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Measuring Financial Literacy: A Comparative Study across Two Collegiate Groups

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The University of Southern Mississippi

Measuring Financial Literacy: A comparative study across two collegiate groups

by

Emma Floyd

A Thesis
Submitted to the Honors College of
The University of Southern Mississippi
in Partial Fulfillment
of the Requirements for the Degree of
Bachelor of Science in Business Administration
in the Department of Finance

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Approved by

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Abstract

This study analyzed the financial literacy of students in the College of Business versus that of students in other colleges at the University of Southern Mississippi. The purpose of this study was to examine the relationship between demographic characteristics, financial literacy, and financial experience. The financial literacy of the students was assessed using a selection of questions from the Jump\$tart Coalition Survey of Personal Financial Literacy. The financial literacy of the students was determined based upon the number of questions answered correctly on the survey; however, there was no passing or failing number. Instead, each demographic group was said to be more or less financially literate than the others. The results from the survey were analyzed using two ordered logistics regression formulas.

Key Terms: Financial Literacy, Financial Knowledge, Survey, College

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Chapter 1: Introduction

The United States' economy is a consumer driven market economy. Individual consumers have the freedom to choose between supplied goods and services in a market. Their choices create a demand for a particular good or service, which results in an amount supplied that meets demand (Emmons, 2012). Consumer spending is a driver of economic growth, but can only continue to help grow the economy if individual consumers are financially stable. In order for consumers to be financially stable, they need to have an acceptable understanding of their personal finances. Personal finance encompasses all of the financial decisions and activities of an individual. Financial literacy measures how well individuals understand the information needed to make responsible financial decisions. Financial literacy has drawn considerable attention in the recent years due to a consensus among researchers that consumers have a knowledge deficit concerning personal finance, which has been magnified by the economic crisis and the “shift from defined benefit to defined contribution retirement savings plans” (Knoll & Houts, p.381). The shift from defined benefit to defined contribution retirement savings plans puts the investment decisions into the hands of the employee; people will get out of it what they put into it. If enough of the population has insufficient funds for retirement, it will create a drag on the economy through reduced consumer spending.

Major interest in financial literacy started with the formation of the Jump\$tart Coalition in 1995. It is a not-for-profit organization that partners with approximately 150 organizations that share an interest in advancing financial literacy in the nation's youth. Its mission is preparing the nation's youth for lifelong financial success (Jump\$tart Coalition). Eight years later in 2003, the United States government passed the Financial

Literacy and Education Act, which created the Financial Literacy and Education Commission whose purpose was to create a national financial education website, hotline, and strategy on financial education (U.S. Department of the Treasury, 2014). The housing market crash and credit crises in 2007 prompted President George W. Bush to add the Presidential Advisory Council on Financial Literacy to his administration in 2008, in an effort to make financial education a national priority (U.S. Department of the Treasury, 2014). President Obama continued this council until 2013, when he restructured it to focus more on young Americans, renaming it the President's Advisory Council on Financial Capability for Young Americans. It becomes apparent when looking through the history of financial literacy that it is viewed as an important issue because of its direct impact on the nation's economy. It has also become so significant because there is a general consensus among researchers that most consumers lack the financial literacy needed to make decisions in their best interests (Mandell & Klein, 2009; Knoll & Houts 2012). To improve the financial literacy of the nation as a whole, there needs to be data to show where it is low and in which areas of knowledge populations are lacking.

The purpose of this study is to examine the relationship between demographic characteristics, financial literacy, and financial experience. Financial literacy has been previously studied in specific groups of college students but has not been frequently analyzed across groups (Bongini, Trivellato, & Zenga, 2012). This study aims to fill a gap in the research of financial literacy by analyzing the relationship between financial literacy and financial experience across socio-demographics in collegiate groups.

Chapter 2: Literature Review

Financial Literacy Defined

Although financial literacy has drawn increasing interest, a universally accepted definition has yet to be acknowledged. A comprehensive study that included most research about financial literacy from 1996 to 2008 found that over half of these studies did not include a definition of financial literacy and out of the 13% that did, eight different definitions are provided. The eight definitions range from including both financial knowledge and financial application to one or the other (Huston, 2010). “The ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being,” is the definition or very similar to the definition accepted by three major financial literacy organizations (Jump\$tart Coalition, PACFL, and FLEC). Since these three organizations encompass over 100 governmental agencies and private organizations, it can be assumed that a large portion of financial literacy research will adopt this definition as well (Knoll & Houts, 2012, p.383).

Financial Literacy Measured

Whether influenced by the absence of a universal definition or not, the methods used in research to measure financial literacy also lack uniformity. Some research pulled secondary data from previously administered surveys such as the Health and Retirement Study (Murphy, 2013) and other research collected primary data by administering surveys (Mandell & Klein, 2009) created specifically for the study or conducting interviews (Bongini, Trivellato, & Zenga, 2012). Regarding the surveys that are created for a study, there is no consistency pertaining to the number of questions asked, with the minimum amount being 3 and the maximum 68 (Huston, 2010); however, all research

generally used one or more of the following content areas on which the questions are based: money basics, investing, borrowing, and protecting resources (Huston, 2010). Some research drew questions from previously created financial literacy tests, including the JumpStart Coalition questionnaire (Mandell & Klein, 2009; Bongini, Trivellato, & Zenga, 2012). For researchers who wish to create an original questionnaire, Huston (2010) suggests using the four finance content areas that already exist in literature and asking between 12 and 20 questions per Kim and Mueller's (1978) rule of thumb that the minimum number of items having meaningful loadings on a domain factor varies between three and five. Most surveys include questions regarding demographic data, and some include questions associated with financial behaviors. There is also a wide range of audiences that researchers target, including both student and adult subjects, international and local subjects, and subjects within different ethnic groups (Bongini, Trivellato, & Zenga, 2012; Mandell & Klein, 2009; Nicolini, Cude, & Chatterjee, 2013; Knoll & Houts, 2012).

Previous Findings

Using the survey method, researchers have collected data, and analyzed it looking at the relationship between financial literacy and personal characteristics. Research has found that, "men, those older than 24 years old, those with at least a high school education, and those with annual incomes greater than \$25,000" are more financially literate than individuals who do not fall into these categories (Nicolini, Cude, & Chatterjee, 2013, p.695). Results from a study of college students showed that major choice, job experience, and financial behaviors all forecast the level of financial literacy (Bongini, Trivellato, & Zenga, 2012). In a study regarding psychosocial factors, data

analyses revealed religiosity and financial satisfaction as independent predictors of financial literacy (Murphy, 2013).

The hypotheses for this study is derived from the results of previous studies:

Hypothesis 1: Years of college completed (higher) is positively associated with financial literacy.

Hypothesis 2: Marital status (married) is positively associated with financial literacy.

Hypothesis 3: Parent status is positively associated with financial literacy.

Hypothesis 4: Gender identification (male) is positively associated with financial literacy.

Hypothesis 5: Age (18+) is positively associated with financial literacy.

Hypothesis 6: College (Business) is positively associated with financial literacy.

Chapter 3: Methodology

This study will use the definition provided by the Jump\$Start Coalition, PACFL, and FLEC, because it encompasses both the knowledge and application aspects of financial literacy. It will also focus on the demographic characteristics of gender, age, marital status, number of children, and college years completed and their effect on financial literacy per the hypotheses. The hypotheses will be tested using two collegiate groups: students who are in the College of Business, and students who are not in the College of Business. To answer the research question, “How is financial literacy related to various demographic characteristics within collegiate groups?” this study will follow Huston’s suggestions about creating a survey, and will pull questions from the Jump\$Start questionnaire. The survey will be online and created using the Qualtrics system. Students will be notified about the survey via their USM email, Facebook, and their professors. The sample size for each group will be 100 and it is a convenience sample. The survey should take approximately 10 to 15 minutes and will consist of 23 questions. The survey will begin with sixteen questions, with four relating to four categories similar to the four personal finance content areas previously stated in the literature review: Income, Money Management, Savings and Investment, and Spending and Debt. There will be six questions regarding the subject’s demographic characteristics in order to collect the necessary control information: age, gender, college years completed, marital status, number of children, and major. There will also be a question asking participants to check all financial experiences that they have had. The questions relating to personal finance will have five possible answers including an “I don’t know” response, to prevent data from being skewed due to guessing. All of the questions and the order in which they

were asked are present in Appendix B. In order to encourage students to take the survey, a \$100 VISA gift card will be awarded to one student through a random drawing.

Potential Problems

When collecting data through a survey in this manner, there are problems and errors that can occur. A potential problem is that the response rate for the surveys may not meet the expected sample size, which could result in the failure to draw accurate conclusions. There can also be errors in the data caused by survey participants guessing answers correctly rather than actually knowing the correct answer; however, there is no way to determine whether this has occurred or not. Another problem with this method of data collections is that some students may not complete the entire survey, or may neglect to answer some of the questions. In an effort to minimize the potential for error created in these situations, surveys that had incomplete demographic information were discarded, while those with unanswered financial literacy questions were included with the assumption that the answer for the unanswered questions was “I don’t know”.

Chapter 4: Results

The financial literacy of the subjects will be assessed based on the number of questions answered correctly compared to that of the whole; therefore, a subject or demographic group will be referred to as more or less financially literate as opposed to making a passing and failing distinction. This approach has been chosen, because there is no universal measurement currently in use and the definition used for this research describes financial literacy as the ability to use knowledge and skills to manage financial resources, it cannot be measured on a pass and fail basis.

Descriptive statistics

After administering the survey and filtering through the data to discard any unusable submissions, there were 373 usable submissions left. The data was then extracted from the Qualtrics system and organized into three groups: whole data, business only data, and non-business data. Each grouping of data is represented in a chart, which gives the mean number of answers to the question, the standard deviation, and the minimum and maximum amount of options chosen. The minimum and maximum amount mainly apply to the total amount answered correctly, and the amount of financial experiences of each student.

The whole data, which is represented in Chart 1 in Appendix C, was comprised mainly of students who were female (64.34%), aged 21-25 (46.65%), single (77.48%), and had no children (83.91%). A majority of the students (78.29%) will have completed three or more years of college by May 2015. Out of the 12 possible financial experiences, the maximum number that a student had was 11. The mean amount of experiences the students had as a whole was 4.7078. The mean number of financial literacy questions answered correctly was 8.7239 out of the 16 possible. The personal finance category, in which the students as a whole, answered the most questions correctly was Income. The personal finance category that the students struggled with most was Savings and Investment; however, the question that the most students answered incorrectly was question 14 regarding a stolen credit card.

Chart 2 in Appendix C displays the data for students who are in the College of Business. The College of Business students comprised 46.11% of the total survey submissions. The business students who completed the survey were 40.12% male and

58.72% female. Exactly half of them were aged 21-25, with the other half split across the other age ranges. A majority of the students (62.79%) will have completed either their Junior or Senior year of college by May 2015. As with the whole data, the bulk of the students were single (76.74%) with no children (82.56%). The business students, on average, had more financial experiences than the students as a whole at 5.2267. The mean number of financial literacy questions answered correctly by the business students at 8.9651 was slightly higher than that of the students as a whole. The business students struggled and excelled in the same personal finance categories as the students as a whole and there is no extreme difference in the mean responses to each question.

The non-business data is presented in Chart 3 in Appendix C. The majority of the non-business students were female (69.15%), single (78.11%), and had no children (85.07%). Most of the students were aged 21-25 at 43.78% and will have completed three or more years of college (79.61%) by May 2015. The non-business students had slightly less financial experiences (4.2637) and fewer total questions answered correctly (8.5174) than the students as a whole. However, they struggled and excelled in the same areas as students as a whole.

Regression Data

After analyzing the sample, each group was put through two different ordered logistic regression formulas. The first regression looked at the relationship between the number of questions answered correctly (total correct) and the demographic information. The second regression looked at the relationship between the dependent variable, financial experience, and the independent variables of demographic information. Data is considered statistically significant if the probability greater than z was below 0.1. The

regression model used requires one variable from each demographic group be left out. For example, in the age grouping, this variable was the 18-20 years of age range. When analyzing the data, this should be interpreted as comparing each variable against the one left out. For example, the age range 21-25 would be said to be more or less financially literate than the 18-20 age range and so on. Due to the low response averages of some of the demographic groupings, the data may not accurately represent that demographic population at USM accurately. The groups with the lowest response rate (under 2%) were students who have a marital status of separated, and those who have four or more children. Other groups that had a low response rate (under 5%) include students with two or three children, students aged 36-40, students who will not have completed any years of college by May 2015, and students who have a marital status of divorced or other.

The results from the first regression, which analyzes the relationship between total numbers of questions answered correctly and the demographic characteristics are shown in Chart 4 in Appendix C. When analyzing this data, the demographic information that is not statistically significant includes marital status, gender, number of children, and being a business major. The demographic information that is statistically significant comprises age, years of college, and financial experience. The data shows that students aged 31-35, 36-40, and 40 plus had a $P > z$ value of .024, .013, and .001 respectively. Therefore, as students age, they become more financially literate. Students with four years of college had a $P > z$ value of .066, but students with five or more years of college had a $P > z$ score of .107. The financial experience demographic had a $P > z$ value of .001. Based on this regression, the two drivers of how many questions a student will answer correctly are age and financial experience, which are most likely tied together.

The results from the second regression, which analyzes the relationship between financial experience and the other demographic characteristics, are shown in Chart 5 in Appendix C. Similar to the first regression, gender is not statistically significant in this relationship either. However, all of the other demographic characteristics have a category that is statistically significant. The categories within the age demographic that are statistically significant are 31-35, 36-40, and 40 plus. The categories that are significant within the years of college completed demographic are four and five plus years. Looking at marital status, married and divorced were both statistically significant. The category within the number of children demographic that is statistically significant is having two children. Each of these categories has a P-value of less than .1 meaning that if a student falls into these categories, they are more likely to have more financial experience than those who do not. The characteristic that has the strongest relationship to amount of financial experience of a student, with a P-value of 0, is whether or not they are a business major.

Chapter 5: Conclusion and Future Work

Based on the results collected from the survey and the regression analyses, the conclusions regarding each hypothesis mentioned previously are as follows:

Hypothesis 1: Years of college completed (higher) is positively associated with financial literacy.

There is some evidence in support of this hypothesis. Completing four years of college was a statistically significant variable. Completing fewer than four years was not significant. Completing more than four years of college, however, was not significant either.

Hypothesis 2: Marital status (married) is positively associated with financial literacy.

The data reject this hypothesis.

Hypothesis 3: Parent status is positively associated with financial literacy.

The data reject this hypothesis.

Hypothesis 4: Gender identification (male) is positively associated with financial literacy.

The data reject this hypothesis.

Hypothesis 5: Age (18+) is positively associated with financial literacy.

The data support this hypothesis. Ages 18-30 are not significant. Ages above the age of 30, however, are statistically significant. This indicates that as students get older, they gain more financial literacy.

Hypothesis 6: College (Business) is positively associated with financial literacy.

The data reject this hypothesis.

Although no hypotheses were made regarding the effect of financial experience on financial literacy, it was the most statistically significant variable, which indicates that the more financial experience a student has, the more financially literate they will be.

Financial literacy is a topic in need of further studies. As the financial environment changes in this technical age, consumers are becoming more directly involved with their finances. They have more access to international financial markets, more choice regarding “how much to save and where to invest, and, during retirement, [must] take on responsibility for careful decumulation so as not to outlive their assets while meeting their needs” (Lusardi & Mitchell, pg. 6). Due to this increased access and responsibility, consumers that are severely lacking financial literacy can make decisions that could detrimentally impact their lives as well as the economy. It is important to

educate the younger generations about finance both for themselves and for the future of the economy. Based on the research conducted through this survey, it is obvious that many students do not know enough about savings and investments. Since this survey was only conducted over a small population, the results cannot be projected over students across the whole United States. For future research, studies conducted across colleges or regions may provide more useful information.

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<http://www.treasury.gov/resource-center/financial-education/Pages/commission-index.asp>

Appendix A: IRB Approval Letter



INSTITUTIONAL REVIEW BOARD
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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: 15030301
PROJECT TITLE: Measuring Financial Literacy: A Comparative Study Across Three Colligate Groups
PROJECT TYPE: New Project
RESEARCHER(S): Emma Floyd
COLLEGE/DIVISION: College of Business
DEPARTMENT: Finance
FUNDING AGENCY/SPONSOR: N/A
IRB COMMITTEE ACTION: Expedted Review Approval
PERIOD OF APPROVAL: 03/11/2015 to 03/10/2016
Lawrence A. Hosman, Ph.D.
Institutional Review Board

Appendix B: Survey Questions

A. Income

1. Your take home pay from your job is less than the total amount you earn. Which of the following best describes what is taken out of your total pay?
 - a. Social security and Medicare contributions
 - b. Federal income tax, property tax, and Medicare and social security contributions
 - c. Federal income tax, social security and Medicare contributions*
 - d. Federal income tax, sales tax, and social security contribution
 - e. I don't know
2. Chelsea worked her way through college earning \$15,000 per year. After graduation, her first job pays \$30,000. The total dollar amount Chelsea will have to pay in Federal Income taxes in her new job will:
 - a. Double, at least, from when she was in college*
 - b. Go up a little from when she was in college
 - c. Stay the same as when she was in college
 - d. Be lower than when she was in college
 - e. I don't know
3. If you went to college and earned a four year-degree, how much more money could you expect to earn than if you only had a high school diploma?
 - a. About 10 times as much
 - b. No more; I would make about the same either way
 - c. A little more; about 20% more
 - d. A lot more; about 70% more*
 - e. I don't know
4. Which of the following best describes the primary sources of income for most people age 20-35?
 - a. Dividends and interest
 - b. Salaries, wages, tips*
 - c. Profits from business
 - d. Rents
 - e. I don't know

B. Money Management

5. Inflation can cause difficulty in many ways. Which group would have the greatest problem during periods of high inflation that last several years?
 - a. Older, working couples saving for retirement
 - b. Older people living on fixed retirement income*
 - c. Young couples with no children who both work
 - d. Young working couples with children
 - e. I don't know
6. Retirement income paid by a company is called:
 - a. 401(k)
 - b. Pension*

- c. Rents and profits
 - d. Social Security
 - e. I don't know
7. Many young people receive health insurance benefits through their parents. Which of the following statements is true about health insurance coverage?
- a. You are covered by your parents' insurance until you marry, regardless of your age
 - b. If your parents become unemployed, your insurance coverage may stop, regardless of your age*
 - c. Young people don't need health insurance because they are so healthy
 - d. You continue to be covered by our parents' insurance as long as you live at home, regardless of your age
 - e. I don't know
8. If each of the following persons had the same amount of take home pay, who would need the greatest amount of life insurance?
- a. An elderly retired man, with a wife who is also retired
 - b. A young married man without children
 - c. A young single woman with two young children*
 - d. A young single woman without children
 - e. I don't know

C. Savings and Investment

9. Sara and Joshua just had a baby. They received money as baby gifts and want to put it away for the baby's education. Which of the following tends to have the highest growth over periods of time as long as 18 years?
- a. A checking account
 - b. Stocks*
 - c. A U.S. Govt. savings bond
 - d. A savings account
 - e. I don't know
10. Which of the following types of investment would best protect the purchasing power of a family's savings in the event of a sudden increase in inflation?
- a. A 10 year bond issued by a corporation
 - b. A certificate of deposit at a bank
 - c. A 25 year corporate bond
 - d. A house financed with a fixed rate mortgage*
 - e. I don't know
11. Many savings programs are protected by the Federal government against loss. Which of the following is not?
- a. A U.S. Savings Bond
 - b. A certificate of deposit at the bank
 - c. A bond issued by one of the 50 States
 - d. A U.S. Treasury bond
 - e. I don't know

12. If you had a savings account at a bank, which of the following would be correct concerning the interest that you would earn on this account?
- Earnings from savings account interest may not be taxed
 - Income tax may be charged on the interest if your income is high enough*
 - Sales tax may be charged on the interest you can earn
 - You cannot earn interest until you pass your 18th birthday
 - I don't know

D. Spending and Debt

13. Which of the following statements best describes your right to check your credit history for accuracy?
- Your credit record can be checked once a year for free*
 - You cannot see your credit record
 - All credit reports are the property of the U.S. Government and access is only available to the FBI and Lenders
 - You can only check your record for free if you are turned down for credit based on a credit report
 - I don't know
14. If your credit card is stolen and the thief runs up a total debt of \$1,000, but you notify the issuer of the card as soon as you discover it is missing, what is the maximum amount that you can be forced to pay according to Federal law?
- \$500
 - \$1000
 - Nothing
 - \$50*
 - I don't know
15. Which of the following credit card users is likely to pay the GREATEST dollar amount in finance charges per year, if they all charge the same amount per year on their cards?
- Jessica, who pays at least the minimum amount each month and more, when she has the money
 - Vera, who generally pays off her credit card in full but, occasionally, will pay the minimum when she is short of cash
 - Megan, who always pays off her credit card bill in full shortly after she receives it
 - Erin, who only pays the minimum amount each month*
 - I don't know
16. Which of the following statements is true?
- People have so many loans it is very unlikely that one bank will know your history with another bank
 - Your bad loan payment record with one bank will not be considered if you apply to another bank for a loan
 - Banks and other lenders share the credit history of their borrowers with each other and are likely to know of any loan payments that you have missed*

- d. If you missed a payment more than 2 years ago, it cannot be considered in a loan decision
- e. I don't know

Demographic Questions

1. What is your gender?
 - a. Male
 - b. Female
2. How old are you?
 - a. 18-20
 - b. 21-25
 - c. 26-30
 - d. 31-35
 - e. 36-40
 - f. 41 or older
3. How many years of college have you completed? (As of May 2015)
 - a. 0
 - b. 1
 - c. 2
 - d. 3
 - e. 4
 - f. 5 or more
4. What is your major?
 - a. Fill in blank
5. What is your marital status?
 - a. Single
 - b. Married
 - c. Divorced
 - d. Separated
 - e. Other
6. How many children do you have?
 - a. 0
 - b. 1
 - c. 2
 - d. 3
 - e. 4 or more
7. Select all that apply
 - a. I use/have used a financial adviser
 - b. I have at least 1 bank account in my name
 - c. I regularly read the financial section of the newspaper
 - d. I regularly talk with friends and relatives about financial topics
 - e. I have taken a finance class
 - f. I own investment products such as bonds, stocks, and mutual funds
 - g. I have a mortgage
 - h. I took out a loan to pay for college
 - i. I have other debt/loans excluding college and mortgages
 - j. I own a debit card

- k. I own a credit card for my bank
- l. I own a credit card for a retail store

Appendix C: Charted Data

Chart 1: Summary Statistics for Whole Sample

Variable	Mean	Standard	Minimum	Maximum
Q1	0.7265	0.4463	0	1
Q2	0.3834	0.4869	0	1
Q3	0.4745	0.5000	0	1
Q4	0.9410	0.2359	0	1
Q5	0.6059	0.4893	0	1
Q6	0.4343	0.4963	0	1
Q7	0.6649	0.4727	0	1
Q8	0.6971	0.4602	0	1
Q9	0.3405	0.4745	0	1
Q10	0.3512	0.4780	0	1
Q11	0.3217	0.4678	0	1
Q12	0.4209	0.4944	0	1
Q13	0.7292	0.4450	0	1
Q14	0.0992	0.2993	0	1
Q15	0.7292	0.4450	0	1
Q16	0.8043	0.3973	0	1
Total Correct	8.7239	3.0755	0	16
Male	0.3512	0.4780	0	1
Female	0.6434	0.4796	0	1
Age: 18-20	0.2547	0.4363	0	1
Age: 21-25	0.4665	0.4995	0	1
Age: 26-30	0.0965	0.2957	0	1
Age: 31-35	0.0617	0.2409	0	1
Age: 36-40	0.0402	0.1967	0	1
Age: 40 plus	0.0777	0.2681	0	1
College 0	0.0402	0.1967	0	1
College 1	0.0617	0.2409	0	1
College 2	0.1153	0.3198	0	1
College 3	0.2654	0.4421	0	1
College 4	0.2869	0.4529	0	1
College 5 plus	0.2306	0.4218	0	1
Business Student	0.4611	0.4992	0	1
Single	0.7748	0.4183	0	1
Married	0.1582	0.3654	0	1
Divorced	0.0241	0.1537	0	1
Separated	0.0054	0.0731	0	1
Other	0.0322	0.1767	0	1
Children 0	0.8391	0.3679	0	1
Children 1	0.0697	0.2550	0	1
Children 2	0.0322	0.1767	0	1
Children 3	0.0349	0.1837	0	1
Children 4 plus	0.0188	0.1359	0	1
Financial Experience	4.7078	2.1894	0	11

Chart 2: Summary Statistics for Sample of Business Students

Variable	Mean	Standard Deviation	Minimum	Maximum
Q1	0.7791	0.4161	0	1
Q2	0.3895	0.4891	0	1
Q3	0.5058	0.5014	0	1
Q4	0.9709	0.1685	0	1
Q5	0.6105	0.4891	0	1
Q6	0.4360	0.4973	0	1
Q7	0.6395	0.4815	0	1
Q8	0.6802	0.4677	0	1
Q9	0.3779	0.4863	0	1
Q10	0.3256	0.4700	0	1
Q11	0.3547	0.4798	0	1
Q12	0.4477	0.4987	0	1
Q13	0.7849	0.4121	0	1
Q14	0.1047	0.3070	0	1
Q15	0.7326	0.4439	0	1
Q16	0.8256	0.3806	0	1
Total Correct	8.9651	2.9417	0	16
Male	0.4012	0.4916	0	1
Female	0.5872	0.4938	0	1
Age: 18-20	0.2558	0.4376	0	1
Age: 21-25	0.5000	0.5015	0	1
Age: 26-30	0.0698	0.2555	0	1
Age: 31-35	0.0581	0.2347	0	1
Age: 36-40	0.0581	0.2347	0	1
Age: 40 plus	0.0523	0.2233	0	1
College 0	0.0465	0.2112	0	1
College 1	0.0698	0.2555	0	1
College 2	0.1163	0.3215	0	1
College 3	0.3198	0.4677	0	1
College 4	0.3081	0.4631	0	1
College 5 plus	0.1395	0.3475	0	1
Single	0.7674	0.4237	0	1
Married	0.1512	0.3593	0	1
Divorced	0.0291	0.1685	0	1
Separated	0.0058	0.0762	0	1
Other	0.0349	0.1840	0	1
Children 0	0.8256	0.3806	0	1
Children 1	0.0698	0.2555	0	1
Children 2	0.0349	0.1840	0	1
Children 3	0.0349	0.1840	0	1
Children 4 plus	0.0233	0.1512	0	1
Finance Experience	5.2267	2.1277	0	11

Chart 3: Summary Statistics for Sample of Non-business Students

Variable	Mean	Standard Deviation	Minimum	Maximum
Q1	0.6816	0.4670	0	1
Q2	0.3781	0.4861	0	1
Q3	0.4478	0.4985	0	1
Q4	0.9154	0.2789	0	1
Q5	0.6020	0.4907	0	1
Q6	0.4328	0.4967	0	1
Q7	0.6866	0.4650	0	1
Q8	0.7114	0.4542	0	1
Q9	0.3085	0.4630	0	1
Q10	0.3731	0.4848	0	1
Q11	0.2935	0.4565	0	1
Q12	0.3980	0.4907	0	1
Q13	0.6816	0.4670	0	1
Q14	0.0945	0.2933	0	1
Q15	0.7264	0.4469	0	1
Q16	0.7861	0.4111	0	1
Total Correct	8.5174	3.1782	0	16
Male	0.3085	0.4630	0	1
Female	0.6915	0.4630	0	1
Age: 18-20	0.2537	0.4362	0	1
Age: 21-25	0.4378	0.4974	0	1
Age: 26-30	0.1194	0.3251	0	1
Age: 31-35	0.0647	0.2466	0	1
Age: 36-40	0.0249	0.1561	0	1
Age: 40 plus	0.0995	0.3001	0	1
College 0	0.0348	0.1838	0	1
College 1	0.0547	0.2280	0	1
College 2	0.1144	0.3191	0	1
College 3	0.2189	0.4145	0	1
College 4	0.2687	0.4444	0	1
College 5 plus	0.3085	0.4630	0	1
Single	0.7811	0.4145	0	1
Married	0.1642	0.3714	0	1
Divorced	0.0199	0.1400	0	1
Separated	0.0050	0.0705	0	1
Other	0.0299	0.1706	0	1
Children 0	0.8507	0.3572	0	1
Children 1	0.0697	0.2552	0	1
Children 2	0.0299	0.1706	0	1
Children 3	0.0348	0.1838	0	1
Children 4 plus	0.0149	0.1216	0	1
Finance Experience	4.2637	2.1483	0	11

Chart 4: Ordered Logit Regression with Financial Literacy Score as Dependent Variable

Variable	Coefficient	Z	P > z
Female	-0.0967	-0.47	0.64
Age: 21-25	-0.0839	-0.3	0.762
Age: 26-30	0.6337	1.22	0.224
Age: 31-35	1.2879	2.26	0.024
Age: 36-40	1.4448	2.49	0.013
Age: 40 Plus	2.1848	3.39	0.001
College 1	-0.3626	-0.62	0.535
College 2	-0.4086	-0.79	0.431
College 3	0.5506	1.12	0.262
College 4	0.9889	1.84	0.066
College 5 Plus	0.8674	1.61	0.107
Business	0.1962	0.95	0.344
Single	0.2170	0.48	0.633
Married	0.1457	0.19	0.847
Divorced	0.4810	0.56	0.579
Separated	1.3093	1.25	0.211
Child 1	0.2130	0.41	0.683
Child 2	-0.2261	-0.26	0.792
Child 3	0.0266	0.03	0.974
Child 4 Plus	0.0658	0.07	0.947
Financial Experience	0.2075	3.3	0.001

Chart 5: Ordered Logit Regression with Financial Experience Score as Dependent Variable

Variable	Coefficient	Z	P > z
Female	-0.1036	-0.51	0.612
Age: 21-25	0.2327	0.69	0.49
Age: 26-30	0.6740	1.41	0.16
Age: 31-35	2.0647	3.33	0.001
Age: 36-40	1.7067	2.29	0.022
Age: 40 Plus	2.1742	3.3	0.001
College 1	0.1392	0.21	0.834
College 2	0.4146	0.75	0.454
College 3	0.7551	1.39	0.164
College 4	1.2186	2.05	0.041
College 5 Plus	1.2549	2.09	0.036
Business	1.1632	5.73	0
Single	0.4722	0.6	0.548
Married	1.8707	2.26	0.024
Divorced	2.0199	1.77	0.076
Separated	0.1093	0.03	0.975
Child 1	-0.2771	-0.56	0.572
Child 2	-1.1787	-2.14	0.033
Child 3	-0.5856	-0.81	0.415
Child 4 Plus	0.0465	0.05	0.957