 0.1. This indicates that the respondents who took a finance course in college have a higher level of financial literacy along with those who are more financially experienced. The age of the respondents does not seem to have a strong impact on their financial literacy.

In these regression results, taking a high school finance course does not statistically impact the respondent's overall financial literacy. These are not the results we would hope to see to make a case for requiring financial education in high school. Yet, in this sample the correlation between students who took a high school finance course and students who took a college finance course is nearly 1.0. Therefore, a larger sample of students that included respondents from outside the College of Business would be necessary to isolate the impact of high school finance courses taught on financial literacy.

Chapter 5: Conclusion and Future Work

Based on the results of this survey and accompanying regression analyses, it can be concluded that financial education does have an impact on one's financial literacy. The respondents used in this study showed a higher overall level of financial literacy than

much of prior research suggests. This can be attributed to two things: the subject matter of the survey and the fact that most of the respondents have had financial education. The questions that students encountered were more in line with what is typically taught in finance courses and more applicable to real life experiences. The majority of the students had also taken a finance course in college, which increases their knowledge and ability to understand the questions and respond correctly. The sample used in this study, however, did not allow us to determine the difference between the impact of a high school finance course and a college course.

The factors that impact financial literacy is an area that needs to be further researched. People are becoming increasingly responsible for their financial outcomes so it is important to understand how we can help them make better decisions, and the earlier we do so the better. For future research, I think it is important to test a larger sample of students from differing fields in the university. I think it would also be advantageous to test students while they are in high school, both before and after completing a course, to see if their financial literacy has improved. Testing students across the country would allow us to compare regional differences and to see whether or not different methods would produce different results.

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Appendices

Appendix A: Tables

Table 1: Demographic Data

Variable	Percentage of Responses
Age: 18-21	27%
Age: 22-30	54%
Age: 31-45	14%
Age: 46 & above	5%
College Freshman	3%
College Sophomore	4%
College Junior	24%
College Senior	54%
College Graduate	4%
Graduate Student	9%
Graduate Degree	3%
HS Finance Class	22%
College Finance Class	82%
Checking Account	92%
Savings Account	61%
Credit Card	68%
Mutual Funds	22%
Stocks/Bonds	22%
Leases	25%
Mortgage	18%
Car Loan	38%
Student Loan	48%

Table 2: Summary of Responses

Variable	Percentage of Respondents Who Answered Correctly
Q 1	86%
Q 2	84%
Q 3	77%
Q 4	96%
Q 5	81%
Q 6	63%
Q 7	49%
Q 8	76%
Q 9	76%
Q 10	59%
Q 11	81%
Q 12	86%
Q13	92%
Q14	76%
Q15	90%
Q16	84%
Q17	67%
Q18	85%

Table 3: Regression Variable Summary Statistics

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum
Finlit	82	13.7561	3.723668	2	18
ageunder22	82	.2560976	.4391624	0	1
ageover22	82	.7073171	.4577941	0	1
Hsfin	82	.2073171	.4078793	0	1
collegefin	82	.7926829	.4078793	0	1
Finexp	82	3.792683	2.059233	0	8

Table 4: Ordered Logit Regression with Financial Literacy as Dependent Variable

finlit	Coefficient	Standard Error	t	P> t 	95% Conf. Interval	
ageunder22	-.6912542	.9059275	-.76	.448	-2.495186	1.112678
Hsfin	.1571005	.7334071	.21	.831	-1.3033	1.617501
collegefin	1.576417	.8962771	1.76	.083	-2.082991	3.361132
Finexp	1.025358	.1678859	6.11	.000	.6910548	1.359662
Cons	8.762099	1.183587	7.4	.000	6.405276	11.11892

Appendix B: Survey Questions

Savings

1. John just opened a savings account and wants to maximize the amount of interest he earns. Which of the following actions would enable him to earn MORE interest?
 - A. Selecting an account with a high interest rate
 - B. Leaving his money in the account for a long period of time
 - C. Transferring money into his checking account each month
 - D. Both A and B
2. The purpose of a budget is to:
 - A. help you plan how you will spend the money you earn or receive
 - B. stop you from spending too much money
 - C. increase the balance of your savings account
 - D. tell you how much you owe the government in taxes

Banking

1. Savings accounts usually offer _____ interest rates than checking accounts. It is _____ to access your money in a savings account than a checking account.
 - A. lower; harder
 - B. lower; easier
 - C. higher; harder
 - D. higher; easier
2. What is the best strategy for avoiding ATM fees?
 - A. only use ATMS close to your house
 - B. only use ATMs to withdraw cash
 - C. only use ATMs in your bank's network
 - D. only use ATMs you have used before

Payment Types

1. Which of the following statements are TRUE about credit cards?
 - I. When you use a credit card, the money comes directly out of your account
 - II. Credit cards typically offer more fraud protection than debit cards
 - III. Transactions made with a credit card can impact your credit score
 - A. Statement I
 - B. Statement II
 - C. Statements II & III
 - D. Statements I, II & III
2. Which payment method typically charges the highest interest rates?
 - A. Credit Cards
 - B. Cashier's Checks
 - C. Pre-paid cards

D. Payday Loans

Credit Score

1. Which of the following factors will have the greatest impact on your credit score?

- I. Length of Credit History
- II. Payment History
- III. Amounts Owed
- IV. Types of Credit Used

- A. I & II
- B. II & III
- C. I & III
- D. II & IV

2. Which of the following actions has no impact on your credit score?

- A. You inquire about a credit card charge
- B. You use a large percentage of your credit limit
- C. You opened several new credit cards last week
- D. You send in your credit card payment a couple days later

Higher Education

1. When looking to finance higher education, what is the best order to look for funding sources?

- A. Grants/Scholarships- Federal Student Loans- Private Loans
- B. Private Loans- Grants/Scholarships- Federal Student Loans
- C. Federal Student Loans- Grants/Scholarships- Private Loans
- D. Grants/Scholarships- Private Loans- Federal Student Loans

2. Which of the following correctly pairs a financing option with its description?

- A. Grants & Scholarships- Money you Earn
- B. Federal Student Loans- Free Money
- C. 529 Plan- Money you Save
- D. Federal Work-Study Program- Money you Borrow

Renting v. Owning

1. A _____ is generally considered an appreciating asset because it will _____ in value over time.

- A. car; increase
- B. car; decrease
- C. house; increase
- D. house; decrease

2. Renting provides _____ flexibility but can lead to _____ cost in the long-term.

- A. greater; lower
- B. greater; higher

- C. less; lower
- D. less; higher

Insurance and Taxes

1. Which of the following is not deducted on a typical paystub:
 - A. Sales tax
 - B. Social security tax
 - C. State income tax
 - D. Medicare tax
 - E.
2. You have an insurance policy with a \$300 premium and a \$500 deductible. How much should you expect to pay the insurance company each month for coverage?
 - A. \$200
 - B. \$300
 - C. \$500
 - D. \$800

Consumer Protection

1. Identity thieves can use your personal information to:
 - A. Open a credit card
 - B. Sign up for electricity service
 - C. Get a cell phone contract
 - D. All of the above
2. Consumer protection laws are meant to:
 - A. Protect businesses from consumers
 - B. Prevent unfair or deceptive business practices
 - C. Protect consumers from spending too much money
 - D. Prevent consumers from buying unnecessary items

Investing

1. Which of the following would be considered the highest risk portfolio?
 - A. A portfolio made up of 20 % savings accounts, 50% mutual funds, and 30 % bonds
 - B. A portfolio made up of 40% mutual funds, 40% Treasury bonds, and 10% stocks
 - C. A portfolio made up of 60% stocks, 30% mutual funds, and 10% Treasury bonds
 - D. A portfolio made up of 70% mutual funds, 10% stocks, and 20% Treasury bonds
2. Which best describes the difference between stocks and bonds?
 - A. Stocks allow investors to share in profits; bonds make investors responsible for company debts
 - B. Stocks allow investors to own a portion of the company; bonds are loans to the company

- C. Stocks pay interest to investors throughout the year; bonds only pay interest at fixed times during the year
- D. Stocks are a more reliable investment; bonds tend to be more volatile

Demographic

1. What is your age?

- 18-21
- 22-30
- 31-45
- 46 or above

2. What is your level of education?

- College Freshman
- College Sophomore
- College Junior
- College Senior
- College Graduate
- Graduate Student
- Graduate Degree

3. Did you take a financial class while you were in high school?

- Yes
- No

4. Have you taken any financial classes while in college?

- Yes
- No

5. Which of the following do you currently use? (choose all that apply)

- Checking Account
- Savings Account (including money market and CDs)
- Credit Card
- Mutual Funds
- Stocks/ Bonds
- Lease (home, apartment)
- Mortgage
- Car Loan
- Student Loan

Appendix C: Participant Consent Form

THE UNIVERSITY OF SOUTHERN MISSISSIPPI AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT

Consent is hereby given to participate in the study titled: **Financial Literacy in High School Education**

Purpose: This study is designed to examine what effects a high school finance class can have on an adult's financial literacy.

Description of Study: Participation in this study will consist of completing an online questionnaire. The questionnaire consists of 5 demographic questions and 18 questions pertaining to the different areas of financial literacy. These questions are drawn from EverFi's Cumulative Exam Answer Key provided to all teachers of the EverFi high school financial education program. There are no risks assumed by the participants aside from those encountered in routine daily life. The survey will be sent to 100 students and is expected to take no longer than 30 minutes.

Benefits: Participants will not benefit directly from participation in this study, however we hope that this study will contribute to a better understanding of the correlation between a high school financial education and one's financial literacy.

Risks: In this study, there are no foreseeable risks beyond those that are present in routine daily life. If participants become stressed while completing the survey, they should contact the researcher immediately. Do not participate in this study if you are not 18 years of age or older.

Confidentiality: Participants will not be asked to provide any private, identifying information while completing the questionnaire. Since the consent form delinks from any responses, participant's responses will remain anonymous. The data gathered from the study will be stored on a password protected computer and on the University of Southern Mississippi's server, and then destroyed after one year. The findings will not be presented with any identifying information.

Participant's Assurance: Whereas no assurance can be made concerning results that may be obtained (since results from investigational studies cannot be predicted) the researcher will take every precaution consistent with the best scientific practice. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Questions concerning the research should be directed to Chelsea Simmons at chelsea.simmons@eagles.usm.edu. This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of

Southern Mississippi, 118 College Drive #5116, Hattiesburg, MS 39406-0001, (601) 266-5997. A copy of this form is available upon request.

By clicking below to continue to the questionnaire, you are agreeing to the participation conditions above.

Appendix D: IRB Approval Letter



INSTITUTIONAL REVIEW BOARD

118 College Drive #5147 | Hattiesburg, MS 39406-0001

Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional.review.board

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 16021204

PROJECT TITLE: Financial Literacy in High School Education

PROJECT TYPE: New Project

RESEARCHER(S): Chelsea Simmons

COLLEGE/DIVISION: College of Business

DEPARTMENT: Finance

FUNDING AGENCY/SPONSOR: N/A

IRB COMMITTEE ACTION: Exempt Review Approval

PERIOD OF APPROVAL: 03/09/2016 to 03/08/2017

Lawrence A. Hosman, Ph.D.

Institutional Review Board