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Will Financial Literacy Impact Students' Financial Decisions?

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Abstract:

This article addresses the impact of financial literacy on high school students’ financial decisions. To analyze the impact, financial literacy information was provided to the treatment group and the treatment and control group discussed college expectations. Following the treatment or non-treatment, students completed a survey that was used to measure their financial decisions. Here we find that there was no significant impact. I discuss ways in which other variables impacted our outcome and I propose alternatives for future research.

Keywords: finance, literacy, decision
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WILL FINANCIAL LITERACY IMPACT HIGH SCHOOL STUDENTS’ FINANCIAL DECISIONS?

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Will Financial Literacy Impact High School Students’ Financial Decisions?

Students accrue phenomenal amounts of debt due to a lack of financial guidance. High school students that are financially literate are more likely to make better financial decisions. High school students that choose sound financial decisions are more likely to borrow prudently when financing their higher education. Mandell suggests that to date, mandated instruction of personal finance happens at the high school level. He further states that students completing high school are emerging adults that will be making very important decisions that include student loans and when recent turmoil such as the sub-prime mortgages surface, young people had little to no understanding of the contracts that they signed and were misled by those that they trusted (2009).

The purpose of this study is to assess the impact of financial literacy relative to financial decisions. Hitherto, previous literature has examined students’ level of financial literacy and many of its facets and the impact it has or has not had on students’ financial behavior. I would like to know how financial literacy will impact financial decisions. I propose that financially literate high school juniors will make sound financial decisions in the future.

Does financial literacy lead high school juniors to make better financial decisions? This is the question that I seek to answer. Financial literacy is defined by Remund as:

Financial literacy is a measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances
This is how financial literacy will be defined in this article. Financial literacy is a concept defined by many as the knowledge, understanding and application of financial terms, concepts and sound decisions that produce optimal results. There are certain areas of interest that some studies use to operationally measure financial literacy. These areas of interest include knowledge of savings, borrowing, investment, budgeting and financial knowledge (Chen and Volpe, 1998; Remund, 2010). Financial decisions will be defined as decisions or a selection of possible choices made with the applied knowledge of financial literacy. Financial decisions are greatly influenced by a constant battle between the generating of goods and services in the marketplace and a person’s limited reserves to acquire such goods and services (Remund, 2010). A financial decision is not to be confused with financial behavior. However, a financial decision will lead to financial behavior. Financial literacy, if implemented, comprehended and applied, should lead Americans to a successful future and to a better economy overall.

Due to an increase in bankruptcies, household debt, and poor investments to name a few of the reasons, the U.S. government recognized that there was a need for economic change. To restore and increase market efficiency, debt had to be reduced. The U.S. Department of treasury enacted a policy that would charge an organization to educate society. The Financial Literacy and Education Commission (FLEC) was created under the Fair and Accurate Credit Transactions Act of 2003 (“Financial Literacy and Education Commission”, n.d.). The Commission formed a National Strategy in 2006 and a later enhanced National Strategy in 2011. Given research, analysis and mock trials, the government believes that financial literacy is the answer.
...as we have learned, the financial difficulties of individuals and families can dramatically affect the financial health of local communities and regional markets. The crisis has also illustrated that the financial well-being of individuals and families is fundamental to national financial stability, and that a lack of financial literacy is one barrier that can lower standards of living and limit prosperity. (“Why and How: Background Report Developing the 2011 National Strategy”, 2010)

On July 1, 2012, the Budget Control Act of 2011 was implemented to attempt to contain the funding of education. The Budget Control Act of 2011 created the Federal Pell Grant Lifetime Eligibility Used (LEU) which allows students 12 semesters or 600% of Pell grant aid to eligible candidates as opposed to the previous 18 semesters or 900%. (“Federal Student Aid,” n.d.). This new addendum will most definitely affect students that double major, are in any of the STEM programs that require at least 5 years and students that may take more time than others; leaving them with no other option than to borrow. This act has amended the Expected Family Contribution (EFC) requirement from $32,000 to the lowered threshold of $23,000 for only dependent students and independent students with dependents as a means to evading the reduction of the Pell grant by $180 per eligible person (Kantrowitz, 2011). There have been other alterations, such as loans are no longer subsidized during the grace period, interest begins accruing on the loan once you are no longer 100% enrolled as well as the budget for federal work study being reduced. These are only some of the reasons why students have a need for funds. Of the many reasons that students borrow funds while preparing to attend and attending higher education institutions, needing money and lack of proper financial knowledge to make sound decisions are some of the most common. When students need funds to attend school, they make choices according to what they know or do not know and how they feel. Although people will
make decisions according to what they know or may not know, possessing thorough knowledge and being able to apply that knowledge is key to an optimal outcome. After all, education is key!

The majority of research that has been conducted on financial literacy as it relates to financial behavior has shown that financial literacy does have an impact on financial behavior. However, not all research has supported the causation or even correlation of financial literacy’s impact on financial behavior. McKenzie (2009) found that the level of university seniors’ financial literacy and their student loan debt had no relation and recommends that higher education institutions should provide more courses to enhance the student’s level of financial literacy, implying that the level of literacy in university seniors was not adequate, nevertheless financial literacy is a solution. Research suggests that more education is needed and other factors need to be addressed. Chen and Volpe’s (1998) research found that students hold a low level of financial literacy in the area of personal finance and suggested that “when individuals cannot manage their finances, it becomes a problem for the whole society” (p.122). According to Mandell (2009), “high school courses have not yet managed to increase financial literacy, there is some evidence that courses taught by trained teachers using a well-structured, mandated curriculum, may have a positive impact”. These are the studies that have found little relation or causation of financial literacy on financial behavior. However, there is other research that lends opposing results.

As financial literacy is defined by Remund (2009) and applied in this study, it is relative to financial capability as defined by Lusardi (2010). Remund describes financial literacy as managing personal finance, long-range planning, short-term decision making, understanding financial concepts and the ability to use them. Financial capability as it relates to financial literacy is “(1) making ends meet, (2) planning ahead, (3) choosing and managing financial products and (4) self-assessed skills” (Lusardi, 2010, p.4). Lusardi (2010) prepared a financial
capability study for the Financial Crisis Commission that expressed Americans’ financial capability. She found that when participants were given the national survey, state-by-state survey and a military survey to assess financial capability and many factors including behavioral characteristics, that Americans are financially incapable (p.5). Nevertheless, Lusardi’s study did determine a strong correlation between behavior and financial capability. However, correlation does not equal causation. Peng (2008) finds that state mandates requiring a specific personal finance course have a significant and positive impact on student financial literacy. Gross, Ingrahm and Matasar (2005) further support the impact of financial literacy “Financial literacy education can change students’ knowledge, attitudes, and behaviors with respect to money and finance, facilitating their handling of these issues during school and following graduation” (as cited in Block-Lieb, Baron-Donovan, Wiener, and Gross, 2004a; Wiener, Block-Lieb, Gross, and Baron-Donovan, 2005a).

As the FLEC suggests, financial literacy decreases our national debt. So much so that this commission has unified different entities to try and fight a crisis in the making. Mary Johnson refers to student loans as being number two to mortgage loans of the biggest debts in America (2011). Society assumes that comprehensive education on a subject will render you capable of self-proficiency. However, it is ironic to find that in financial literary expert, Mary Johnson’s article and other research that financial literacy is only a small part of the problem. It is commonly known, that just because someone has the tools does not mean that they will use them. This is why I have chosen to conduct research on the impact on financial decisions and not financial behavior.

In the previous literature, there are mixed results that suggest that financial literacy has none, little, or significant impact on student’s financial decisions and financial behavior. I expect that
giving students what is needed to make sound financial decisions will at least provide them with adequate tools to make sound decisions when confronted. To test whether financial literacy impacts financial decisions, I will use two groups of high school juniors from the same subject but in different classes. I will collect data from a Title I school in an urbanized area where minorities outweigh Caucasians. Since 2009 at least half of the students that attend this institution were eligible for free or reduced lunches, which is determined by the Federal poverty guidelines and was ranked in the 35.7% based on FCAT 2.0 test scores. (‘‘Amos P. Godby,’’ n.d.)
The high school juniors that will participate will represent the sample of students that have yet to begin making final decisions about the financing of their higher education as opposed to high school seniors and college freshmen. They will be assigned to either the experimental or control group by random assignment. Both groups will receive information about college and the college experience. The experimental group will receive results to the financial literacy assessment (Jump$Start Questionnaire). The Jump$Start questionnaire was developed by Mandell to assess high school student’s financial literacy. Prior to these treatments the participants will receive a Jump$Start survey to assess their financial literacy. To test the effect of the financial literacy impact, the participants will complete a questionnaire where they will make financial decisions (allocating an income amount to different responsibilities, showing willingness to save or borrow and describing their financial plan to attend college) that will determine the impact that the treatment had on the outcome. Unlike the Jump$Start questionnaire, the financial decision measure ($\alpha=.437$) that I have developed will not only assess students’ knowledge of financial literacy, but it will create a quasi-simulation of the actual financial decision-making process that adults encounter. Given that these are high school juniors that do not consistently manage large amounts of income, I will allow an income of $200 for their resource allocation funds. I expect
that financial literacy in this form will have a significant impact on the financial decisions of these students.

**Method**

The population will include high school students. Students of two different classes that are equal in amount will be the participants. The first class will serve as the control group and the second class will serve as the experimental group, this will not occur simultaneously. To begin, each class will be administered the Jump$tart financial literacy survey by Mandell to assess their knowledge of finances. This survey will also include five questions to pinpoint certain demographics. To keep the surveys and questionnaires anonymous, each participant will be assigned a number and they will receive the corresponding survey and questionnaire. After the survey has been administered, we will commence with a group discussion about college and what to expect. This is all that will be discussed with the control group. The experimental group will have the same discussion about college and what to expect. They will also receive facts about loan interest rates, an example of the time it takes to repay a loan at a certain interest rate, the changes to subsidized loan repayment incentives, the interest-accruing grace period of subsidized loans and the cost of a five year public college. When the treatments are complete, both groups will complete a decision-making process where they will allocate resources that to certain living expenses. (Prior to this measure being issued, I will perform a pilot test on random participants to control for uncertainties, provide internal validity and reliability.) From there they will decide what to pay. The optimal financial decision will be the one that allows payment or allotted money to each aspect (debt, living expenses, and savings). The most detrimental financial decision will be money allotted for only living expenses.
Instruments

I will administer all surveys and questionnaires as well as the discussion on college and the facts of financial literacy.

Materials

Jump$tart Questionnaire.

Treatments

The control group will only discuss what to expect at college and their opinions of college.

The experimental group will discuss what to expect at college and their opinions of college as well as answers to the Jump$tart Questionnaire (as a financial literacy source).

Procedures

During each class, at separate times that the classes meet, I will collect the parent permission slips. For each permission slip, I will hand out a Jump$tart survey and assign the participant a number to create and maintain anonymity. After all surveys are completed and collected (15 minutes), I will begin to discuss college and their expectations with the control group (10 minutes). With the experimental group, I will allot the same amount of time that was given to the control group (10 minutes), however for a few minutes of the time we will cover college and their expectations and the majority of the ten minutes, I will administer financial literacy facts or the answers to the questions listed on the Jump$tart Survey. The residual amount of time left, students will complete a post survey, followed by the debriefing. The post survey will be the measure used to observe the participants’ financial decisions. I will hand out a sheet with that will allow the students $200 in the first month of their first semester of college. Tuition, books, rent (dorm room), food and, healthcare are paid for. Students will be asked to allocate the $200 on transportation, hygiene, entertainment, and savings. The instructions will be to spend all
of their resources. Following this allocation, below will be five multiple choice questions that will directly measure students’ decision to borrow or to save for items of interest. The impact of financial literacy on financial decisions will be based on their payment selections and their choices to spend with cash or borrowed funds/credit. I will measure their choices using categories (saver, spender, and financially sound student) that will define the choice by using a percentage range for each category. I will use Roth’s (2008) 50/30/20 balanced money formula to determine which category each student will most closely identify with. I will also use three multiple choice questions that measure the students’ decision to pay for different wants and one open-ended question to assess their future financial plan for their higher learning.

**Research Design**

This is an experimental design and will be analyzed using a T-test. Ultimately, I will analyze the impact of financial literacy on the financial decisions of high school juniors. I will first measure the financial literacy of both groups and compare the difference of means between the two groups. After assessing the financial literacy level of either group, and providing financial knowledge, I will use the financial decision questionnaire to measure the participant’s financial decisions. For the allocated resources section of the financial decision assessment, I will measure the percentage of money allocated for each line item and compare these outcomes with the financial literacy outcomes of each group. For instance, I will use the T-test to analyze the means for the control and the experimental group’s allocation preferences and further compare financial decision means with the financial impact means to observe the impact on the outcome. For the multiple choice part of the financial decision questionnaire, I am seeking the preference to borrow or to work to pay for items amongst the two groups. Therefore, I will analyze both groups’ mean scores based on whether or not they were more likely to choose to borrow or to
work to pay for items and compare these results to the above mean scores given for financial literacy. The open-ended question, will qualitatively describe the most common homogenous feedback amongst each group, both positive and negative.

*Results*

I expected that giving students what is needed to make sound financial decisions would at least provide them with adequate tools to make sound decisions when confronted. Thirty students were included in the study, 16 students were in the treatment group and 14 students were in the control group. Due to this inequality, I randomly withdrew 2 corresponding Jump$tart and financial decision questionnaires. My goal was to assess high school juniors’ financial literacy, compare the difference in means between the groups and measure the impact, if any, that financial literacy had on the students’ financial decisions.

I found that the control group (Group B) was on average, less financially literate than the treatment group (Group A). Group A was measured at $(M=0.317, \text{SD}=0.111)$ and group B was measured at $(M=0.255, \text{SD}=0.0751)$, $t(28)=1.748$, $p=0.09$. After this finding, I was confident that the treatment in accompany with the Group A having a higher average, would most definitely result in Group A’s sound financial decisions.

I found that there was no difference in means between the two groups’ decisions to accrue debt versus working to pay for a goal. Group A measured at $(M=0.615, \text{SD}=0.257)$, group B measured at $(M=0.614, \text{SD}=0.256)$, $t(28)=0.007$, $p=0.99$. This evidence would suggest that regardless of literacy or not, students insignificantly measured the same when making financial decisions.

When determining which category students closely identified with, Group B had more financially sound students as well as students that were categorized as savers. This group had the least spenders. Group A on the other hand had the highest percent of spenders.
To analyze the impact that financial literacy (or lack thereof) had on financial decisions, I ran a linear regression analysis to measure this as well as the effect that financial literacy (or lack thereof) had on financial decisions when literacy was controlled for. In measuring this phenomenon, I utilized two independent variables: the treatment/control group and the literacy levels group. The literacy levels group consisted of four groups where students’ scores on the Jump$Start questionnaire fell between 0-24, 25-49, 50-74, and 75-100. This method allowed me to simultaneously measure the impact of treatment, and the students’ literacy levels as it effected their financial decisions. I found that this method of financial literacy treatment had no effect on students’ decisions and that neither of these variables significantly predicted the outcome, financial decisions $F(1,26)=.290, \ p>.05, \ R \ squared = .11$. However, literacy levels did have an 11% effect on students’ financial decisions.

Discussion

I anticipated that financial literacy in high school juniors would positively impact their financial decisions. However, when analyzing my research, I found that my experiment was confounded. This experiment included freshmen, sophomores and high school juniors. My proposed design initially excluded freshmen and sophomores due to their immaturity and lack of college expectations as well as seniors that are currently preparing and possibly more aware of college financing methods. Unfortunately, financial literacy was not the only variable that impacted the students’ financial decisions.

For future research using this design, I would propose a few method alterations. I would strongly suggest using a larger sample size to allow greater validity. Concomitant with a large sample size, I would propose a multiple number of subsets to allow for a greater amount of random assignment amongst high school juniors. Although I conducted a pilot test on a random group of
people, this was not comparable to the actual experiment. It would have been more beneficial to conduct a pilot test at the Amos P. Godby High School on a different group of participants prior to the experiment. This pilot test would have assisted in controlling for confounds prior to the experiment. I would also suggest making the treatment a discussion as opposed to dictation of financial literacy facts. This may allow for better comprehension of different concepts. While debriefing, I found that there were concepts that were unclear and or unknown to many of the participants in both the control and treatment condition. Lastly, I would suggest more time allotted to the treatment/control segment of this design to allow for in-depth instruction and participation. Instead of one hour, I would suggest at least two hours, with one hour solely retained for the treatment/control group segment.

I appreciate the research on students’ financial literacy and students financial behavior, however, high school juniors’ financial literacy levels as it effects their financial decisions is a study that requires more research and will aid in research on policy and programs that effect our economy.

Conclusion

Although there are mixed results on the impact that financial literacy has on students financial behaviors and decisions, I chose to measure the positive impact that financial literacy has on high school students. Unfortunately, there was not a significant impact due to confounding variables. The results suggest that while financial literacy did not have an impact on students’ financial decisions, other variables did. The confounding variable that may have had the most impact is the students’ classification level. As first and second year high school students, future financial obligations and higher education expectations may not be so pertinent. Therefore, the younger participants may have encountered these concepts for the first time. I proposed junior high school students as the target participants because although they have not begun to apply to higher
education institutions, they have more than likely began to think about subsequent plans after high school graduation, unlike most first and second year high school students.

Though the experiment was confounded, I found that the average score of student’s financial literacy is low based on the Jump$tart Questionnaire assessment. Therefore, I would recommend that more research is conducted to find the best way to not only measure this question, but to inform our society which I believe will serve as preventative measures to contain the funding of education and assist in lowering our national debt.
References

Amos P. Godby High School

Retrieved from:


Burks, F. (n.d.). What Percentage of My Income Should Go to Paying Bills & Debt?


Appendix A

Financial literacy assessment

Jump$tart 2008 Questionnaire with answers

- * Represent the correct answers
- Numbers in bold are the mean sample and numbers that are not in bold are the percentage of the sample

Part 1 - 31 Jump$tart Questions

Numbers to the Left of Answers are Proportion Giving Response

1. Inflation can cause difficulty in many ways. Which group would have the greatest problem during periods of high inflation that last several years?

   10.6 a.) Older, working couples saving for retirement.
   40.0 b.) Older people living on fixed retirement income. *
   7.2 c.) Young couples with no children who both work.
   41.7 d.) Young working couples with children.

2. Which of the following is true about sales taxes?

   27.2 a.) The national sales tax percentage rate is 6%.
   25.5 b.) The federal government will deduct it from your paycheck.
   4.9  c.) You don’t have to pay the tax if your income is very low.
   41.9 d.) It makes things more expensive for you to buy. *

3. Rebecca has saved $12,000 for her college expenses by working part-time. Her plan is to start college next year and she needs all of the money she saved. Which of the following is the safest place for her college money?

   3.7 a.) Locked in her closet at home.
   3.7 b.) Stocks.
4.8  c.) Corporate bonds.
87.7  d.) A bank savings account.*

4. 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?

19.2  a.) A 10-year bond issued by a corporation.
26.2  b.) A certificate of deposit at a bank.
17.4  c.) A twenty-five year corporate bond.
35.8  d.) A house financed with a fixed-rate mortgage.*

5. Under which of the following circumstances would it be financially beneficial to you to borrow money to buy something now and repay it with future income?

55.8  a.) When you need to buy a car to get a much better paying job.*
5.1  b.) When you really need a week vacation.
5.8  c.) When some clothes you like go on sale.
33.4  d.) When the interest on the loan is greater than the interest you get on your savings.

6. Which of the following statements best describes your right to check your credit history for accuracy?

47.7  a.) Your credit record can be checked once a year for free.*
5.3  b.) You cannot see your credit record.
13.8  c.) All credit records are the property of the U.S. Government and access is only available to the FBI and Lenders.
33.2  d.) You can only check your record for free if you are turned down for credit based on a credit report.

7. 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?

9.5  a.) Social security and Medicare contributions.
21.2  b.) Federal income tax, property tax, and Medicare and social security contributions.
56.4  c.) Federal income tax, social security and Medicare contributions.*
12.9  d.) Federal income tax, sales tax, and social security contribution.
8. Retirement income paid by a company is called:
   37.4 a.) 401 (k).
   36.2 b.) Pension.*
   3.6 c.) Rents and profits.
   22.8 d.) Social Security.

9. Many people put aside money to take care of unexpected expenses. If Juan and Elva have money put aside for emergencies, in which of the following forms would it be of LEAST benefit to them if they needed it right away?
   40.1 a.) Invested in a down payment on the house.*
   13.2 b.) Checking account.
   32.1 c.) Stocks.
   14.6 d.) Savings account.

10. David just found a job with a take-home pay of $2,000 per month. He must pay $900 for rent and $150 for groceries each month. He also spends $250 per month on transportation. If he budgets $100 each month for clothing, $200 for restaurants and $250 for everything else, how long will it take him to accumulate savings of $600.
    20.9 a.) 3 months.
    60.2 b.) 4 months.*
    6.7 c.) 1 month.
    12.2 d.) 2 months.

11. 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?
    4.7 a.) A checking account.
    16.8 b.) Stocks.*
    37.3 c.) A U.S. Govt. savings bond.
    41.3 d.) A savings account.
12. Barbara has just applied for a credit card. She is an 18-year-old high school graduate with few valuable possessions and no credit history. If Barbara is granted a credit card, which of the following is the most likely way that the credit card company will reduce its risk?

- **7.2** a.) It will make Barbara’s parents pledge their home to repay Karen’s credit card debt.
- **32.7** b.) It will require Barbara to have both parents co-sign for the card.
- **14.1** c.) It will charge Barbara twice the finance charge rate it charges older cardholders.
- **45.9** d.) It will start Barbara out with a small line of credit to see how she handles the account.*

13. 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:

- **47.1** a.) Double, at least, from when she was in college.*
- **36.4** b.) Go up a little from when she was in college.
- **10.0** c.) Stay the same as when she was in college.
- **6.5** d.) Be lower than when she was in college.

14. Which of the following best describes the primary sources of income for most people age 20-35?

- **9.1** a.) Dividends and interest.
- **75.3** b.) Salaries, wages, tips.*
- **9.1** c.) Profits from business.
- **6.5** d.) Rents.

15. If you are behind on your debt payments and go to a responsible credit counseling service such as the Consumer Credit Counseling Services, what help can they give you?

- **7.0** a.) They can cancel and cut up all of your credit cards without your permission.
- **17.8** b.) They can get the federal government to apply your income taxes to pay off your debts.
- **70.5** c.) They can work with those who loaned you money to set up a payment schedule that you can meet.*
- **4.7** d.) They can force those who loaned you money to forgive all your debts.
16. Rob and Mary are the same age. At age 25 Mary began saving $2,000 a year while Rob saved nothing. At age 50, Rob realized that he needed money for retirement and started saving $4,000 per year while Mary kept saving her $2,000. Now they are both 75 years old. Who has the most money in his or her retirement account?

24.8  a.) They would each have the same amount because they put away exactly the same

11.7  b.) Rob, because he saved more each year

12.5  c.) Mary, because she has put away more money

51.1  d.) Mary, because her money has grown for a longer time at compound interest.*

17. Many young people receive health insurance benefits through their parents. Which of the following statements is true about health insurance coverage?

18.4  a.) You are covered by your parents’ insurance until you marry, regardless of your age.

40.4  b.) If your parents become unemployed, your insurance coverage may stop, regardless of your age.*

8.2  c.) Young people don’t need health insurance because they are so healthy.

33.0  d.) You continue to be covered by your parents’ insurance as long as you live at home, regardless of your age.

18. Don and Bill work together in the finance department of the same company and earn the same pay. Bill spends his free time taking work-related classes to improve his computer skills; while Don spends his free time socializing with friends and working out at a fitness center. After five years, what is likely to be true?

11.5  a.) Don will make more because he is more social.

9.8  b.) Don will make more because Bill is likely to be laid off.

67.9  c.) Bill will make more money because he is more valuable to his company.*

10.8  d.) Don and Bill will continue to make the same money.

19. 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?

17.3  a.) $500

16.9  b.) $1000

52.8  c.) Nothing.

13.0  d.) $50*
20. Which of the following statements is NOT correct about most ATM (Automated Teller Machine) cards?

- **8.8** a.) You can generally get cash 24 hours-a-day.
- **14.0** b.) You can generally obtain information concerning your bank balance at an ATM machine.
- **68.0** c.) You can get cash anywhere in the world with no fee.*
- **9.2** d.) You must have a bank account to have an ATM Card.

21. Matt has a good job on the production line of a factory in his home town. During the past year or two, the state in which Matt lives has been raising taxes on its businesses to the point where they are much higher than in neighboring states. What effect is this likely to have on Matt's job?

- **14.4** a.) Higher business taxes will cause more businesses to move into Matt’s state, raising wages.
- **18.7** b.) Higher business taxes can’t have any effect on Matt’s job.
- **57.3** c.) Matt’s company may consider moving to a lower-tax state, threatening Matt’s job.*
- **9.7** d.) He is likely to get a large raise to offset the effect of higher taxes.

22. If you have caused an accident, which type of automobile insurance would cover damage to your own car?

- **16.1** a.) Comprehensive.
- **40.0** b.) Liability.
- **7.1** c.) Term.
- **36.8** d.) Collision.*

23. Scott and Eric are young men. Each has a good credit history. They work at the same company and make approximately the same salary. Scott has borrowed $6,000 to take a foreign vacation. Eric has borrowed $6,000 to buy a car. Who is likely to pay the lowest finance charge?

- **43.1** a.) Eric will pay less because the car is collateral for the loan. *
- **18.7** b.) They will both pay the same because the rate is set by law.
- **13.3** c.) Scott will pay less because people who travel overseas are better risks.
- **24.9** d.) They will both pay the same because they have almost identical financial backgrounds.
24. 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?

21.9 a.) About 10 times as much.
8.6 b.) No more; I would make about the same either way.
22.0 c.) A little more; about 20% more.
47.6 d.) A lot more; about 70% more.

25. Many savings programs are protected by the Federal government against loss. Which of the following is not?

13.4 a.) A U. S. Savings Bond.
43.8 b.) A certificate of deposit at the bank.
28.4 c.) A bond issued by one of the 50 States.
14.4 d.) A U. S. Treasury Bond.

26. If each of the following persons had the same amount of take home pay, who would need the greatest amount of life insurance?

31.6 a.) An elderly retired man, with a wife who is also retired.
10.0 b.) A young married man without children.
51.1 c.) A young single woman with two young children.
7.2 d.) A young single woman without children.

27. Which of the following instruments is NOT typically associated with spending?

6.7 a.) Debit card.
82.1 b.) Certificate of deposit.
6.7 c.) Cash.
4.5 d.) Credit card.

28. 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?

16.8 a.) Jessica, who pays at least the minimum amount each month and more, when she has the money.
17.1  b.) Vera, who generally pays off her credit card in full but, occasionally, will pay the minimum when she is short of cash

18.2  c.) Megan, who always pays off her credit card bill in full shortly after she receives it

48.0  d.) Erin, who only pays the minimum amount each month.*

29. Which of the following statements is true?

53.7  a.) 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.*

14.8  b.) People have so many loans it is very unlikely that one bank will know your history with another bank

18.8  c.) Your bad loan payment record with one bank will not be considered if you apply to another bank for a loan.

12.7  d.) If you missed a payment more than 2 years ago, it cannot be considered in a loan decision.

30. Dan must borrow $12,000 to complete his college education. Which of the following would NOT be likely to reduce the finance charge rate?

32.5  a.) If he went to a state college rather than a private college. *

19.2  b.) If his parents cosigned the loan.

28.8  c.) If his parents took out an additional mortgage on their house for the loan.

19.5  d.) If the loan was insured by the Federal Government.

31. 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?

40.6  a.) Earnings from savings account interest may not be taxed.

27.3  b.) Income tax may be charged on the interest if your income is high enough.*

17.8  c.) Sales tax may be charged on the interest that you earn.

14.3  d.) You cannot earn interest until you pass your 18th birthday.

**Part 2 - Classification Questions**
Numbers in **Bold** at Left are Mean Scores
Numbers not in Bold, to Right of Bold Numbers, are Percent in Sample

32. Does your family rent or own your home?

<table>
<thead>
<tr>
<th>Score</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>44.0</td>
<td>22.7</td>
</tr>
<tr>
<td>49.7</td>
<td>77.3</td>
</tr>
</tbody>
</table>
33. What is your gender?
   - 49.0 44.7 Male
   - 48.0 55.3 Female

34. What are your educational plans after high school?
   
   **Score %**
   - 34.9 2.2 No further education is planned.
   - 44.6 18.7 Attend a 2-year college or junior college.
   - 50.9 67.2 Attend a 4-year college or university.
   - 44.2 6.8 Other plans for training or education.
   - 39.2 5.1 Don’t know.

35. What is your best estimate of your parents’ total income last year? Consider annual income from all sources before taxes.
   - 43.4 10.7 Less than $20,000.
   - 47.3 20.1 $20,000 to $39,999.
   - 50.3 26.5 $40,000 to $79,999.
   - 52.3 23.0 $80,000 or more.
   - 44.8 19.7 Don’t know.

36. How do you describe yourself?
   - 52.5 55.0 White or Caucasian.
   - 41.3 13.6 Black or African-American.
   - 45.1 20.1 Hispanic American.
   - 47.2 3.7 Asian-American.
   - 37.7 2.2 American Indian, Alaska Native, or Native Hawaiian
   - 41.1 5.4 Other.

37. What is the highest level of schooling your father or mother completed?
44.2 11.5 Neither completed high school
47.2 24.4 Completed high school.
49.0 21.6 Some college.
51.4 36.8 College graduate or more than college.
36.9 5.9 Don’t know.

38. What type of work do you intend to do when you finish school?
   36.9 2.8 Manual work such as truck driver, laborer, farm worker.
   43.8 6.5 Skilled trade such as plumber, electrician.
   44.6 12.1 Service worker such as secretary, food service worker, office worker, police officer, firefighter.
   51.7 48.6 Professional worker such as nurse, computer programmer.
   46.6 30.0 Other or don’t know.

39. When you start to work full-time, after you finish your education, how much do you expect to make per year before deductions for taxes and other items?

<table>
<thead>
<tr>
<th>Score</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>38.5</td>
<td>3.4 Under $15,000.</td>
</tr>
<tr>
<td>42.2</td>
<td>6.7 $15,000 to $19,999.</td>
</tr>
<tr>
<td>46.8</td>
<td>10.6 $20,000 to $29,999.</td>
</tr>
<tr>
<td>50.7</td>
<td>20.5 $30,000 to $39,999.</td>
</tr>
<tr>
<td>50.2</td>
<td>41.6 $40,000 or more.</td>
</tr>
<tr>
<td>46.4</td>
<td>17.2 Don’t know.</td>
</tr>
</tbody>
</table>

40. Whose credit card do you use?
   44.2 14.9 My own.
   45.9 14.2 My parents’.
   45.2 5.6 Both my own and my parents’.
   50.1 65.3 None, I don’t use a credit card.
41. How do you use your debit (or ATM) card?
   49.9 40.6 For getting cash from an ATM and for buying things directly.
   45.4 12.6 For getting cash from an ATM only.
   47.8 46.7 I don’t have a debit card.

42. Which of the following best describes your automobile driving?
   46.0 26.8 I don’t have a driver’s license.
   42.6 4.3 I have a driver’s license, but no car in the family that I can drive.
   44.2 4.9 I drive the family car, which is used by others, and help pay for the insurance.
   50.9 12.7 I drive the family car, which is used by others, and don’t help pay for the insurance.
   49.7 21.5 I drive my own car and help pay for the insurance.
   50.0 29.9 I drive my own car and don’t help pay for the insurance.

43. How would you describe your employment history?
   48.8 24.5 I work full time in the summers and part time during the school year.
   48.6 6.3 I work full time in the summers and don’t work during the school year.
   48.9 33.8 I work part time in the summers and part time during the school year.
   48.9 11.8 I work part time in the summers and don’t work during the school year.
   46.6 23.6 I have never been formally employed outside the home.

44. What kind of bank account do you have?
   43.7 24.9 I don’t have a bank account.
   49.7 29.1 I have a savings account but no checking account.
   49.1 11.8 I have a checking account but no savings account.
   50.3 34.3 I have both a savings and a checking account.
45. Which of the following is true about your ownership of stocks and mutual funds (circle all that apply)?

<table>
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</thead>
<tbody>
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<td>6.0</td>
</tr>
<tr>
<td>47.7</td>
<td>6.3</td>
</tr>
</tbody>
</table>

- I own no stocks or mutual funds.
- I own stocks in my own name.
- I own stocks in my parents’ name.
- I own mutual funds in my own name.
- I own mutual funds in my parents’ name.

46. What is your high school class level?

- 48.3 100.0 Senior.
- Junior.
- Sophomore.
- Freshman.

47. Which of the following classes have you had in high school (circle all that apply)?

- 47.5 21.4 An entire course in money management or personal finance.
- 48.9 26.2 A portion of a course where at least a week was focused on money management or personal finance.
- 48.8 44.7 An entire course in economics.
- 49.4 23.7 A portion of a course where at least a week was focused on economics.
- 51.0 24.0 A course in which we played a stock market game.

48. If you have taken a full semester course in money management or personal finance, did you take it as a:

- 47.1 52.4 Senior
- 48.5 26.1 Junior
- 49.2 12.7 Sophomore
- 44.7 8.8 Freshman
49. Approximately what was your total score on the college entrance exam?

- 45.5 10.4 SAT under 1,500
- 54.1 17.3 SAT 1,500 to 2,000
- 52.2 4.3 SAT over 2,000
- 43.3 10.7 ACT under 20
- 51.3 17.4 ACT 21-26
- 58.8 5.9 ACT 27 or higher

- 44.0 34.5 I didn’t take a college entrance exam or don’t remember my score.
Appendix B

Financial Decision Assessment

You are a freshman in college and most, but not all of your expenses are paid. Your tuition, healthcare, room and board (dorm fees and food), and books are all paid for. Transportation, entertainment, hygiene and savings are your responsibility. You have $200 to spend toward the items that you are responsible for. When spending the $200, remember that this is all the money that you will have for this one month.

Transportation:

Entertainment:

Hygiene:

Savings:

Answer Key: Financially sound = 50% needs/ 30% wants/ 20% savings

Spender= anything more than 30% on wants and less than 50% and 20% on needs and savings

Saver= anything more than 20% on savings

Pick the best answer.

1. You want a car, how will you pay for it?
   a. Financing
   b. Savings
   c. Credit card

2. Prom is near, you want to go, but you do not have the money for formal wear or a car, so you get a job.
   a. Very Likely
   b. Not at all likely
   c. Less likely

3. The senior trip will be $1200. You are currently a junior, what will you do to reach this goal?
   a. Ask mom and dad
   b. Solicit my services
   c. Gamble

Assume that you will be attending college. Tell me how will you finance it?
### Appendix C

Table 1

**Financial Literacy**

*Descriptive Statistics (N=28)*

<table>
<thead>
<tr>
<th></th>
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<th>Group B</th>
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<tbody>
<tr>
<td>1.</td>
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Table 2

Financial Decisions

Descriptive Statistics (N=28)

<table>
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<tr>
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</table>
Table 3

Financial Allocation Decisions

Descriptive Statistics (N=28)

<table>
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<th>Group A</th>
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<th>Group B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Financially Sound</td>
<td>.15</td>
<td></td>
<td>.16</td>
<td></td>
</tr>
<tr>
<td>2. Saver</td>
<td>.15</td>
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<td>.58</td>
<td></td>
</tr>
<tr>
<td>3. Spender</td>
<td>.53</td>
<td></td>
<td>.25</td>
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