Financial Literacy: Impact on Student Success

The Honors Program
Senior Honors Project
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ABSTRACT
Financial literacy has proven to be an essential skill for young adults to help in achieving success and reaching one’s potential. Many studies find that those with a stronger background in financial literacy are more likely to demonstrate positive behaviors, both financially and in other areas. This study will attempt to draw a link between Bryant University students’ background in financial literacy and benefits within the college classroom. Specifically, my study will look at whether having a stronger background in financial literacy leads to increased confidence in the classroom, decreased accounting anxiety, and superior academic performance. The study uses primary data gathered by administering a survey to 300 Bryant undergraduate students. The results of this study can be used by students and faculty alike in determining and cultivating a potential driver of success for students.
INTRODUCTION

The goal of this Senior Capstone Project is to develop a research project that aims to understand the impact that a background in financial education prior to entering Bryant University has on students. Financial literacy is a key driver of success, and numerous studies have drawn a link between a proficiency in financial literacy and future success and capability. Therefore, this study has explored the financial background, or lack thereof, that Bryant students have obtained before entering Bryant, and the ways this background impacts the student, in terms of academic performance, choice of major, and confidence in the classroom.

As mentioned, this project looks at the impact of a background in financial education on Bryant students, where financial education is defined as “the process by which financial consumers/investors improve their understanding of financial products, concepts and risks and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being” (OECD, 2005). Though the topic of financial literacy’s impact on student success is not uniquely applicable to Bryant students, the scope of this project examines only Bryant undergraduate students. This was done by offering a survey to Bryant students from freshmen to seniors. The survey inquired about any financial background the individual has had prior to, and since entering Bryant University, the individual’s academic performance, the individual’s level of confidence in both social science classes and accounting and finance classes. A brief test of financial literacy that will then help to determine what level of financial literacy the individual
has. For the remainder of the paper, accounting and finance courses will be referred to as “financial business courses”. The paper also refers to something as “accounting anxiety”, which is best described as a feeling of tension, apprehension, or fear that interferes with accounting performance. Through the survey results, any correlations between a background in financial literacy and student success were analyzed and compared to the hypotheses, which are further explained in the following section.

This project was worth doing because it can help determine a potential driver of success for Bryant University students. It can help to evaluate how much, if at all, past exposure to financial literacy courses, readings, etc. can influence future success for students, and in what way. By understanding the impact financial literacy has on students, Bryant could implement programs or workshops that would be beneficial to both the students and to Bryant itself, and it could help to better prepare students and lead to long-term improvement in the classroom. Furthermore, if a background in financial literacy does prove to be a driver of success in the classroom, a financial literacy workshop may be worth implementing as a pillar of the First Year Gateway Experience here at Bryant University to cultivate student success. Financial literacy is a skill that is both important and necessary for people of all ages to have. However, despite the wealth of research regarding to financial literacy, there is still more to be done. This project will investigate an aspect of financial literacy that has not yet been fully examined, which is the impact a background in financial literacy has in the college classroom.
Research Questions

The overarching question that defines the research project is the question of: “How does a background in financial literacy impact the individual in the college classroom?” In synthesizing the relevant literature, there are three specific research hypotheses that define the scope of the project and reflect the research question upon beginning the research. They are as follows:

\[(H1a):\] Having a background in financial literacy leads to increased confidence in financial business courses

\[(H1b):\] Having a background in financial literacy leads to decreased accounting anxiety.

\[(H2):\] Having a background in financial literacy prior to college leads to improved academic performance in financial business courses upon entering college

LITERATURE REVIEW

Introduction

Financial literacy is defined as “the ability to make informed judgements and effective decisions regarding the use and management of money” (McCormick, 2006). In a fast-paced and ever-changing world, the notion of being financially literate is a skill that has become increasingly important in achieving success. In researching financial literacy, one of the major recurring themes is the importance of educating students and increasing their understanding and proficiency in certain financial topics, in order to pave a successful future. Furthermore, many of these studies draw links between a strong background in financial literacy and future success, whether it be in the work force or financially, self-confidence, and/or overall quality of life. One
topic that has been lightly explored, is the idea of a link between classroom success and a background in financial literacy. In researching the many positive impacts a background in financial literacy creates, it is important to look into areas the research may have not fully explored yet.

Much of the information gathered comes from studies that look at the impact of financial literacy, specifically on youth and college students. The source selection represents a wide range of topics regarding financial literacy and the benefits it can have, as well as different ways to evaluate financial literacy. All of the past research that has been explored has helped to shape the project focus on where the information and research is found to be lacking, and that is the impact of financial literacy in the classroom, and more specifically, the college classroom.

**Background**

Financial literacy has been defined and redefined many times over the past few decades. Throughout the literature, I have come across a multitude of explanations of financial literacy, some that are unique and others that are widespread and popular. There are certain ones that are preferred to others, though it is important to evaluate the different definitions and get a widespread understanding of what financial literacy means to different people. McCormick (2006) defines financial literacy as “the ability to make informed judgements and effective decisions regarding the use and management of money”. This definition is adequate, but is lacking in that it is not as all-encompassing as other definitions. The definition that seems to best encompasses the idea of financial literacy and illustrates the opportunities that being financially literate provides is, “Possessing the skills and knowledge on financial matters to confidently take
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effective action that best fulfills an individual’s personal, family and global community goals” (National Financial Educators Council, 2013). Throughout the research, one may come across multiple definitions of financial literacy, but the common denominator among all of this research is the benefits and importance that comes with being financially literate.

Though financial literacy is widely discussed and not always agreed upon, there are certain studies and researchers that serve as pillars in financial literacy research. For example, Lusardi (2010) created a survey with a series of questions to test financial literacy, and this test has been used and adapted in many of the other studies related to financial literacy. Furthermore, the Jump$tart Coalition is a non-profit organization that strives to increase financial education, specifically for students. Their mission is to improve the overall financial literacy of youth, and they have used many avenues to achieve this mission. Therefore, much of the research that has been explored has cited ideas or suggestions by the Jump$tart Coalition in their own studies, or uses them as a point of reference in discussing financial literacy education. The National Financial Educators Council (NFEC) was another source that served as a pillar for this research project, as they are advocates for financial education and for understanding the level of financial literacy among individuals. They also offer a series of different tests to determine one’s level of financial literacy, which was the source of some of the test questions administered in this project’s survey. The remaining test questions came from the FINRA Investor Education Foundation. These pioneer studies draw a link between much of the research done with this
project, and is helpful in offering a point of guidance on where to start the research, and where to go with it.

An increasingly important topic in the field of financial literacy is the idea of starting a financial education at young age. Though it is not widely accepted, or at least widely utilized, many schools across the country have begun to implement lessons that help increase a person’s financial literacy. Furthermore, the idea of implementing curricular or co-curricular lessons and workshops for college students is gaining widespread recognition. Although there seems to be an abundance of research and even agreement on the overall importance of financial literacy, one gap that has been identified in the literature is that there is not much research to be done on any connection between financial literacy and academic success, which is where this research project fits.

Review

I. Patterns

In reviewing the literature, a few trends and patterns continuously arise in the research. The most prevalent ideas found or sought after in this research project include the overall benefits of financial literacy, the link between financial literacy and success in higher education, and the best ways to implement financial education. There are other trends that have been noticed and will be discussed in this paper, but these major patterns are widely discussed and researched by all ranges of researchers, including educators, students, psychologists, and journalists.
a. Overall benefits of financial literacy

Many different studies are tied together by the underlying idea that a background in financial literacy can provide a multitude of benefits for the individual. For example, Rosacker’s (2009) study references the idea that highly financially literate individuals are more financially responsible in terms of saving, budgeting and planning, and are also more likely to have a higher level of income and education than those who are not as financially literate. This exemplifies the idea that having the skill of financial literacy is not just beneficial in that the individual has a strong understanding on financial matters. Rather, the individual also reaps the residual benefits, which include higher income and more education. Similarly, Godfrey (2006) defines financial education as a critical key to success, which emphasizes the sheer importance when paving an individual’s future. He goes further to say that more students go bankrupt than graduate college, which reiterates the importance of receiving a background in financial literacy. The background in financial literacy helps to warn against behaviors that are detrimental to one’s financial well-being, while also guiding them toward a successful future financially, career-wise, lifestyle-wise, and more. Furthermore, Johnson’s (2007) research highlights Rosacker’s ideas as well as bringing forward the idea that students who are financially educated at a young age will be more financially capable than those who do not receive this education until later, if at all. This idea touches upon the importance of financial literacy and youth, and the fact that those students who are exposed to financial literacy at a young age end up with improved financial capability, which is of course a long-term benefit. Hoelzl & Kapteyn (2011) further explain this idea of financial capability by addressing its five different domains, “(1) managing money: making ends meet... (2) managing money: keeping track... (3) planning ahead... (4) choosing products...and (5)
staying informed” (p. 543). With the understanding of financial capability, it is clear that improving one’s financial literacy often results in personal benefits that can vastly improve one’s quality of life.

Another added benefit of financial literacy is the notion that an individual who is more financially literate is better prepared with sought after skills in the working world. Plush (2013) discusses the link between financial literacy and work force readiness. Plush also says that teaching financial literacy can positively influence students and lead to personal growth. Thus, an individual who has a higher level of financial literacy has concurrently developed skills that will help him get a head not only financially, but also in the workplace, which could translate to the classroom, as well. Furthermore, Kezar (2010) also supports the idea that an education in financial knowledge can lead to confidence, judgement skills, and critical thinking skills. These skills are another personal advantage that come about in connection with financial literacy.

As previously discussed, being financially literate oftentimes goes hand in hand with positive skills and behavioral traits that can ultimately improve the individual’s life in the classroom, the workplace, and just overall quality. However, it is important to note that there is a link between being financially literate and having positive psychological effects, as well. Williams (2009) discusses the idea that financial education leads to financial literacy, which ultimately leads to good financial decisions and behavior and confidence. With this understanding that financial literacy can lead to psychological benefits, as well as financial benefits, it is important that this study takes into account how participants’ confidence is affected by their background, or lack
thereof, in financial literacy, and if this confidence is changed after taking an introductory accounting or finance course.

In looking at the psychological benefits and personal and professional skills that are correlated with financial literacy, it is interesting to place focus onto young people, specifically college students. College students and young adults are currently the group that holds the highest amount of debt. Gavigan (2010) also discusses the idea that today’s students are very weak in terms of financial literacy, and that being financially educated will help college students prepare for a successful future. While the benefit of increased financial literacy includes increased financial capability, young people can gain many other benefits from being financially literate. Cull’s (2011) research reiterates Gavigan’s notion that financial literacy is critical for young people by explaining the repercussions of not having strong financial knowledge. The lack of financial literacy can lead to financial trouble such as major debt, but also physical and emotional troubles such as bad health and low quality of life. Therefore, one can see that, apart from the palpable results of low financial literacy, (poor financial behavior) the non-obvious effects are just as important. If a lack of financial literacy is related to physical and emotional strife, this may translate to the college classroom. If individuals are experiencing a lower quality of life or increased stress, this could take a toll on their schoolwork as well, whether it is in performance or in confidence in the classroom. Beal (2003) also saw the importance in studying financial literacy among college students. His study focused on Australian students, and looked at mostly first year business students and tested their financial knowledge skills, which parallels many aspects of this study. Overall, Beal noticed low financial literacy skills and deducted that improving financial literacy will have better outcomes for the individual and the economy as a
whole. Again, though Beal did not specifically state any specific “outcomes” that he predicts, this creates an opportunity for further research to explore what these outcomes will be. Similarly, Cull (2011) tested financial literacy among Australian university students and analyzed the results based on a few key things, notably how business majors scored against students of the arts or education, which is further expanded on in the Results & Methods Section. The research widely supports the idea that a strong background in financial literacy has positive impacts on the individual, aside from just healthier finance behavior, which is important because it shows that there could very likely be a link between financial literacy and academic success.

b. Success in Higher Education

Perhaps the most relevant research to this project is in regard to the relationship between financial literacy and higher education. Though studies that specifically measure academic success in relation to a background in financial literacy have not been found or discussed within this research project, many researchers do note the effects and benefits, or the potential benefits, financial education has on college students.

One of the main points of investigation in the research is whether a background in financial literacy has any impact on an individual’s chosen major. Tenaglia’s (2010) study made a connection among chosen major and financial behavior. She describes this in saying, “...quant majors, which included Accounting, Finance, Financial Services, and Actuarial Math, had a negative coefficient. This means that Quant majors were less likely to have credit problems”. Because Tenaglia found that college major does correlate with financial behavior, perhaps the inverse is true and financial understanding leads to college major.
Another aspect of the research for this project focuses on the overall performance in the college classroom. With the understanding that increased financial literacy leads to improvements in things like confidence and critical thinking skills, the inverse is presumably true. If an individual is financially illiterate, he or she may be struggling with decreased confidence and weaker critical thinking skills. This is explored in Rosacker’s study based on college business freshmen which also noted that a lack of financial literacy can hinder success in higher education, among other things previously listed. In support of this, Xu (2012) addressed the idea in her findings that greater financial literacy leads to higher educational attainment, in terms of degrees rather than academic success. Financial literacy is related to the pursuit of higher education, and the pursuit of higher education oftentimes is connected with academic performance, thus drawing a connection between financial literacy and academic performance. Similarly, Lusardi (2010) conducted a study that found those who attend or plan on attending college scored better on a test of financial literacy. Furthermore, Lusardi noted the importance of starting financial literacy education in high school, or at least before students start making serious financial decisions on their own. Therefore, there may be a direct link between financial literacy and educational achievement, though these studies do not take into account grade point average or other measures of academic success.

One of the most repeated notions among researchers is the idea of financial literacy being a critical tool for the college student. A 2014 study by Heather Jagman focuses on financial education at DePaul University in Chicago. Jagman emphasizes the importance of financial literacy in terms of success and college students by stating that financial literacy is critical to education and the college degree nowadays, and offers the suggestion of implementing a
campus-wide, first-year experience workshop to increase students’ financial literacy. This idea is something that can be seamlessly implemented into Bryant’s Gateway Experience, and is something that can be seen as a critical factor of success for students. Jagman goes further to quote Kezar’s (2010) study that discussed the multitude of benefits for college students with a background in financial literacy. Some of these benefits are addressed in saying, “…financial literacy can increase the odds that students will stay—and succeed—in college…Financial education can be a key component of learning in college and that students who possess practical competence in personal finance are more confident and academically successful” (16). Kezar goes on to discuss the current practices in financial education and recommendations for future practices. Overall, Kezar discusses the fact that financial literacy is widely important and is a necessary element of a college degree. Though Kezar does not back up her claims with a study explicitly proving a link with academic success, she too makes it clear why there may be a connection, and that it is something worth exploring.

II. Results & Methods

c. How to implement

One of the prevalent themes in the research studied in this project are recommendations about the best way to conduct financial literacy education for students. Overall, the most widely accepted recommendation is to implement a face-to-face, hands-on workshop on college campuses. Totenhagen’s (2015) study surveyed much of the same literature used in this study, and decided on the best, most effective ways to implement a financial literacy education for students. However, Totenhagen focused more heavily on younger students, and not as much on
college students. Totenhagen did conclude that face-to-face education and hands-on learning did produce the best results for improving students’ financial literacy, which is in line with nearly all the research surveyed, in terms of ways to implement financial education. These findings are helpful in looking through the lens of Bryant University because we already have the Gateway Experience here, and in looking at the relevant literature, financial literacy would be a beneficial addition to the Gateway Experience.

Much of the research includes the idea of including a test of financial literacy, as well as demographic questions to draw different connections. As briefly mentioned before, Cull (2011), tested financial literacy by giving out a survey with questions based on different financial topics. Because the study was done in Australia, the questions were designed with an Australian context. However, Cull’s methodology is similar to what this study plans to do in that she gathered demographic data regarding field of study, age, and more and then created a test to determine the individuals’ level of financial literacy. In terms of results, Cull’s study found that university students, overall, had a low level of financial literacy. The study broke down financial literacy into different aspects, such as compound interest, debt, banking, and more, and analyzed the results that way. Therefore, each topic had its own analysis. Notably, in looking at compound interest, students of the sciences scored better than those of business students, whereas business students scored the highest in questions about taxes. Something to consider when evaluating this data, and any data that will be read or analyzed, is the idea that self-reports can lead to errors, and that there is commonly a misperception and over optimism when it comes to self-reporting, which was also identified in Willis’ (2009) study. Though Cull’s research is relevant and significant, there are a few gaps that this study plans to explore more, such as what kind of
financial literacy background students had before this survey and how that affects or does not
affect performance. Cull’s (2011) study also found that students’ preferred method of gaining
financial literacy is through workshops or face-to-face interactions with whoever is educating
them on the topic. Similarly, McWilliams (2008) study noted the idea that university students
need to improve financial literacy, and other university students can help them. It listed specific
suggestions such as the 360 Degrees of Financial Literacy program or a collaborative workshop
led by accounting majors and/or CPA students.

In terms of actually testing the financial literacy of students, many different things can be done.
However, one of the popular ones among the research is Lusardi’s (2010) survey, which can be
considered a sort of pioneer in its field. From that survey, many researches have adapted or
copied the same questions in order to test financial literacy in its different aspects. However, in
conducting this research, the most preferred tests are the 2017 tests administered by the National

III. Financial Literacy and High School Students

Because this research focuses on an individual’s financial background prior to entering college, it
is essential to understand research that has already been done regarding financial literacy and
high school students. It is widely accepted that there is a need for financial literacy among the
young. Many studies take an “earlier the better” approach in deciding how early an individual
should start receiving a financial education. In response to the idea that financial literacy, though
it may not be a skill that children actively exercise now, is something that children will need to
know in the future, Johnson & Sherranden (2007) discuss the sensibility in beginning to develop
financial capabilities in childhood. It is important to build a wealth of knowledge on the subject of financial literacy before being thrown into a situation that requires this kind of knowledge. For example, think of an incoming college student trying to apply for a student loan. If the individual has some financial knowledge, they will be more apt to find a loan with better terms, whereas an individual with no financial literacy is going into the situation blind. Upon entering college, there are many financial decisions to be made, and for some students they will be making those decisions with no prior knowledge on the subject.

Not only is a background in financial literacy starting in high school or prior a potential driver of financial success, it is something that young adults desire. In a study by the National Financial Educators Council (2017), they found that the majority of young adults said that a course in money management would benefit their life the most.

Young adults, similar to numerous researchers on the topic, recognize the need for a financial education course. Despite that, there is no mandate for any financial literacy program in the public school systems. Some schools offer some form of a personal finance or related course as an elective, but very few schools have required courses, which is something that could be both beneficial to the student and also desired by the student.
Another factor to determine when analyzing financial literacy and high school students is whether the students found the programs to be effective or not. If the individual found the program to be effective, it is more likely to stick with them and be carried forward into the future. Tenaglia (2010) examined the connection between financial training in high school students and credit behavior of college students. In that, she found that if students had useful financial training in high school, they were likely to have better credit behavior. Ultimately, if the students found their program to be effective, they were able to transfer that knowledge into different aspects of their life. Therefore, it is expected that if the students examined had effective financial training in high school, they too will be able to bring those skills with them into the college classroom. Tenaglia goes forward to suggest, “Perhaps if students were required to take basic business classes in high school, they would have good credit behaviors in the future” (33). On the contrary, the students who found those programs ineffective did not carry those behaviors forward.

IV. Effectiveness of Financial Literacy Programs

In order to look toward the future in terms of financial literacy, it is necessary to understand how effective different financial literacy programs are, and what makes these programs more successful than others. One of the main drivers behind effectiveness of financial literacy programs is not the program itself, but rather the motivation of the individual participating. Mandell & Klein (2007) say, “Students retain little of what they learn in personal finance and money management classes because they do not perceive that it is relevant to their lives” (108). That being said, if an individual understands the importance of financial literacy and the benefits
of being financially literate, they may have a stronger inclination toward the subject matter. Tenaglia discusses the impact of a financial literacy program that was not relatable to high school students, “Students who did not find the financial training in high school useful most likely either forgot the information they were given or didn’t bother to pay attention at the time because they didn’t feel it was relevant to their lives” (33). Furthermore, if a program is geared towards goals that motivate the student, such as ways to grow personal wealth or ways to manage student loan debt, the student would be more motivated and thus the program would be more successful. Hathaway & Khatiwada (2009) discuss this in saying that the most effective financial education programs are targeted toward a specific group or facet of financial activities. This reiterates the point of Mandell & Klein in that if a program is personally relevant to the individual, or in this case, group of students, there will be an increased motivation to learn, and thus increased effectiveness of the program. On the contrary, programs that are too broad or untailed do not yield the best results. Lusardi, among other researchers, also notes the fact that interactive programs are typically more effective than other types of programs.

Much of the research agrees on the fact that there is not one, all-encompassing way to evaluate financial literacy programs. Hathaway & Khatiwada describe this in saying “Existing research on the effectiveness of financial education programs is incomplete and unconvincing...Many researchers have discussed the need for improved program evaluation; arguing it should be better planned, planned earlier, and conducted as an integral component of every program” (16). Therefore, the effectiveness of every financial literacy programs cannot be accurately and completely measured on the same scale. However, insights from the research have led this
research to look for key elements of an effective financial literacy program: it should be targeted to a specific audience as to increase motivation to learn, and it should be interactive.

Conclusion:

Reviewing the literature was very informative and helped to shape the proposed project idea. In reviewing the relevant literature, there were clear major focuses that people have done before this project and it was also clear to see the window of opportunity in which people have not thoroughly explored. Additionally, this study has observed different benefits that come from having a background of financial literacy, though there are more that still need to be explore, such as the potential benefits related to academic success. This project will use some of the tools used in prior research.

The most significant discovery made while reviewing the literature is just how important financial literacy is in terms of paving a successful path for the individual. Before starting the research for this project, it was unclear how beneficial and impactful having a background in financial literacy is. Therefore, this has created even more interest than before in studying the potential link between financial literacy and academic success, and how this could affect the Bryant community. Many studies have discussed the idea of increasing financial education for college freshmen, and therefore, it is thought that the Gateway Program could be a great start for Bryant to help in furthering the success of the students.
METHODOLOGY

This project was executed as a traditional research thesis. The traditional research thesis was carried out by first conducting a literature review, addressing an aspect of that research and building upon it, coming up with hypotheses, and then testing and analyzing the hypotheses and results. The main source of data and key component of the research was collected from a survey and test of financial literacy administered to Bryant University undergraduate students.

The literature review was conducted by finding, reading, and analyzing over twenty scholarly sources related to financial literacy and financial education, as well as classroom anxiety. The literature review was used to gather background knowledge on the topic of financial literacy, as well as to see what prior research had found and where the research has not yet gone. The literature review was also significant in constructing the financial literacy test.

Before administering the survey, it was sent to Bryant’s Institutional Review Board (IRB) along with an informed consent form (see Appendix A and B) to ensure the privacy and safety of all participants. Prior to sending out the final version of the survey to the Bryant undergraduate population, it was sent to approximately 12 graduate students for any critiques. This served as a pre-test in order to have their evaluations, critiques, and suggestions for the survey itself. Their survey responses were not used when analyzing the survey data, but their feedback was taken into consideration prior to composing the final survey.

The survey is composed of two parts: (1) questions that address demographic information and any background in financial literacy (see Appendix C) and (2) a test of financial literacy (see
Appendix D). Part 1 of the survey gathered demographic information regarding class year, major, and GPA. Then, the survey asked participants about any background or training they had in financial literacy, both before and upon entering college. The next set of questions dealt with accounting anxiety and situations that may or may not cause classroom anxiety for students, using a 5 point Likert Scale. Then the survey asked about comfort, confidence, and preference towards accounting and finance classes versus social science classes, again using a 5 point Likert Scale.

The financial literacy test is comprised of twelve questions gathered from financial literacy tests by both the National Financial Educators Council and FINRA Investor Education Foundation. The 12 questions were condensed from the original tests, which have more questions. Each of the twelve questions were chosen based on the fact that they encompass different elements of financial literacy and addressed different topics such as time value of money, budgeting, interest impact, and more. The survey was sent online, by directly e-mailing students the link or e-mailing professors and asking them to distribute it to their classes (see Appendix E).

Approximately 300 Bryant undergraduate students completed the survey. Once the data had been collected in Qualtrics, it was exported to Excel. From Excel the data was sent to the statistical analysis program, SAS. SAS was used in order to perform tests and analyze the data using factor analysis and regression analysis. Factor analysis was chosen to look at multiple factors within a certain section and see if that could be condensed into a clearer construct (i.e. accounting anxiety). Regression analysis was used to estimate the relationships among different variables (i.e. major and accounting anxiety). Then, because there were two clusters of results being
analyzed, a t-test was chosen as an appropriate statistical analysis tool. In excel, the t-test function was used in order to calculate the probabilities associated with the t-values of the findings, in order to determine the statistical significance, if any, between the differences. That is, what is the probability that the findings occurred by chance alone? Using the multiple tools for analysis allowed us to determine whether the hypotheses were supported, and whether the findings were statistically significant.

RESULTS

A majority of the findings were split up in two sections: “before college” and “after college”. The “before college” questions asked respondents about any background they had in financial literacy prior to entering Bryant University, and “after college” asks about background students have gotten during their time at Bryant.

Accounting Anxiety

On the survey, respondents were asked to rate their overall level of accounting anxiety. Then, follow up questions outlined specific situations that may induce accounting anxiety, and respondents were asked to rate their level of accounting anxiety in each individual situations.
Factor analysis concluded that the question of overall accounting anxiety was generally reflective of the individual situations, as Table 1 demonstrates. So from then on, the one construct of “accounting anxiety” was representative of overall accounting anxiety as well as the accounting anxiety each situation induces.

Following the factor analysis, regression analysis was performed in relation to the independent variables of respondents’ majors.
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| Parameter                  | Estimate | Standard Error | t Value | Pr > |t| |
|----------------------------|----------|----------------|---------|------|---|
| Inter
c|cept                   | 2.85099  | 0.47774        | 5.97   | <0.0001 |
| Accounting                | -1.02143 | 0.29054        | -3.52  | 0.0005 |
| Data Science              | 0.04368  | 0.45666        | 0.1    | 0.9239 |
| Finance                   | -0.35412 | 0.24966        | -1.42  | 0.1577 |
| Global Supply Chain       | -0.186   | 0.45696        | -0.41  | 0.6844 |
| International Business    | -0.15807 | 0.22477        | -0.7   | 0.4828 |
| Management                | 0.14946  | 0.29889        | 0.5    | 0.6176 |
| Marketing                 | -0.03528 | 0.26649        | -0.13  | 0.8948 |
| Psychology                | -0.67382 | 0.41048        | -1.64  | 0.1023 |
| Communications            | 0.52929  | 0.44163        | 1.2    | 0.2322 |
| History/Social Science    | -0.84607 | 0.6203         | -1.36  | 0.1742 |
| Mathematics               | -0.6652  | 0.3382         | -1.97  | 0.0506 |
| Science                   | -0.88964 | 0.48037        | -1.85  | 0.0656 |
| Undeclared                | -0.21095 | 0.29691        | -0.71  | 0.4783 |

**Table 2**
Table 2 indicates that accounting, math, and science majors have lower levels of accounting anxiety. This statistically significant connection is evident by the P values less than 0.1. These relationships could be explained by the fact that accounting, math, and science majors all have in common the necessary skill of numerical analysis within their fields. It is interesting to note that finance majors have just as much accounting anxiety as any other non-accounting major.

Research Question 1 explores whether having a background in financial education leads to decreased accounting anxiety (and increased confidence). Responses were analyzed based on the two tails of responses, those who have none to slight accounting anxiety, and those who have moderate to extreme accounting anxiety.

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<thead>
<tr>
<th>Source of Financial Education</th>
<th>Signifies those with Moderate- Extreme Anxiety</th>
<th>Signifies those No- slight anxiety</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Business Course in High School</td>
<td>17 14%</td>
<td>38 20%</td>
<td>6%</td>
</tr>
<tr>
<td>Learning from Parents</td>
<td>33 28%</td>
<td>69 36%</td>
<td>8%</td>
</tr>
<tr>
<td>Little to no training/background</td>
<td>45 38%</td>
<td>46 24%</td>
<td>-14%</td>
</tr>
<tr>
<td>Personal Finance Course in High School</td>
<td>20 17%</td>
<td>37 19%</td>
<td>2%</td>
</tr>
<tr>
<td>Use of a Financial Literacy Program (i.e. Jump$Start)</td>
<td>1 1%</td>
<td>0 0%</td>
<td>-1%</td>
</tr>
<tr>
<td>Other, please explain</td>
<td>2 2%</td>
<td>3 2%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>118 100%</td>
<td>193 100%</td>
<td></td>
</tr>
</tbody>
</table>

P Value 0.025747

*Table 3*
Table 3 confirms that those who have had little to no training or background in financial literacy prior to entering college are 14% more likely to feel extreme to moderate accounting anxiety. These results were expected because those students who have no background in a financial education are being exposed to something new upon entering Bryant University classes, and apprehension and anxiety typically go hand-in-hand with new, unfamiliar situations. The P Value of .025747 illustrates the statistical significance of this finding, as it is less than 0.1.

Confidence

In addition to anxiety, Research Question 1 explores whether there is a connection between a background in financial literacy and classroom confidence. It was hypothesized that those students who have had a background in financial literacy would be more confident in their accounting classes.

<table>
<thead>
<tr>
<th>Source of Financial Literacy</th>
<th>Extremely Confident</th>
<th>Not Confident</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Business Course in High School</td>
<td>8, 21%</td>
<td>6, 11%</td>
<td>-10%</td>
</tr>
<tr>
<td>Learning from Parents</td>
<td>15, 38%</td>
<td>16, 28%</td>
<td>-10%</td>
</tr>
<tr>
<td>Little to no training/ background</td>
<td>5, 13%</td>
<td>27, 47%</td>
<td>35%</td>
</tr>
<tr>
<td>Personal Finance Course in High School</td>
<td>11, 28%</td>
<td>7, 12%</td>
<td>-16%</td>
</tr>
<tr>
<td>Use of a Financial Literacy Program (i.e. Jump$tap)</td>
<td>0, 0%</td>
<td>0, 0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other, please explain</td>
<td>0, 0%</td>
<td>1, 2%</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39, 100%</strong></td>
<td><strong>57, 100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source of Financial Literacy</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little to no training/ background</td>
<td>0.001348</td>
</tr>
<tr>
<td>Personal Finance Course in HS</td>
<td>0.012865</td>
</tr>
</tbody>
</table>

Table 4

[28]
Table 4 illustrates the survey results relating classroom confidence and background in financial literacy prior to entering college. The results show an extremely strong correlation between the level, or lack thereof, of training and background and confidence. That is, those students who had little to no training and background in financial literacy are 35% more likely to report feeling not at all confident in accounting classes. Another interesting finding is that those students who took a personal finance course in high school are 16% more likely to feel extremely confident in their accounting class. This finding can potentially be explained by the notion that typically, the more someone is exposed to something, the more they become comfortable with it. Therefore, in having some financial education prior to entering the college classroom, by the time the student gets to college they may already be comfortable and familiar with some of the things introduced to them, and thus feel more confident in approaching it.

<table>
<thead>
<tr>
<th></th>
<th>Signifies those that are extremely confident in accounting classes</th>
<th>Signifies those that are not confident at all in accounting classes</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance 201</td>
<td>11</td>
<td>13</td>
<td>-6%</td>
</tr>
<tr>
<td>Other Business Course</td>
<td>16</td>
<td>8</td>
<td>-31%</td>
</tr>
<tr>
<td>that addressed these topics</td>
<td>47%</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>4</td>
<td>28</td>
<td>45%</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Seminar</td>
<td>3</td>
<td>0</td>
<td>-9%</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>49</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P Value</th>
<th>Other Business Course that addressed these topics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>0.0000976</td>
</tr>
<tr>
<td></td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>0.000109</td>
</tr>
</tbody>
</table>

Table 5

Similar to Table 4, Table 5 also demonstrates survey responses in regards to classroom confidence, but Table 5 represents level of background in financial literacy after entering Bryant.
This data suggests that students who have taken another business course, aside from Finance 201, that addressed topics in financial literacy are 31% more likely to report feeling extremely confident in accounting classes than those who report feeling not confident at all. Similar to Table 4, Table 5 also demonstrates that those students who have not yet taken a course that addresses topics in financial literacy are 45% more likely to report feeling not confident at all in accounting classes. These findings may be explained by the idea that the more familiar with something a person is, the more confident they are. Overall, these findings demonstrate support for the original hypothesis regarding the expectation that a background in financial literacy would lead to increased classroom confidence. It was surprising to notice that there was not a major difference between the two tails of confidence when looking at students who have taken Finance 201.

**Performance**

The second and final research question explores the idea of a connection between a background in financial literacy leading to improved classroom performance. It was hypothesized that there would be a strong positive connection between those who have a stronger background in financial literacy and those who perform better in accounting classes. The data in the following table investigates this hypothesized connection.
Table 6 investigates the relationship between performance in accounting classes and background in financial literacy prior entering Bryant. The data showed a strong connection between performance and both having little to no training, and taking a general business course in high school. However, upon performing the t-test, it is evident that the connection between performance and having little to no training is not statistically significant, so it will not be considered in analyzing the findings. The connection between classroom performance and taking a general business course is statistically significant, and it is strong. That is, those who have taken a general business course in high school are 17% more likely to report performing much better in accounting classes.
Financial Literacy: Impact on Student Success

Senior Capstone Project for Alexandra Cunningham

Table 7 explores the relationship between background in financial literacy after entering Bryant, and performance in accounting classes. As the table illustrates, there appears to be a link between those who have not yet taken courses addressing financial literacy, and those who perform much better in accounting classes than in social science classes. However, the P Value of 0.467 concludes that these findings are not statistically significant, and it is possible they could have occurred by chance alone. The table also illustrates a connection between other business courses, aside from Finance 201, and classroom performance that is statistically significant. That is, those students who have taken other business courses that addressed financial literacy topics are 27% more likely to report performing much better in accounting classes than those who have taken other business courses and perform much worse.

These findings are reflective of the hypothesis that a stronger background in financial literacy leads to improved academic performance in accounting courses. This could be explained by the
old saying “practice makes perfect”, in that those who have taken business courses in high school and college have likely been exposed to accounting and other financial business topics before, and thus have an academic advantage in those areas.

Financial Literacy Test

The last portion of the survey was a test of financial literacy test. Data analysis was done to examine any link between a background in financial literacy before and/or after entering college and financial literacy test results.

<table>
<thead>
<tr>
<th>Background</th>
<th>Signifies those who scored higher than 75%</th>
<th>Signifies those who scored lower than 25%</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Business Course in High School</td>
<td>13</td>
<td>17</td>
<td>-6%</td>
</tr>
<tr>
<td>Learning from Parents</td>
<td>20</td>
<td>27</td>
<td>-9%</td>
</tr>
<tr>
<td>Little to no training/background</td>
<td>12</td>
<td>49</td>
<td>24%</td>
</tr>
<tr>
<td>Personal Finance Course in High School</td>
<td>14</td>
<td>15</td>
<td>-10%</td>
</tr>
<tr>
<td>Use of a Financial Literacy Program (i.e. Jump$Start)</td>
<td>1</td>
<td>1</td>
<td>-1%</td>
</tr>
<tr>
<td>Other, please explain</td>
<td>0</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>111</td>
<td>100%</td>
</tr>
</tbody>
</table>

P Value: Little to no training/background: 0.026428545

*Table 8*
Financial Literacy: Impact on Student Success
Senior Capstone Project for Alexandra Cunningham

<table>
<thead>
<tr>
<th></th>
<th>Signifies those who scored higher than 75%</th>
<th>Signifies those who scored lower than 25%</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance 201</td>
<td>19</td>
<td>23%</td>
<td>-10%</td>
</tr>
<tr>
<td>Other Business Course</td>
<td>21</td>
<td>25%</td>
<td>-16%</td>
</tr>
<tr>
<td>that addressed these topics</td>
<td>15</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>8</td>
<td>10%</td>
<td>25%</td>
</tr>
<tr>
<td>Other</td>
<td>36</td>
<td>43%</td>
<td>-1%</td>
</tr>
<tr>
<td>Seminar</td>
<td>0</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>84</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>164</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

P Value

<table>
<thead>
<tr>
<th>Other Business Course that addressed these topics</th>
<th>0.0000401</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0.0000130</td>
</tr>
</tbody>
</table>

Table 9

Table 8 and 9 represent the results regarding the financial literacy test and background in financial literacy, prior to and after entering college, respectively. The data in Table 9 shows a connection between the financial literacy test scores and taking other business courses, aside from Finance 201, upon entering college. That is, those who have taken other business courses are 16% more likely to score in the highest quartile on the financial literacy test. Both tables demonstrate a correlation between not having a background in financial literacy and scoring in the lowest quartile of the financial literacy test. This finding is not surprising as the test is a direct representation of how much or little a person knows in regards to financial literacy, and so it is unlikely that those students who have not yet had exposure to topics in financial literacy would perform well on the test.
Lastly, as Table 10 illustrates, we explored a connection between GPA and the financial literacy test.

<table>
<thead>
<tr>
<th>GPA Range</th>
<th>Signifies those who scored higher than 75%</th>
<th>Signifies those who scored lower than 25%</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5-2.99</td>
<td>2</td>
<td>13</td>
<td>9%</td>
</tr>
<tr>
<td>3.0-3.39</td>
<td>11</td>
<td>27</td>
<td>0%</td>
</tr>
<tr>
<td>3.4-3.69</td>
<td>14</td>
<td>35</td>
<td>1%</td>
</tr>
<tr>
<td>3.7-4.0</td>
<td>9</td>
<td>12</td>
<td>-11%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GPA Range</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5-2.99</td>
<td>9%</td>
</tr>
<tr>
<td>3.7-4.0</td>
<td>-11%</td>
</tr>
</tbody>
</table>

Table 10

Table 10 shows a link between students’ GPA in the highest bracket (3.7-4.0) and scoring in the highest quartile on the financial literacy test, but this was not found to be statistically significant after performing the t-test. However, there is a statistically significant connection between scoring in the lowest quartile on the test and being in the lowest GPA quartile. This finding is not entirely surprising, especially after reviewing abundant literature about the benefits a background in financial literacy has on students. Being financially literate has a multitude of benefits on individuals, and so it is relatively unsurprising that those who scored lowest on the financial literacy test are also likely to be performing lower in their overall academic career, as well.

Summary of Findings

Overall, the data analysis provided us with multiple key takeaways from this study. The major research hypotheses are supported by the findings. H1a is supported in that those who do not have a background in financial literacy are less likely to feel confident in financial business
courses. Moreover, those who have taken personal finance or other business courses are more likely to feel confident. H1b is supported in that those who have had little to no training in financial literacy are more likely to feel moderate to extreme accounting anxiety. The findings also were in support of H2 in that those who have taken business courses are more likely to perform much better in accounting classes. However, there was not a statistically significant connection between classroom performance and those who have had no background or courses in financial literacy. Lastly, the analysis showed a connection between scoring low on the financial literacy test with having had no background or courses in financial literacy, as well as having a lower GPA.

**CONCLUSIONS**

**Limitations**

I anticipated that there is always the possibility of potential research problems and limitations in regards to the survey. If survey respondents do not answer accurately or honestly, for example searching the answers to the financial literacy test questions, this could skew survey results. Another potential problem could be if respondents cannot recall certain information related to their background in financial literacy. For example, if they do not remember when or how they gained the knowledge that they have. Another potential limitation of the research is uncertainty about the direction of the relationship. For example, if there is a connection between financial literacy and decreased anxiety in the classroom, it is unclear if that connection is caused because financial literacy decreases classroom anxiety, or because those with decreased classroom anxiety are more likely to take a course in financial literacy. One element of this study that was
not anticipated was that the survey population was not entirely representative of the Bryant undergraduate population. That is, freshmen made up 45% of survey respondents, while the remaining three grade years made up the other 55%.

Another limitation of this study stems from the fact that this study only focused on Bryant University students. Bryant is predominantly a business school, which signifies that most of its students are already business-minded individuals upon entering and potentially are already inclined toward mastering their financial literacy. Furthermore, students are introduced to business courses, many of which have some aspect of financial education, early on in their career here. Therefore, Bryant university students may likely create a skewed view of overall financial literacy of college students. That is, Bryant University students may produce less surprising or varying results than students at other universities.

Future Research Implications

This study could be the foundation for a number of future research projects. It would be interesting to compare Bryant’s results versus that of a liberal arts school, for example. Another interesting possibility would be to add to the survey and ask students to report their own level of financial literacy and then compare their self-assessment with what they actually score on the financial literacy test.

There are also implications for Bryant that could be imperative in helping to create a more well rounded, confident student. As mentioned earlier, the National Financial Educators Council found that a course in financial literacy was voted to be the course that young adults would find most beneficial to their life. It would be compelling to survey Bryant University students and see
if this is reflective of the Bryant population as well. With the knowledge that young adults would find a course in financial literacy beneficial to their life, paired with the findings of this study, it is evident that financial literacy is a critical tool for success, specifically for young adults. With this in mind, Bryant University, and other higher education institutions, may want to consider implementing a course, seminar, or experience that provides financial education for students. Specifically, Bryant could consider adding or incorporating financial literacy training into the First-Year Gateway Experience in order to reach students early in their career and increase the likelihood that they achieve the Bryant University (2018) mission to “educate and inspire students to discover their passion and become innovative leaders of character around the world”.

[38]
INTRODUCTION
You are invited to join a research study that aims to understand what impacts a background in financial education prior to entering Bryant University has on students. You were selected as a participant in this study because you are an undergraduate student at Bryant University. The decision to join, or not to join, is up to you.

WHAT IS INVOLVED IN THE STUDY?
If you decide to participate you will be asked to answer some demographic questions and then to complete a brief test of financial literacy. We think the survey will take approximately 15-20 minutes, but you may take as long as you like.

CONFIDENTIALITY
Any information obtained in connection with this study will remain confidential and will not be disclosed to the general public in a way that can be traced to you.

INFORMATION SECURITY
This consent form, with your signature, will be stored separately and independently from the data collected so that your responses will not be identifiable.

YOUR RIGHTS AS A RESEARCH PARTICIPANT
Participation in this study is voluntary. You have the right not to participate at all or to leave the study at any time. Deciding not to participate or choosing to leave the study will not result in any penalty and it will not harm your relationship with Bryant University or its employees in any way.

CONTACTS FOR QUESTIONS OR PROBLEMS
If you have any questions, please contact Alexandra Cunningham (acunningham1@bryant.edu) at (781) 484-6894. If you have any additional questions later, we will be happy to answer them and you can have a copy of this form to keep.

SIGNATURE INDICATING INFORMED CONSENT
Please sign below if you have decided to participate. Your signature indicates only that you are at least 18 years of age and have read the information provided above. Your signature does not obligate you to participate, and you may withdraw from the study at any time without consequences.

Signature of Participant: __________________________ Signature of Principle Investigator______________________________
Date: __________________________ Date: __________________________
Appendix B: IRB Approval

October, 2017

Alexandra Cunningham:

RE: IRB Proposal #2017-1017
TITLE: Financial Literacy: Impact on Student Success

Dear Alexandra:

Your proposal, entitled “Financial Literacy: Impact on Student Success” was considered under IRB Guidelines for exemption/expedited review. The IRB Committee of Bryant University approved the proposal October 17, 2017.

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

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

Very truly yours,

[Signature]

Sukki Yoon
Chair, IRB Committee
Appendix C: Survey

Q1 Class Year

- Freshman (1)
- Sophomore (2)
- Junior (3)
- Senior (4)
- Other (5)

*Skip To: End of Survey If Class Year = Other*

Q2 Gender

- Male (1)
- Female (2)

Q3 Major (select all that apply)

- Accounting (1)
- Data Science (CIS/ISA) (2)
- Finance (3)
- Global Supply Chain (4)
- International Business (please check off concentration along with IB) (5)
- Management (6)
- Marketing (7)
- Psychology (8)
Financial Literacy: Impact on Student Success

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☐ Communication (9)

☐ Economics (10)

☐ History or Social Science (11)

☐ English or Cultural Studies (12)

☐ Mathematics (applied Math/Statistics or Actuarial) (13)

☐ Science (Biology/Environmental Science) (14)

☐ Other, please specify (15) ________________________________________________

☐ Undecided (16)

Q5 Cumulative GPA

☐ 0-1.99 (1)

☐ 2.0-2.49 (2)

☐ 2.5-2.99 (3)

☐ 3.0-3.39 (4)

☐ 3.4-3.69 (5)

☐ 3.7-4.0 (6)

☐ N/A (7)
Q6 Before coming to college, have you had any training/background in financial literacy*?
*Where financial literacy is defined as, “Possessing the skills and knowledge on financial matters to confidently take effective action that best fulfills an individual’s personal, family and global community goals”

- Personal Finance Course in High School (1)
- General Business Course in High School (2)
- Use of a Financial Literacy Program (i.e. Jump$tart) (3)
- Learning from Parents (4)
- Little to no training/background (6)
- Other, please explain (5) __________________________________________________________________________

Q7 Since being in college, have you had any financial literacy training?

- Finance 201 (1)
- Other Business Course that addressed these topics (2)
- Seminar (3)
- Other, please explain (4) __________________________________________________________________________
- None (5)
Q8 1. What, if any, level of accounting anxiety* do you experience?

*Where accounting anxiety is defined as a feeling of tension, apprehension, or fear that interferes with accounting performance.

<table>
<thead>
<tr>
<th>Level of Accounting Anxiety (1)</th>
<th>None (1)</th>
<th>Slight (2)</th>
<th>Somewhat (3)</th>
<th>Moderate (4)</th>
<th>Extreme (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q9 Please indicate how anxious you would feel in the following situations regarding accounting/finance courses.

<table>
<thead>
<tr>
<th>Having to use the tables in the back of an accounting/finance book (1)</th>
<th>None (1)</th>
<th>Slight (2)</th>
<th>Somewhat (3)</th>
<th>Moderate (4)</th>
<th>Extreme (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking an examination in an accounting/finance course (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listening to a lecture in an accounting/finance course (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Starting a new chapter in an accounting/finance book (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching the teacher work a new accounting/finance concept on the blackboard (5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q10 Please rate your comfort/confidence level in the following courses
(*Social Science classes could be psychology, sociology, history, law, anthropology, economics, political science, philosophy.)

<table>
<thead>
<tr>
<th></th>
<th>Not confident at all (1)</th>
<th>Slightly Confident (2)</th>
<th>Somewhat Confident (3)</th>
<th>Moderately Confident (4)</th>
<th>Extremely Confident (5)</th>
<th>N/A (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Science*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classes (1)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>Accounting/Finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classes (2)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td>o</td>
</tr>
</tbody>
</table>

Q12 Please rank your preference toward Accounting/Finance classes vs. Social Science classes

- [ ] Strongly prefer accounting/finance courses (1)
- [ ] Moderately prefer accounting/finance courses (2)
- [ ] Neutral (3)
- [ ] Moderately prefer social science courses (4)
- [ ] Strongly prefer social science courses (5)

Q13 Please rate your performance in the following courses

<table>
<thead>
<tr>
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<th>Much worse than I perform in other courses (1)</th>
<th>Somewhat worse than I perform in other courses (2)</th>
<th>The same as I perform in other courses (3)</th>
<th>Somewhat better than I perform in other courses (4)</th>
<th>Much better than I perform in other courses (5)</th>
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[45]
Appendix D: Financial Literacy Test

Q56 Now, the final process of this survey is to take a brief, 12 question test of financial literacy. Please do not consult any outside sources when answering the questions. If you do not know an answer, choose your best guess or select “I don’t know”.

Q17 Why would I want to improve my credit score?
   ○ To save money when purchasing a car with a loan. (1)
   ○ To earn more interest on investments. (2)
   ○ To help you get a job, because many employers check their prospective employees’ credit. (3)
   ○ Both "A" and "C" (4)
   ○ I don’t know (5)

Q18 From the following list, choose the answer that contains the best suggestions for building and maintaining a good credit rating.
   ○ Have money in savings and protect against identity theft. (1)
   ○ Keep your debt low and pay your bills on time. (2)
   ○ Make safe investments and set clear financial goals. (3)
   ○ None of the above. (4)
   ○ I don’t know (5)

Q19 If I invest $100 per month starting at age 21, and that money earns a 7.5% annual return, how much will I have after 70 years?
   ○ $138,957 (1)
   ○ Between $150,000 and $225,000 depending on life expectancy. (2)
   ○ More than 1.5 million dollars (3)
   ○ None of the above (4)
   ○ I don’t know (5)
Q20 Choose the answer that best describes how to automate your finances.

- Keep track of all the bills you pay on a spreadsheet, have a written budget, and set up an account with a bank or credit union. (1)
- Have your employer direct deposit your paycheck, set up automatic bill-pay, set up automatic transfers to your savings account, and track all your finances on the mint.com website. (2)
- Have all the companies you owe deduct their monthly payments directly from your checking account. (3)
- None of the above. (4)
- I don't know (5)

Q21 Which loan term is best if you want to minimize the total amount you will repay over the life of the loan?

- 3-year (1)
- 5-year (2)
- 7-year (3)
- 10-year (4)
- I don't know (5)

Q22 Loan payments are based on:

- APR (1)
- Interest Rate (2)
- Length of the loan (3)
- All of the above (4)
- B & C only (5)
- I don't know (6)
Q23 When you purchase a brand-new car:

- You own an asset that is likely to appreciate in value (1)
- Your net worth will probably decrease immediately by at least 5% of the car’s purchase price (2)
- You will receive reduced auto insurance rates compared to older-model cars (3)
- You will receive lower registration rates compared to older-model used cars (4)
- I don't know (5)

Q24 What should you research and be prepared to pay prior to moving into a rental property?

- Current month's rent (1)
- Last month's rent (2)
- Security deposit (3)
- Expenses associated with establishing utilities (4)
- All of the above (5)
- I don't know (6)

Q25 True or false: Buying a single company’s stock usually provides a safer return than a stock mutual fund.

- True (1)
- False (2)
- I don’t know (3)
Q26 Suppose you owe $1,000 on a loan 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?

○ Less than 2 years (1)
○ 2 to 4 years (2)
○ 5 to 9 years (3)
○ 10 or more years (4)
○ I don't know (5)

Q27 Imagine that the interest rate on your savings account is 1 percent a year and inflation is 2 percent a year. After one year, would the money in the account buy more than it does today, exactly the same or less than today?

○ More (1)
○ Same (2)
○ Less (3)
○ I don't know (4)

Q28 True or false: A 15-year mortgage typically requires higher monthly payments than a 40-year mortgage but the total interest over the life of the loan will be less.

○ True (1)
○ False (2)
○ I don't know (3)
Appendix E: Sample Email to Professors

Good Afternoon Professor ______,  

I am currently working on my Honors Capstone Project and trying to gather as much research as possible from Bryant undergraduate students of all levels/majors. I am working with Professor Charlie Cullinan as my advisor. The title of my project is "Financial Literacy: Impact on Student Success", and the goal of my research is to understand the impact that a background in financial education prior to entering Bryant University has on students. Therefore, I am interested in researching the financial background, or lack thereof, that Bryant students have obtained before entering Bryant, and in what ways this impacts the student in terms of academic performance, choice of major, and confidence in the classroom.

In order to conduct my research I have created a 5-10 minute anonymous survey and brief test of financial literacy that has been approved by the IRB. I am writing to you to see if you would be willing to send this survey out to your undergraduate classes as I am trying to get my survey to reach as many Bryant students as possible. It is not something that needs to be taken in the classroom as it is all online. I have copied the link to the survey below if this is something you are willing to help me with.

https://bryant.qualtrics.com/jfe/form/SV_aV0wmLdRkLkcKa1

If you have any questions, please let me know. Thank you for your consideration!

Sincerely,

Ally Cunningham
REFERENCES


Financial Literacy: Impact on Student Success

Senior Capstone Project for Alexandra Cunningham


Tenaglia, Lisa, "Financial Literacy: The Impact of Financial Training in High School on the

