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Financial Literacy at CSB/SJU

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Accounting Capstone

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Background

My research project for my Accounting Capstone course focuses on the financial literacy of students at the College of Saint Benedict and Saint John's University. Financial literacy is the education and understanding of various financial areas. It is the ability to manage personal finance matters in an efficient manner and possess the knowledge to make appropriate decisions about personal finance. If an individual is financially literate, monetary decisions can be made efficiently while reducing the risk for unfavorable outcomes. Examples of financial literacy topics include investing, insurance, real estate, paying for college, budgeting, retirement and tax planning. This information is important to every person during every stage of their life. At any age, individuals make important financial decisions. My passion and enthusiasm for this topic stemmed from personal opinions regarding the importance of financial literacy and the lack of opportunities in the curriculum at our institutions to further knowledge in this area. My goal was to determine if there is a need and/or a want to implement this type of course.

Research Question and Intended Audience

My research question is: *What students at CSB|SJU are most financially literate? Why?* The answer to this question and my additional research results will be beneficial to many people, but most specifically three groups. One, professors and administrators of CSB|SJU: as they examine their curriculum in relation to the current student climate, it is important for them to understand where educational opportunities can improve to most benefit the students. Two, college students: as they are planning their future and becoming more financially independent, many of them have questions and are looking to become educated. Three, parents: as they are raising children in a rapidly changing economic environment, they can benefit by learning how best to prepare their children for their futures

Existing Research

Personal finance and financially literacy are important, highly researched topics. There are many nationwide surveys that test various areas to determine financial literacy. The most common categories measured include financial skills, confidence in financial literacy, ability to make decisions, and understanding of topics. For example, it is important to have the ability to decide to pay the minimum on a credit card each month, but to be financially literate an individual must understand what that means in terms of compounding interest and overall increase of debt. I examined two surveys that were most relevant to my research purpose and question.

The first piece of existing research is the National Financial Capability Study (http://www.usfinancialcapability.org/) done by FINRA Investor Education Foundation, in consultation with the U.S. Department of Treasury and President Bush's Advisory Council on Financial Literacy and later with President Obama's Advisory Council on Financial Capability. The objective of the research was to "benchmark key indicators of financial capability and evaluate how these indicators vary with underlying demographic, behavioral, attitudinal and financial literacy characteristics" (FINRA). The survey was distributed to 25,000 Americans to determine: are Americans financially literate? The study focused on four main categories. One, "Making Ends Meet, examined individuals' ability to balance monthly income and expenses. Results showed that 18% of Americans are spending more than they are earning month-to-month. Two, "Planning ahead", focused on the existence of an emergency fund, a savings account which should fund three to six months of expenses. Over 50% of individuals lacked this fund and put themselves at risk for financial instability. Three, "Managing Financial Products", looked at credit cards, home loans, and overall borrowing habits. About 32% of respondents reported paying the minimum on their credit card month-to-month. This does not necessarily mean that individuals are not financially literate, but it does mean they are not the most financially healthy. However, despite these statistics, many Americans reported they are confident in their decisions and financial health, which points to their financial literacy. The last category, four, "Financial Knowledge and Decision-Making", was a scored quiz. These scores allowed FINRA to examine different factors and their effect on the financially literacy of Americans.

The second piece of existing research is the Consumer Financial Literacy Survey done by the National Foundation for Credit Counseling (NFCC). This survey was distributed to 2,017 adults ages 18 and over. This smaller study looked at similar topics as existing research one. Topics include budgeting, spending, saving, credit card debt, and confidence in personal finance. Many findings pointed towards the illiteracy of the population. Key results relevant to my research are 60% do not keep a budget, 29% do not save for retirement, 11% are rolling over $2,500+ in credit card debt, 52% do not know their credit score, but 92% are confident in their financial decisions. Not only are respondents in debt and not saving for retirement, but they are not utilizing major opportunities to become literate such as budgeting and knowing their credit score. This existing research helped me develop my research methodology to examine the financial literacy of students at CSB|SJU.

My Research Methodology

The bulk of my research examined the results of a survey I created and distributed to all students at CSB|SJU. This survey is discussed in summary in the next section and the complete survey can be found at the end of this paper. In addition to the survey, I interviewed educators and examined the curriculum at CSB|SJU to understand the institutions' current and future plans regarding personal finance and financial literacy.

Survey Questions

The survey was distributed to all students at CSB|SJU, a little over 3,600 students. The survey began with the foundational definition of financial literacy given in the *Background* section of this paper. Demographics were collected such as age, gender, major, GPA, and hometown. The student then went through a self-review of personal finance in their life. Including, the age they obtained their first consistent job, the age they bought their first car, and the extent they talked about money during their upbringing. The survey concluded with a six-point financial literacy quiz. It tested the following topics; savings account, mortgage, accruing interest, credit score, credit card, and stock returns.

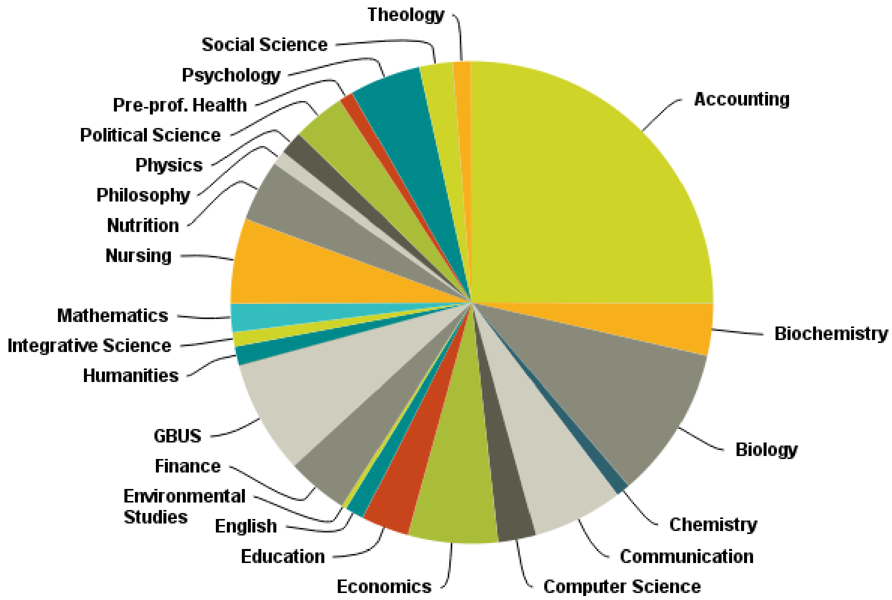
Research Findings: Survey

The distribution of the survey resulted in 315 responses. There was diversity amongst respondents in regards to gender, age, and major. As the percentage of Fifth-Year respondents is disproportionate to the other age groups, during analysis broken down by age the Fifth-Year responses are disregarded. Tables below show specific percentages of respondents. The overall average score on the financial literacy quiz was 4.55 out of 6.00 points. This is a 76%, which equates to a C grade using the CSB|SJU grade scale.

Gender	
Female	60%
Male	40%

Age	
First-Year	20%
Sophomore	23%
Junior	18%
Senior	38%
Fifth-Year	1%

Survey Responses: Majors



The Most Financially Literate Student at CSB|SJU

The first thing I wanted to do with my results was answer my research question. To do this, I examined the results in a pivot table. I took each survey question and compared the average quiz scores for each option to understand who is the “most” financially literate. For example, I looked at all the age groups (first-year, sophomore, junior, senior, fifth-year) and found that on average the senior age group scored the highest on the quiz. I continued this process to get a complete picture of the “most” literate student. The most financially literate options for each survey question are found below.

- Senior
- Male
- Chemistry Major
- GPA of 3.61 – 4.00
- Hometown: Greater MN
- Did *NOT* take a Personal Finance course in high school
- Would *DEFINITELY* take a Personal Finance course, if offered, at CSB|SJU
- Personal rank: Very literate (4/5)
- Talked about money at home almost every day
- 1st consistent job: 20 years old
- Bought 1st car: 22 years old
- Has own credit card
- Has a savings account of more than $500

At a high level, most of these results were predictable. It makes sense that the most literate student would be a senior, with a high GPA, that talked about money at home almost every day. Other results were not as predictable, specifically those who did not take a personal finance course in high school scoring higher than those who did take a course. Understanding the most literate student at a high level led me to breaking down this information further and examining numerous correlations to understand more specifically what students are most literate and why.

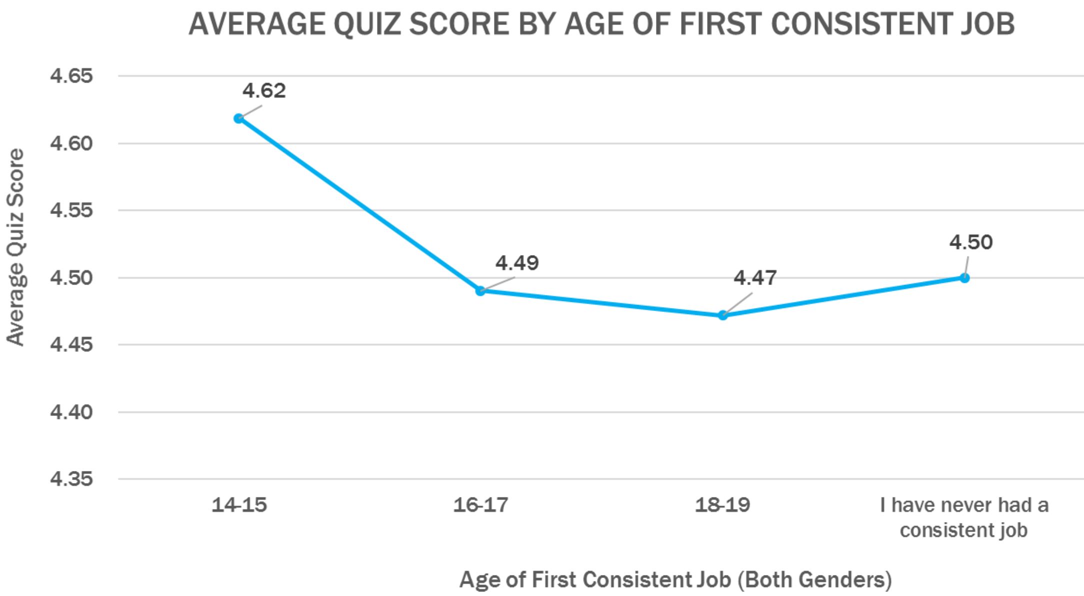
Who is Financially Literate? Who is Not?

The following table breaks down the quiz scores by age and by gender. The highest scoring students being senior males and the lowest scoring students being female first-years. Looking at the far-right column, it displays the average score broken down by age. Results show that, overall, as students get older their financial literacy increases. When broken down by gender, this increase is not as consistent. Moving forward, my research breaks down information by gender to examine this difference.

	Female	Male	Total Average
First-Year	3.79	4.96	4.25
Sophomore	4.19	5.13	4.58
Junior	4.46	4.90	4.61
Senior	4.19	5.31	4.64
Total Average	4.16	5.13	4.55

The Sooner, The Better

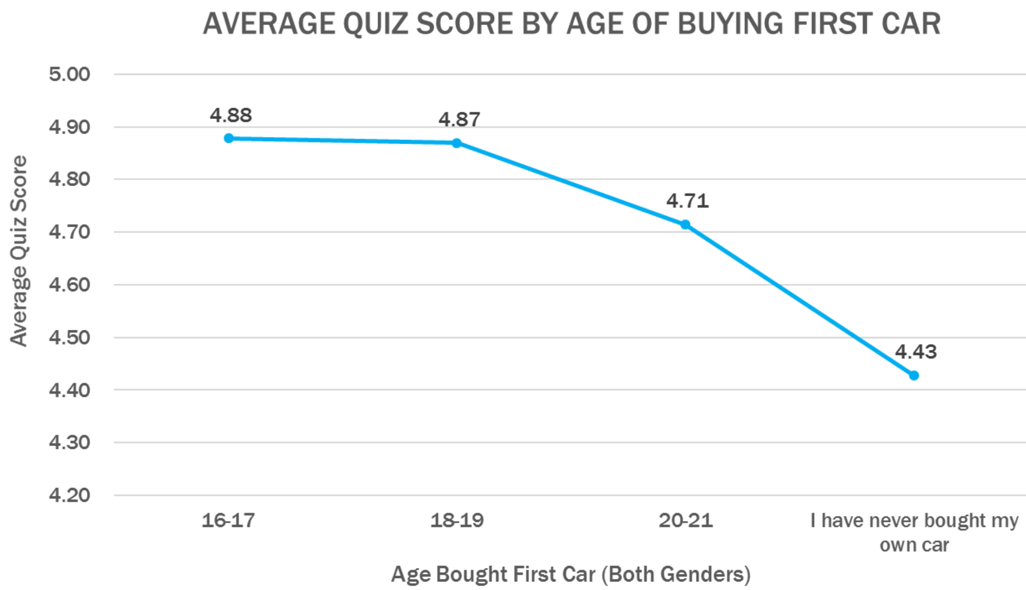
My research focused on two categories of how to increase financial literacy. First, I examine the students' self-review of personal finance in their life. Looking to understand the impact first-hand personal experiences, such as a job and a car, have on financial literacy later in life. Second, I examine the impact of personal finance curriculum at both the high school and collegiate level. Moving forward I refer to the first category as "The Sooner, The Better". This name points to my first conclusion that personal experiences positively impact financial literacy the sooner they are introduced into a student's life. This impact is seen more significantly in male students. The following graphs illustrate this conclusion.



I began by analyzing the average quiz score by the age of the students' first consistent job, for both genders. The highest scoring students obtained their first consistent job at ages 14-15. As the age of the first job increased, the financial literacy decreased. The sooner the personal experience of a consistent job is introduced, the higher the students' financial literacy is later.

Age of First Consistent Job	Female	Male
14-15	4.14	5.27
16-17	4.16 ↑	5.14 ↓
18-19	4.03 ↓	5.02 ↓
I have never had a consistent job	4.43 ↑	5.00 ↓

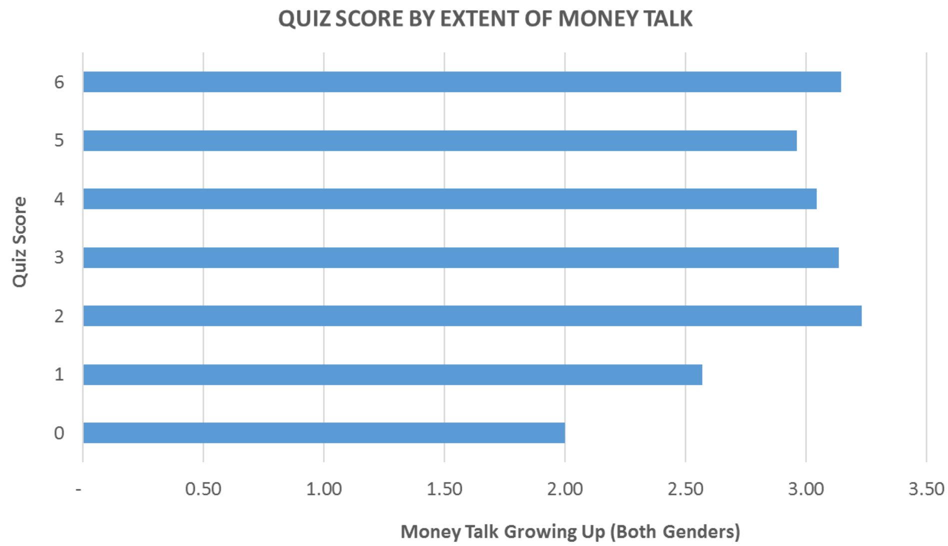
Breaking this information down by gender, the consistent correlation seen overall is not as evident. Females appear to have no distinct increase or decrease in financial literacy in relation to the age of their first job. On the other hand, males clearly show a direct correlation. Initially, males appear to benefit more from personal experiences than females



Next, I analyzed the average quiz score by the age of the students bought their first car for both genders. The highest scoring students bought their first car at ages 16-17. As the age of buying their first car increased, the financial literacy decreased. The sooner the personal experience of buying a car is introduced, the higher the students' financial literacy is later. Most interestingly, 74% of respondents fall into the last category of having NEVER bought their own car. This group had the lowest average score of 4.43 points. This is lower than the overall average of 4.55 points. This result points to the positive impact buying a car can have on financial literacy. As students are budgeting for gas, insurance, maintenance, and overall financing of a car they are forced to learn and make difficult decisions, thus increasing their financial literacy.

Age of First Car Bought	Female	Male
16-17	4.06	5.52
18-19	4.55	5.17
I have never bought my own car	4.13	4.96

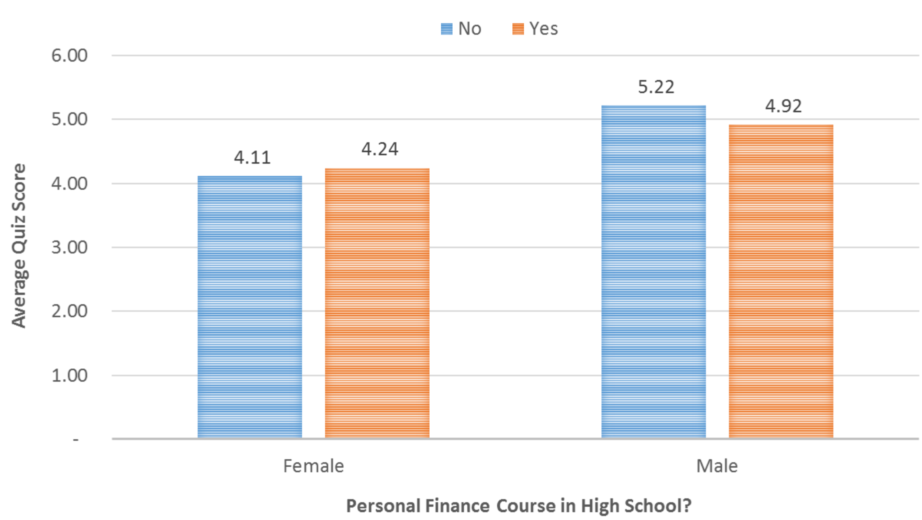
Breaking this information down by gender, the consistent correlation seen overall is not as evident. Females appear to have no distinct increase or decrease in financial literacy in relation to the age of buying their first car. On the other hand, males clearly show a direct correlation. Again, males appear to benefit more from personal experiences than females.



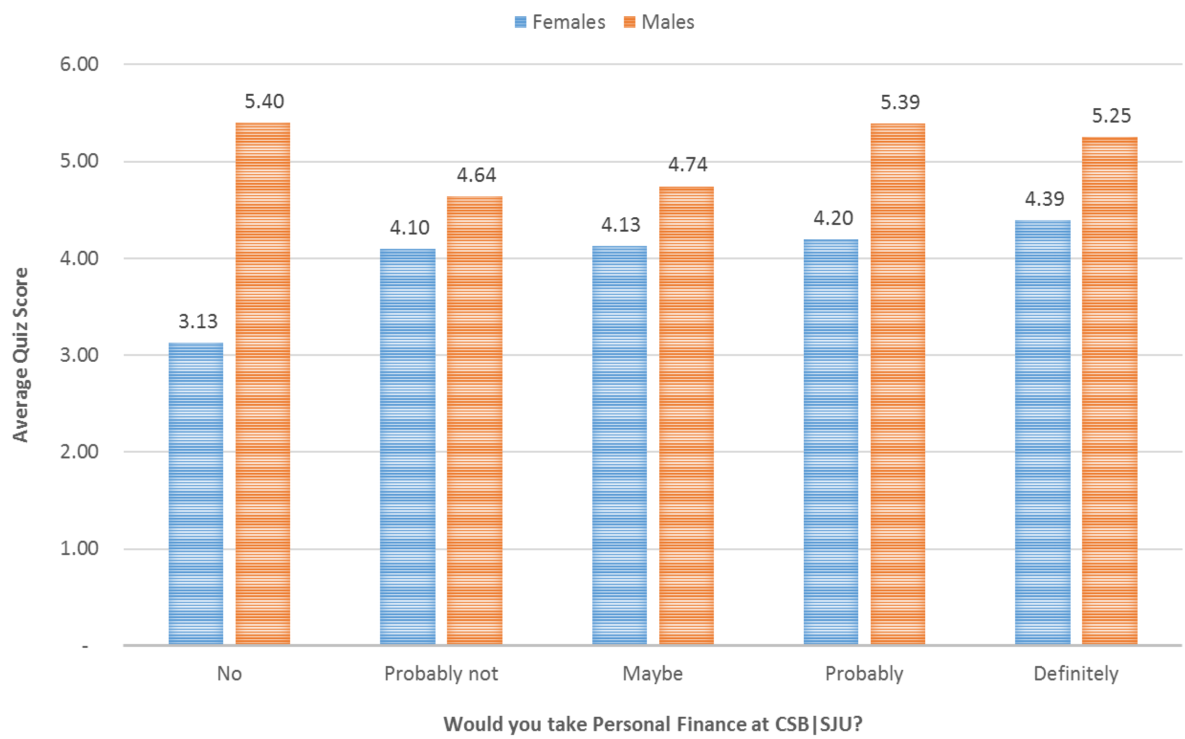
The last area I examined for "The Sooner, The Better" was the average quiz score by the extent of which students talked about money during their upbringing on a scale of one to five. One being never and five being almost every day. Overall, as extent of money discussions as a part of students' upbringing/family increases, the score on financial literacy quiz increases. The correlation is not as distinct in this category, but the overall trend is present. When broken down by gender the results were insignificant.

Personal Finance Course

The second category I examined was the impact of personal finance curriculum at both the high school and collegiate level. The information presented in "The Sooner, The Better" led me to conclude that overall, if financial personal experiences are introduced sooner in a student's life the more positively it impacts their financial literacy later down the line. The other most significant way to gain knowledge of personal finance is in the classroom.



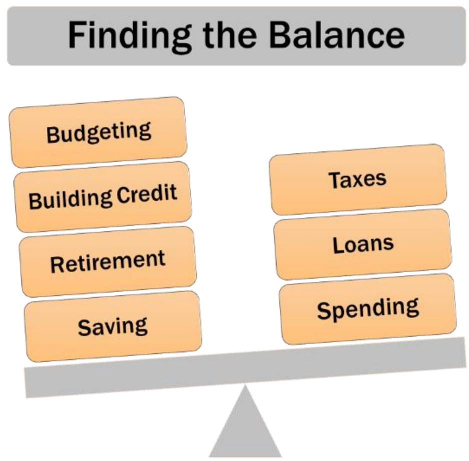
Most high schools offer personal finance as course or as a topic covered in a course. I wanted to understand the impact this has on students' financial literacy. I asked respondents if they had taken a personal finance course in high school. Broken down by gender, I compared this to their average quiz score. Females who scored higher DID take a personal finance course in high school. Males who score higher DID NOT take a personal finance course in high school. The genders are impacted differently when it comes to personal finance curriculum. Although females seem to be positively impacted, the correlation is not significant; concluding that maybe high school is not the best place for this type of curriculum. I wondered if it might be more impactful if students are educated at a collegiate level regarding personal finance.



Respondents were asked how likely are you to take a personal finance course if offered at CSB|SJU? The five response options were no, probably not, maybe, probably, and definitely. In the above graph, the results are broken down by gender and compared to the average quiz score. Females who got the highest quiz score are the most likely to take a personal finance course at CSB|SJU. For females, as interest in the course increased their financial literacy increased directly. Males who got the highest quiz score are the least likely to take a personal finance course at CSB|SJU. For males, there is no correlation between interest in the course and financial literacy; concluding that females appear to positively impacted by personal finance curriculum, whereas with males there is no correlation.

What do you wish you would have known at 16?

My survey had an open response question asking: what is one thing you know now, that you wish you had known at age 16 about personal finance? I received a variety of responses regarding saving, interest, taxes, budgeting, spending, credit, retirement, and investing. Around 36% of students responded that they wished they knew about the importance of saving and the significant impact of starting to save early. The overall message I received was students wanting to learn about the best way to find the balance between spending and saving. The following illustration pulls in many of topics covered in their responses.



I hope these responses can be used by the administration and professors at CSB|SJU to create and implement personal finance curriculum. These topics are ones that students want to learn more about to best prepare themselves for their futures. The next step in my research is to understand CSB|SJU's current and/or future plans regarding this type of curriculum.

Research Findings: CSB|SJU Administration and Curriculum

Jon McGee is the Vice President of Planning and Strategy at CSB|SJU. I facilitated an interview with him discussing his views on personal finance and the financial literacy of students at CSB|SJU. He is equally as passionate about this topic as I am. He talked about understanding personal values as an essential foundation to becoming financially literate. Every student should be able to complete the following phrases: I AM, I EXPECT, I VALUE and I NEED. Doing so will allow students to make financial decisions confidently.

Jon is a leader in the advocacy for some time of personal finance curriculum at our institutions. He and I agree that financial literacy amongst students here needs to be improved. Moving forward at CSB|SJU, the administration is recognizing the need and taking steps to accommodate this need. Beginning with a series of seminars titled, "College2Life." I attended the inaugural seminar on April 6, 2017 called "Life After College: Personal Finance and Money Management". The seminar was led by Dick Adamson, SJU Vice President for Finance, and Jennifer Meyer, SJU Investment Manager. Topics covered included budgets, student loans, credit cards, retirement, and insurance. The seminar was a mixture of presentations, examples, and Q&A. About 25 students attended and received a book as a gift, *Get a Financial Life: Personal Finance in Your Twenties and Thirties*, by Beth Kobliner.

I am proud of our institutions for recognizing this need and taking steps to implement personal finance into our curriculum. I hope that these seminars are the first step and hopefully, someday, a personal finance course can be offered or even required as a component to the common curriculum at CSB|SJU.

Conclusion

My initial research question was, what students at CSB|SJU are most financially literate? Why? The results of my research allowed me to answer my research question at a high level, producing "The Most Financially Literate Student at CSB|SJU." Further analysis revealed the significant amount of gender differences in financial literacy.

"The Sooner, The Better" category looked at the age students had personal financial experiences and its correlation to financial literacy. Overall, financial literacy & confidence increases the sooner experiences such as a job, a car, and money talk are introduced. When broken down by gender, the correlation is shown more significantly with males than with females.

The curriculum category examined the impact of personal finance curriculum at both the high school and collegiate level. Although females benefit a bit more from curriculum in high school, overall there is not a significant correlation. At a collegiate level, there is both a want and a need for a personal finance course at CSB|SJU. When asked, 83% of students responded they would consider taking a personal finance course here if offered.

Limitations and Further Research

The most significant limitation to my research is the number of questions on my financial literacy quiz. Limited to six points, the topics were specified and was not a comprehensive picture of financial literacy. It became difficult when performing analytics to determine significant correlations. In addition, there are many different factors in regards to financial literacy that I did not examine. Some examples include personal interest, family income level, or type of employment. If a student was interested in personal finance or had a job which gave hands on experience, this could have skewed my data. The age of a student also impacts the likeliness of some experiences surveyed. For example, and 18-year-old is less likely to buy a car than a 22-year-old because of less time to raise the necessary capital to make the purchase. The last limitation is in regards to the types of majors which responded. Exactly 25% of respondents were accounting majors. The education they have received could have impacted their financial literacy quiz results.

Further research on this topic would include sending out three surveys to members of the CSB|SJU community. One, a survey distributed to the current student body with a more comprehensive financial literacy quiz and a higher number of responses. Two, a survey to be created and distributed to faculty to obtain their perspective on personal finance curriculum. Three, a survey distributed to graduates to analyze their financial health post-graduation. The results of these three surveys would create a better picture of the financial literacy of our community and the exact changes that need to be made. Lastly, it would be beneficial to research colleges other than CSB|SJU that have implemented some type of personal finance course and understand the impact that has on their graduates.

Additional Information

On Scholarship and Creativity Day at CSB|SJU, I presented my research. A question that was asked is significant to my overall analysis. The question: did having 25% of respondents be accounting majors skew or impact my results? During my analysis, I took all 315 survey responses and eliminated the accounting and finance majors. I was surprised to find that the correlations I presented were exactly the same, but the averages were about a point lower. The overall average dropped from 4.55 points to 4.28 points. The trends in age, first job, first car, money talk, and curriculum remained the same. The table below is an example of the same trend but lower averages.

	Female	Male	Total Average
First-Year	3.60	4.94	4.09
Sophomore	4.08	4.86	4.30
Junior	4.36	4.11	4.31
Senior	4.02	5.11	4.36
Total Average	4.01	4.88	4.28

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Survey: Financial Literacy at CSB|SJU

Student Information: Page 1 of 2

Definition of Financial Literacy: The education and understanding of various financial areas, the ability to manage personal finance matters in an efficient manner, and knowledge of making appropriate decisions about personal finance.

Examples: investing, insurance, real estate, paying for college, budgeting, retirement and tax planning

1. What is your age?
   a. First-Year
   b. Sophomore
   c. Junior
   d. Senior
   e. Fifth-Year
2. What is your gender?
   a. Male
   b. Female
3. What is your major?
   a. (Drop-down list)
4. What is your GPA?
   a. Under 2.5
   b. 2.50 - 2.99
   c. 3.00 - 3.30
   d. 3.31 - 3.60
   e. 3.61 - 4.00
5. Where are you from?
   a. Greater Twin Cities Area
   b. Minnesota – Other
   c. United States – Other
   d. World – Other
6. Did you take a Personal Finance course in high school?
   a. Yes
   b. No
7. Would you take a Personal Finance course if offered at CSBSJU?
   a. No
   b. Probably not
   c. Maybe
   d. Probably
   e. Definitely
8. What would you rank your financial literacy?
   a. Not literate
   b. Somewhat literate
   c. Moderately literate
   d. Very literate
   e. Financial expert
9. To what extent were money discussions a part of your upbringing/family?
   a. Not at all
   b. Very little
   c. Moderate amount
   d. A great deal
   e. Almost every day
10. What age were you when you got your first consistent job?
    a. 14-15
    b. 16-17
    c. 18-19
    d. I have never had a job

11. What age were you when you bought your first car?
    a. 16-17
    b. 18-19
    c. 20-21
    d. 22+
    e. I have never bought my own car
12. Do you have your own credit card independent of your parents?
    a. Yes
    b. No
13. Do you have a savings account of more than $500?
    a. Yes
    b. No
14. What is one thing you know now, that you wish you had known at age 16 about personal finances?
    a. _________________

Financial Literacy Quiz: Page 2 of 2

15. Suppose you have $100 in a savings account earning 2 percent interest a year. After five years, how much would you have?
    a. More than $102
    b. Exactly $102
    c. Less than $102
    d. Don’t Know
16. True or false: A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage but the total interest over the life of the loan will be less.
    a. True
    b. False
    c. Don’t Know
17. Suppose you owe $1,000 on a credit card and the interest rate you are charged is 20% per year compounded annually. If you didn’t pay anything off, at this interest rate, how many years would it take for the amount you owe to double?
    a. Less than 2 years
    b. 2 to 4 years
    c. 5 to 9 years
    d. 10 or more years
18. What is considered an excellent credit score?
    a. 500 to 560
    b. 561 to 600
    c. 700 to 850
    d. 1000 to 1500
19. 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?
    a. Vera, who always pays off her credit card bill in full shortly after she receives it.
    b. Jessica, who only pays the minimum amount each month.
    c. Megan, who pays at least the minimum amount each month and more, when she has the money.

d. Erin, who generally pays off her credit card in full but, occasionally, will pay the minimum when she is short of cash.

20. True or false: Buying a single company's stock usually provides a safer return than a stock mutual fund.
    a. True
    b. False
    c. Don’t Know