

FINANCIAL CAPABILITY – EXAMINING THE IMPACT OF FINANCIAL EDUCATION
ON U.S. MILITARY MEMBERS

by

Philip M. Chapman

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Business Administration

Liberty University, School of Business

December 2022

Abstract

In 2018 a national survey was conducted of 27,091 participants designed to gauge financial capability. While the survey revealed that financial education matters, there is a gap between those with a military background and their civilian counterparts. This dissertation is designed to address how this discrepancy can exist when military individuals have unlimited access to financial education. Even with this access, investors with a military background make poorer financial decisions while simultaneously claiming to have a higher level of financial satisfaction and financial knowledge. Financial education has long been associated with an individual's desire to seek professional financial assistance and improved financial capability; however, this research would show that this is not always the case. Understanding financial capability within the military community is a valuable resource for both the leaders of the various military services and also financial advisors that work for professional full service financial firms. This research reveals the areas in which focus needs to be directed and offer solutions for both communities to take action in order to change the course for the future.

Keywords: financial capability, financial satisfaction, financial knowledge, financial education

FINANCIAL CAPABILITY – EXAMINING THE IMPACT OF FINANCIAL EDUCATION
ON U.S. MILITARY MEMBERS

by

Philip M. Chapman

Dissertation

Submitted in Partial Fulfillment


of the Requirements for the Degree of

Doctor of Business Administration


Liberty University, School of Business

December 2022

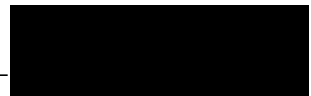
Approvals


Philip M. Chapman, Doctoral Candidate


January 20, 2023
Date


Scott Morter, DBA, Dissertation Chair

January 20, 2023
Date


John Halstead, Ph.D, Committee Member

January 20, 2023
Date


Edward M. Moore, Ph.D, Director of Doctoral Programs

January 24, 2023
Date

Dedication

I dedicate this dissertation work to my family. To my father, CW4 W. Michael Chapman, USA (ret.), and my “bonus” mom Linda, who made me the man that I am today and taught me the discipline to never give up. To my mother, Melanie Hawn Thomas, who taught me the love of Christ and always being patient with others (including myself). Most of all, I dedicate this work to the three very special women in my life who have supported me from start to finish. They have had to endure me not being there mentally, emotionally, or physically during this process—they are my best friends and biggest fans. My wife, Dr. Melissa Chapman, thank you for encouraging me non-stop and always being there for me and loving me. My two daughters, Elizabeth and Isabella, I am sorry that Daddy has had to devote so much time to this undertaking, but I pray that you will see how the hard work has paid off. I love all three of you to the moon and back!

Acknowledgments

The saying “it takes a village” is not hyperbole when it comes to writing a doctoral dissertation and I would be remiss if I did not acknowledge the many “villagers” that have helped me along the way. A huge shout-out to my dissertation chair, Dr. Scott Morter, who always encouraged me and kept me on task—I salute you. To my committee member, Dr. John Halstad, thank you for making sure the work was on point and met standards. I offer sincere gratitude to my administrative reviewer, Dr. Nicole Lowes, who has a job that I do not envy but truly admire the talent she has mastered. To my program director, Dr. Edward Moore, thank you for setting the bar high and making sure I aimed just as high (if not higher). Thank you to Dr. Miguel Gomez of Murray State University (MSU) for being there during the beginning stages and helping me make sense of my own head clutter and translating it into pen-to-paper. I would not have made it through the findings if it was not for Dr. Justin Brogan of MSU. Justin, thank you for sacrificing your weekends with your family to sit with me until I “got it”...apologize to your wife for me one last time. My pastor and spiritual leader, Dr. Nathan Joyce, thank you for keeping it Bible-based and always about Jesus. A salute to the military leaders who had a direct impact on my life, helped forged me into who I am today, and who I am honored to call my friends: RADM Douglas Morton, Col William Hunter, Col Elizabeth Larson, and Col Richard Speakman, MD. Doctoral persistence is no joke, which is likely the reason Liberty starts off their doctoral program by having candidates research the topic. Having watched Dr. Melissa Chapman go through the process firsthand and having her by my side every step of the way, I knew that I had someone next to me who completely understood what I was going through—I would have stopped if it was not for her. Last, but definitely not least, I acknowledge Jesus Christ, my Lord and Savior. I give Him all praise and glory for this entire process.

Table of Contents

Abstract	ii
Approvals	iii
Dedication.....	iv
Acknowledgments.....	v
List of Tables	x
List of Figures.....	xi
Section 1: Foundation of the Study.....	1
Background of the Problem	1
Problem Statement	2
Purpose Statement	3
Nature of the Study.....	3
Discussion of Method	4
Discussion of Design	6
Summary of the Nature of the Study	7
Research Questions	8
Hypotheses	8
Theoretical Framework.....	9
Discussion of Theory 1	9
Discussion of Theory 2	10
Actors	10
Variables.....	11
Discussion of Relationships Between Theories, Actors, and Variables	12

Definition of Terms	13
Assumptions, Limitations, Delimitations	15
Assumptions	15
Limitations.....	17
Delimitations	18
Significance of the Study.....	19
Reduction of Gaps	19
Implications for Biblical Integration.....	21
Relationship to Field of Study	23
Summary of the Significance of the Study.....	24
A Review of the Professional and Academic Literature	24
Historical Background	24
Theory Relevant to Research Questions/Hypotheses	36
Current Empirical Literature Relevant to Research Questions/Hypotheses	49
Transition and Summary of Section 1	73
Section 2: The Project	74
Purpose Statement	74
Role of the Researcher.....	75
Research Methodology	75
Participants.....	77
Population and Sampling.....	77
Discussion of Population.....	78
Discussion of Sampling.....	78

Summary of Population and Sampling	81
Data Collection and Organization	82
Data Collection Plan	82
Instruments	83
Data Organization Plan	88
Data Analysis	89
The Variables.....	90
Descriptive Statistics.....	94
Hypotheses Testing	96
Summary of Data Analysis.....	97
Reliability and Validity.....	97
Reliability	97
Validity.....	99
Summary of Reliability and Validity	100
Summary of Section 2 and Transition	101
Section 3: Application to Professional Practice.....	101
Overview of the Study	101
Presentation of Findings	102
Descriptive Statistics	103
Hypothesis Testing	135
Relationship of the Findings	143
Summary of the Findings.....	147
Application to Professional Practice	147

Improving General Business Practice	148
Potential Application Strategies	150
Summary of Application to Professional Practice.....	152
Recommendations for Further Study.....	152
Reflections	154
Personal & Professional Growth	154
Biblical Perspective	155
Summary of Reflections.....	158
Summary of Section 3	159
References	160
Appendix A	171
Appendix B.....	204

List of Tables

Table 1. Participation Data for 2018 (NFCS) State-by-State Survey	80
Table 2. Variable, Construct, Survey Question	86
Table 3. Decision-Making and Financial Capability Conversion	91
Table 4. Demographic/Education Conversion.....	94
Table 5. Descriptive Statistics	131
Table 6. Financial Knowledge Correlation	137
Table 7. Financial Satisfaction Correlation.....	137
Table 8. Financial Concern Correlation	138
Table 9. Financial Confidence Correlation	138
Table 10. Chi-square for Loan Status	140
Table 11. Odds Ratio for Loan Status.....	140
Table 12. Chi-square for Hardship.....	141
Table 13. Odds Ratio for Hardship.....	141
Table 14. Chi-square for Loan to Hardship Status	142
Table 15. Odds Ratio for Loan to Hardship Status.....	142

List of Figures

Figure 1. Relationships between Theories and Variables	12
Figure 2. Histogram of the Distribution of Military and Non-Military Members Combined.....	104
Figure 3. Histogram of the Distribution of Military Members Filtered.....	105
Figure 4. Histogram of the Distribution of Non-Military Members Filtered.....	106
Figure 5. Histogram of the Distribution of Retirement Account Loans by Military.....	107
Figure 6. Histogram of the Distribution of Retirement Account Loans by Non-Military.....	108
Figure 7. Q-Q Plot of the Expected and Observed distribution of Retirement Account Loans by Military Members.	109
Figure 8. Q-Q Plot of the Expected and Observed distribution of Retirement Account Loans by Non-Military Members.	110
Figure 9. Histogram of the Distribution of Hardship Withdrawals by Military Members.	112
Figure 10. Histogram of the Distribution of Hardship Withdrawals by Non-Military Members.	113
Figure 11. Q-Q Plot of the Expected and Observed distribution of Hardship Withdrawals by Military Members.	114
Figure 12. Q-Q Plot of the Expected and Observed distribution of Hardship Withdrawals by Non-Military Members.	115
Figure 13. Histogram of the Distribution of Financial Satisfaction of Military Members.	116
Figure 14. Histogram of the Distribution of Financial Satisfaction of Non-Military Members.	117
Figure 15. Q-Q Plot of the Expected and Observed distribution of Financial Satisfaction by Military Members.	118

Figure 16. Q-Q Plot of the Expected and Observed distribution of Financial Satisfaction by Non-Military Members.	119
Figure 17. Histogram of the Distribution of Financial Concern by Military Members.....	120
Figure 18. Histogram of the Distribution of Financial Concern by Non-Military Members.....	121
Figure 19. Q-Q Plot of the Expected and Observed distribution of Financial Concern by Military Members.....	122
Figure 20. Q-Q Plot of the Expected and Observed distribution of Financial Concern by Non-Military Members.	123
Figure 21. Histogram of the Distribution of Financial Confidence by Military Members.....	124
Figure 22. Histogram of the Distribution of Financial Confidence by Non-Military Members.	125
Figure 23. Q-Q Plot of the Expected and Observed distribution of Financial Confidence by Military Members.	126
Figure 24. Q-Q Plot of the Expected and Observed distribution of Financial Confidence by Non-Military Members.	127
Figure 25. Histogram of the Distribution of Financial Knowledge of Military Members.....	128
Figure 26. Histogram of the Distribution of Financial Knowledge of Non-Military Members..	129
Figure 27. Q-Q Plot of the Expected and Observed distribution of Financial Knowledge by Military Members.	130
Figure 28. Q-Q Plot of the Expected and Observed distribution of Financial Knowledge by Non-Military Members.	131

Section 1: Foundation of the Study

A significant amount of literature exists that suggest financial education has a direct correlation to financial capability (Gentile et al., 2016; Kramer, 2012; Lim et al., 2014; Lusardi & Mitchell, 2010; Lusardi & Mitchell, 2014; Porto & Xiao, 2016; Porto & Xiao, 2019; Xiao & O'Neill, 2016; Xiao & Porto, 2017). Kramer (2012) explained that financial capability comes from seeking the expertise and advice of professional financial advisors. Access to financial education could vary based on individual situations; however, with this study, it was important to understand that military members had unlimited access to free financial education (Office of Financial Readiness, n.d.; Military OneSource, n.d.). Even with the unlimited free access to financial education, military members were identified as having more hardship withdrawals and loans from their retirement accounts as compared to their civilian counterparts (FINRA IEF, 2019). The power of the association and interaction between access to financial education, financial literacy, and financial capability, was unclear within the military community (FINRA IEF, 2019). The observation of financial education and capability was forceful and adaptable, and could have a direct impact on the financial wellbeing of a military service member's long-term financial success (Elnitsky et al., 2017).

Background of the Problem

Research revealed that there was a relationship between access to financial education and the impact that had on seeking personal financial advice from professionals (Gentile et al., 2016; Kramer, 2012; Lim et al., 2014; Lusardi & Mitchell, 2010; Lusardi & Mitchell, 2014; Porto & Xiao, 2016; Porto & Xiao, 2019; Xiao & O'Neill, 2016; Xiao & Porto, 2017). Additionally, research conducted by the Financial Regulatory Authority (FINRA IEF, 2019) revealed that 41% of members of the United States military, who had unlimited access to free financial education,

rated themselves as satisfied with their personal financial condition, which was 13% higher than individuals who had never served. However, that same report from FINRA identified that military members had taken a hardship withdrawal from their retirement account more than double than that of their civilian counterparts (17% vs. 7%). The financial well-being of veterans of the U.S. military is a very important issue, yet research has found that area to lack appropriate study (Mottola & Skimmyhorn, 2019). Using data collected from the 2018 FINRA Investor Education Foundation's National Financial Capability Study (NFCS), this research focused on reviewing the data and provide new and updated evidence on the financial well-being of military veterans. This research examined how veterans progressed over time, and how they were performing in 2018 as compared to those who had never served.

Problem Statement

The general problem that was addressed was the impact that access to financial education had on the overall financial capability of members of the military which resulted in negative financial decision making. Significant research identified the need to understand the relationship of how financial education impacted the decision to seek out professional financial advice (Gentile et al., 2016; Kramer, 2012; Lim et al., 2014; Lusardi & Mitchell, 2010; Lusardi & Mitchell, 2014; Porto & Xiao, 2016; Porto & Xiao, 2019; Xiao & O'Neill, 2016; Xiao & Porto, 2017). U.S. military members had unlimited access to free financial education on every military installation. Research conducted by the Financial Industry Regulatory Authority Investor Education Foundation found that military veterans were more satisfied with their personal financial condition than those who had never served; however, they were more likely to take a loan or hardship withdrawal from their retirement account (FINRA IEF, 2019). However, research revealed that taking a loan or a hardship withdraw was traditionally frowned upon due

to the significant penalties, taxes, and lost opportunity associated with dipping into a retirement account (Lu et al., 2017). The reality was that retirement accounts were able to provide service members with liquidity prior to retirement in order to meet current financial needs, even though the primary design of those retirement plans were designed to provide financial security later in life. The specific problem that was addressed was the possible failure of unlimited financial education to provide enough financial capability which resulted in the inability for military service members to make informed financial decisions.

Purpose Statement

The purpose of this quantitative study was to add to the body of knowledge by expanding on and examining the potential effects financial education had on overall financial decision-making and utilization of personal financial resources for U.S. military personnel. The larger problem that was explored was through an in depth study of military members and the effect that financial education had on seeking out professional financial advice. The objective was to add to the body of knowledge relating to how access to financial education impacted financial capability and assist in closing the gaps in existing literature.

Nature of the Study

The researcher selected the quantitative research method in order to understand how members of the U.S. military compared to the general population when it came to the amount of access they had to financial education. This was accomplished by using unbiased and quality archival data to look into the relationship between access to financial education and financial decision making. In order to conduct the research and properly answer each of the research questions, both the method and design for the study were determined before any data was collected or analysis took place. The nature of the study was determined by choosing the most

suitable research method and design. The way in which the data was collected, any assumptions of the method chosen, and any limitations a method may have posed also played a part on the nature of the study.

Discussion of Method

A critical part of the research process was ensuring the appropriate research method was applied. The research questions and the literature review were compared to the approved research methods to help ensure the appropriate method was chosen (Creswell, 2014). The program requirements for the doctor of business administration laid out all of the approved research designs for this research. The program authorized the following qualitative designs: case study, ethnography, grounded theory, narrative, and phenomenology. The quantitative designs that were authorized were: causal comparative/quasi- experimental, correlation, and descriptive. There was only one authorized mixed methods design, which was convergent parallel.

For this study, the quantitative research method using a correlation design was chosen. This method was the most appropriate approach because it offered a better understanding of the specifics within the group being studied and it also allowed the researcher to measure the phenomenon and reveal any relationships and trends (Apuke, 2017). The quantitative study relied on numerical data that had been collected and analyzed to describe, explain, and predict phenomena of interest and help to fill in the gaps in existing literature (Creswell, 2009; Yilmaz, 2013). In addition, the trends and relationships that were looked at in the information contained in the survey led to the quantitative approach being the most optimum method to examine the connections and analyze the different variables (Goertzen, 2017). Creswell (2014) suggested that

a quantitative approach was most appropriate whenever the research questions were relative, explanatory, or specific.

The qualitative research method was designed to discover new issues and to illuminate individual understanding by expounding or deciphering a phenomenon in ways in which individuals provided them (Rust et al., 2017). In particular, the qualitative approach looked at a phenomena by trying to understand it verses trying to predict or explain. This understanding was often accomplished by observing participants, in-depth interviews, focus groups, or narratives of audio/video recordings, which generally includes data in the form of words instead of numbers (Saunders et al., 2018). Qualitative research quite often only includes a reduced number of participants who communicate their opinions either verbally or written (O’Conner & Joffe, 2020). Qualitative would be more appropriate when the research being studied was challenged to examine by means of traditional methods prevents hypothesis testing (Sovacool et al., 2018; Thomann & Maggetti, 2020).

Creswell (2014) defined the mixed methods approach has having both qualitative and quantitative research and methods in a single study to help understand a problem. Mixed methods took more of a philosophical approach in which the research decided what to study (Sahin & Öztürk, 2019). A mixed methods approach would have been applied if the purpose of the research was to fully describe a phenomenon where both qualitative and quantitative, together, was better than either one method by itself (Creswell, 2014; Lopez-Fernandez & Molina-Azorin, 2011). This method would be most appropriate when researching complex problems in which one type of research would not be sufficient to properly answer the research questions (Thiele et al., 2018). Mixed methods would be best applied if the goal was to combine

the outcomes in order to formulate an innovative and deeper appreciation of the outcomes that would help navigate the study (Almeida, 2018).

The research was conducted using the assumption that the relationship between access to financial education and financial capability could be determined. The purpose of this research was to investigate the common features that existed among two separate variables and then formulate hypotheses regarding the sampling of individuals used for this investigation. Comprehending the social interactions was not an objective of this research; therefore, a qualitative approach would not have been appropriate (Apuke, 2017). In addition, the qualitative approach would not have been suitable since observing or interviewing individuals would not have been able to generate the data needed to establish the relational analysis of the established variables. The mixed methods approach was not practical since the purpose of this research was able to be achieved through the use of just one style of data collection. The information compiled by the NFCS survey had Likert scale measurements which would not allow the researcher to look deeper into any of the responses. For the purpose of this research, statistical analysis was adequate to allow the researcher to examine the relationship between access to financial education and financial decision making.

Discussion of Design

The quantitative method using a correlation design was utilized for this research. The correlation design was chosen since it allowed the researcher to examine the correlation between phenomena (Martin et al., 2019). The information that was collected through the NFCS survey, while voluntary, was not random; therefore, it was not possible to determine a cause-effect relationship between the variables. For this reason, the causal-comparative/quasi-experimental design would not have been able to achieve the goal of this research and therefore would not

have been an effective method (Patten & Newhart, 2017). The soundness of the relationship between access to financial education and financial capability were evaluated without changing, altering, or influencing the independent variables. The most thorough comprehension into the relationship between the access to financial education and decision making skills was offered through the correlation design. This correlation design utilized and analyzed data collected from the 2018 National Financial Capability Studies (NFCS), which was funded by the Financial Industry Regulatory Authority Investor Education Foundation (FINRA IEF). The NFCS data pulled from an online survey of over 25,000 American adults from all 50 states and the District of Columbia. The data was representative of the American population (FINRA IEF, 2019).

Summary of the Nature of the Study

The researcher selected the quantitative research method in order to understand how members of the U.S. military compared to the general population when it came to the amount of access they had to financial education. This was a correlation design, which utilized and analyzed data collected from the 2018 National Financial Capability Study (NFCS), which was funded by the Financial Industry Regulatory Authority Investor Education Foundation (FINRA IEF). The NFCS data pulled from an online survey of over 25,000 American adults from all 50 states and the District of Columbia. The data was representative of the American population (FINRA IEF, 2019). Quantitative studies rely on numerical data that has been collected and analyzed to describe, explain, and predict phenomena of interest and help to fill in the gaps in existing literature (Creswell, 2009; Yilmaz, 2013).

Research Questions

RQ1. How does having free, unlimited access to financial education impact U.S. military personnel's satisfaction with their personal financial condition as compared to the general population?

RQ2. How does having free, unlimited access to financial education impact U.S. military personnel in financial decision-making as compared to the general population?

Hypotheses

- How does having free, unlimited access to financial education impact U.S. military personnel's satisfaction with their personal financial condition as compared to the general population?
 - H_0 : Having free, unlimited access to financial education has no impact on U.S. military personnel's satisfaction with their personal financial condition as compared to the general population?
 - H_1 : Having free, unlimited access to financial education has a positive impact on U.S. military personnel's satisfaction with their personal financial condition as compared to the general population?
- How does having free, unlimited access to financial education impact U.S. military personnel in financial decision-making as compared to the general population?
 - H_0 : Having free, unlimited access to financial education has no impact on U.S. military personnel in financial decision making as compared to the general population.

- H₁: Have free, unlimited access to financial education has a positive impact on U.S. military personnel in financial decision-making as compared to the general population.

Theoretical Framework

According to Creswell (2014), the theoretical framework was designed to provide the foundation for conducting the research to investigate a particular research problem. The theoretical framework was the conceptual model that helped to determine a roadmap of sort that helped guide the overall research. The framework delivered the backdrop that supported both the research and the investigation while providing rationalization for this research of a specific research problem. It incorporated the variables that were designed to be weighed and the interactions sought after. Essentially, this was where the theory was described and a case was established for looking into that theory. The theoretical framework was a demonstration of the theory that defined a particular problem.

Discussion of Theory 1

The first theory was that there was a correlation between having unlimited access to financial education and an individual's overall satisfaction with their personal financial condition. Data collected from the Investor Education Foundation was used to compare and contrast the information from 2018 between veteran and non-veteran. The 2018 National Financial Capability Study has revealed that veterans scored 4% higher on the CFPB Financial Well-Being Scale, had 4% higher financial self-efficacy, and had 6% lower financial anxiety (FINRA IEF, 2019). This information formed the hypothesis that having free unlimited access to financial education had an impact on U.S. military personnel in financial decision-making as compared to the general population. Gentile et al. (2016) found that self-evaluation of an

individual's own aptitude when connected with elevated levels of financial education typically ended up being considerably damaging.

Discussion of Theory 2

The second theory was that there was a correlation between having unlimited access to financial education, which could impact U.S. military personnel in financial decision-making as compared to the general population. Research by FINRA IEF (2019) demonstrated that more veterans (18%) had taken a loan from their retirement account as compared to those who never served (11%). Additionally, 17% of military veterans had taken a hardship withdrawal from their retirement account as compared to 7% of non-veterans (FINRA IEF). Studies have shown that financial advice from a professional was more of a supplement instead of a replacement of financial education (Gentile et al., 2016). Additionally, individual developmental characteristics such as self-efficacy do play a part in financial decisions and were directly correlated with a member's amount of financial education. Consequently, access to financial education was likely to be beneficial not only to increase financial proficiency, but it could also complement an individual's understanding into their own financial proficiency and by deterring overoptimistic behaviors and behavioral predispositions.

Actors

Actors were the key people groups that were central to the research problem. For the purpose of this research there were two primary people groups, military members and non-military individuals. The actors were distinguished by theoretically significant terms from which the researcher could develop the hypotheses for the experimental analyses (Creswell, 2018). The first people group were military members, which included individuals who had served or were currently serving. Atuel and Castro (2018) defined a military member as any man or woman who

had served or was currently serving in the United States military in one of the six branches of service (Army, Marine Corps, Navy, Air Force, Space Force, and Coast Guard). By process of elimination, non-military members were just the opposite. The non-military people group (actors) were civilians who were not and had never served in the U.S. military.

Variables

For this study, the independent variable was the access to financial education. This was defined as the participants who identified as having served in the U.S. military in any compacity. In this research, financial capability was identified as financial knowledge, financial satisfaction, financial concern, and financial confidence (Robb & Woodyard, 2011; Sherraden & Morrow-Howell, 2015; Xiao et al., 2014). Financial decision-making was identified as taking loans against a retirement account and taking hardship withdraws from a retirement account (Lu et al., 2017; Thaler & Benartzi, 2004; Young et al., 2017).

There were two dependent variables established based on literature. The first variable was poor decision-making. Research found that taking loans against retirement accounts or taking a hardship withdrawal was against the advice of financial advisors (Lu et al., 2017; Thaler & Benartzi, 2004; Young et al., 2017). The other dependent variable looked at the financial capability of the individual. Either of these actions had the potential to change based on the independent variable. The independent variable was the treatment measure, which was access to financial education. The third variable were mitigating variables. Mitigating variables were the way that certain people identified with certain events. There were events that would likely affect only military individuals; likewise, those events would just as likely not be experienced by non-military individuals (i.e., the financial impact that service members might experience due to deployments, etc.). However, the survey was designed to reword questions based on military

status. The result was that respondents were given military-specific wording for many of the questions, in an effort to eliminate any potential mitigating variables (FINRA IEF, 2019).

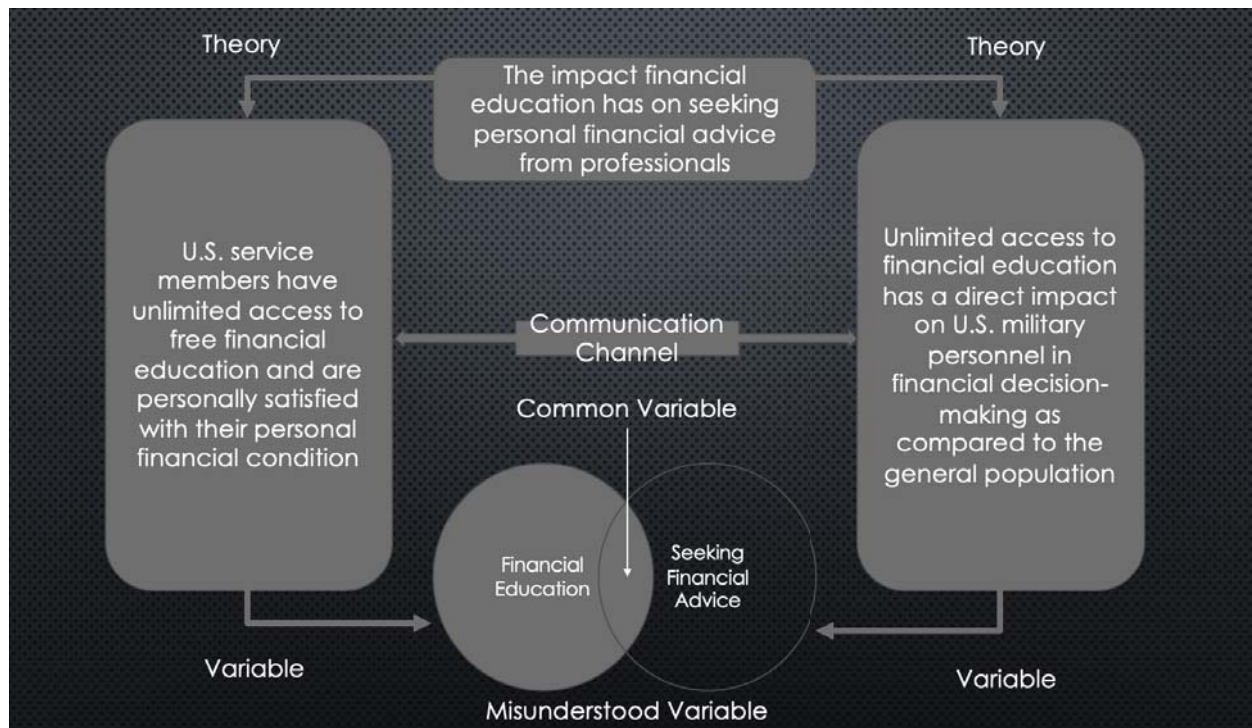


Figure 1. Relationships between Theories and Variables.

Discussion of Relationships Between Theories, Actors, and Variables

The study was designed to increase the research into the potential effects financial education has on overall financial decision-making and utilization of financial resources for U.S. military personnel. Research had shown a need for understanding the relationship of how financial education impacted the decision for seeking financial advice (Gentile et al., 2016; Kramer, 2012; Lim et al., 2014; Lusardi & Mitchell, 2010; Lusardi & Mitchell, 2014; Porto & Xiao, 2016; Porto & Xiao, 2019; Xiao & O'Neill, 2016; Xiao & Porto, 2017). For example, individuals who had served in the armed forces had a higher self-efficacy than those who never

served (FINRA IEF, 2019). Furthermore, Gentile et al. (2016) concluded in their study that individual developmental characteristics such as self-efficacy did contribute significantly towards financial decisions and were directly correlated with a member's amount of financial education. They found that access to financial education was likely to be advantageous by not only increasing financial proficiency, but it could also increase a member's understanding into their own financial efficacy. However, Lu et al. (2017) showed that taking a loan or a hardship withdraw was traditionally frowned upon due to the significant penalties, taxes, and lost opportunity associated with dipping into a retirement account; however, more veterans than non-veterans were doing just that. Therefore, there appeared to be a disconnect between unlimited access to free financial education and the willingness for military veterans to seek professional financial advice in an effort to make better financial decisions.

Definition of Terms

The following terms are defined relative to their use in this research:

Financial Advisor (FA): Financial Advisor is defined as a formally trained, licensed, and registered individual whose primary role is to shape the financial knowledge and investment decisions of clients (Lai, 2016).

Financial Capability: Financial capability is defined as an individual's behavior reviewed from various angles and how it relates to how individuals manage their resources and how they make financial decisions (this also included the various considerations in the decision-making process and the skills which are utilized) (FINRA IEF, 2019).

Financial Education: Financial education is defined as any formal or workplace education that is provided in various settings, which contributes to financial literacy, behavior, and capability (Huhmann, 2014; Xiao & O'Neill, 2016).

Financial Industry Regulatory Authority (FINRA): FINRA is defined as a congressionally mandated organization that falls under the guidance of the Securities and Exchange Commission to help write and enforce rules that oversees the ethical activities of registered brokers and firms, ensures compliance, embraces transparency, and educates investors (FINRA IEF, 2019).

Financial Literacy: Financial literacy is defined as the ability for an individual to use their knowledge and skills to be able to properly manage their financial resources in an effective manner, which could help lead to improved financial well-being throughout their lives (Liebowitz, 2016).

Financial Readiness (FINRED): Financial Readiness is defined as being armed with information and education through a program established by the Department of Defense, which provides military members the ability to access personal financial managers and counselors at no cost to help reduce the chances of losing military security clearances, provide for their families while deployed, and to help military members to stay focused on their primary military mission (Office of Financial Readiness, n.d.).

Military Member: Military member is defined as any man or woman who is currently serving in the United States military in one of the six branches of service (Army, Marine Corps, Navy, Air Force, Space Force, and Coast Guard) (Atuel & Castro, 2018).

Military OneSource: Military OneSource is defined as a Department of Defense-funded program that provides access via online or telephone to financial education, counseling, and support 24 hours a day, 7 days a week, 365 days a year to all individuals associated with the military regardless of military status (active duty and their immediate family members, national guard and their immediate family members, reservist and their immediate family members, and military academy cadets) (Military OneSource, n.d.).

United States Security and Exchange Commission (SEC): The United States Security and Exchange Commission is defined as the organization that was created from the Securities Exchange Act of 1934, which is designed to protect investors, and help to ensure fair and orderly markets (U.S. Securities and Exchange Commission, 2016).

Veteran: Veteran is defined by Title 38 of the Code of Federal Regulations, which states that anyone who served in any branch of the armed services and who was discharged or released under conditions other than dishonorable is considered a veteran (Pensions, Bonuses, and Veterans' Relief, 1995).

Assumptions, Limitations, Delimitations

The assumptions, limitations, and delimitations help to explain, inform, and define the overall research, participants, and demographics involved in the study. It could be simultaneously sobering and inspiring to understand that, when conducting scholarly research, the study could be methodically constrained in various ways. These restrictions could involve the amount of resources available and even individual approaches to reasoning and downfalls caused by human nature. The inspiration stems from identifying any potential deficiencies and the limitations of the decisions individuals make, and then taking corrective action the most effective way feasible. In an effort to eliminate any potential misunderstanding, the assumptions, limitations, and delimitations in conducting this research have been explained.

Assumptions

The assumptions identified within this study are issues that could potentially influence the research, are particular to this research, yet are still broad enough to relate to the research in a generic sense. All of the information collected by the FINRA IEF (2019) survey were self-reported by each respondent and were not independently reviewed or validated by other sources.

For this reason, although it could be rationally assumed that the survey was, at the time, an accurate representation of investors' feelings, opinions, familiarity, and thoughts, it may not necessarily offer an exact replication of individual behaviors or of the quality of financial education received. Therefore, this research also assumed that all participants understood the survey questions and answered all questions honestly. The overall assumption among researchers is that financial literacy has a positive correlation with financial capability, thus in turn equates in financial satisfaction (Fox & Bartholomae, 2008; PACFC, 2013).

Garson (2012) found that it was not uncommon for violations of data level assumptions to occur when dealing with social sciences and could potentially result in making a Type 1 error or incorrectly rejecting a null hypothesis. This type of violation could be expected when surveys collect data using the Likert scale (Garson, 2012). Conversation regarding the type of measurements is pertinent in this research due to the fact that this study reinforced the utilization of a cross-sectional Likert-type survey approach. Conceptually, financial capability has been determined using assorted factors and anticipated by an individual's beliefs and the amount of significance assigned to financial condition (Xiao & Porto, 2017). Therefore, any recognized association may not be reality, but instead with what was expected. In everyday life, the barriers that are typically associated with financial literacy are clearly managed using defined expectations and individualized discipline or military leadership supervision; however, complete accuracy might not be fully defined by a questionnaire that was answered at a single moment in time. If the correlation between reality with expectations are false, then a lower level of financial satisfaction might be possible for military members.

Limitations

It was important that any potential limitations of this research be acknowledged. One potential limitation was that the dataset was cross-sectional. Longitudinal data sets were used to explore the connection between financial capability and financial education. Since the instrument used for this research was archival data, this limitation could not be mitigated. Another potential limitation was that FINRA weighed financial capability using three different variables: perceived financial capability, financial literacy, and financial behavior. It was uncertain to what extent perceived financial capability was a true representation of real financial capability. Due to the survey being completely confidential and the option to answer “unsure” or “prefer not to say” allowed this limitation to be minimized. Additionally, there could have been alternate variables utilized to identify financial capability in a manner that was more direct. A third potential limitation was that the research only utilized data from the FINRA IEF (2019) which used data from U.S. military members that were living in what is considered a developed country; therefore, this study might not be reflective of underdeveloped countries. While this research used archival data and mitigation was not possible, the researcher looked at ways of minimizing this limitation. Potentially, this study could be utilized to research a similar study to improve the comprehension of how crucial this topic could be when exposed to other socioeconomic environments. Any interpretation of the findings of this research should be done carefully due to the restrictions of the model; however, it did insinuate that further research would be appropriate in this field. A potential example would be how this variance was partially caused by the level of stress leadership placed on military members to be more financial capable as compared to their civilian counterparts (FINRA IEF, 2019). The revelation of these limitations provided the potential for additional research in the future.

The report concentrated on financial capability and financial literacy for individuals who had served or were serving in the military. The amount of data collected in this field of study was somewhat limited and the amount of research recently published exploring financial capability in relation to financial education required additional research. One potential limiting factor of additional research was the level of motivation of those being surveyed to be truthful in their answers. Everyone participating in the survey needed assurance that all of the private data and information gathered was properly safeguarded as to not take a chance on having a negative impact on truthfulness of the responses and negatively impacting the outcome. It was important that the National Financial Capability Study survey be managed in a secure fashion in order to validate that the survey was not bias and to ensure that the data was not being altered. The questionnaire had to be administered and clearly explained to maintain the integrity and validity of the data collected.

Additional limitations caused by implementing a cross-sectional survey questionnaire was that it failed to capture any potential evolution in perceived levels of financial capability or the amount of education that might have developed over time (Lavrakas, 2008). This type of research also did not afford participating individuals to offer more in-depth details that a qualitative case study could have potential provided, which could allow a deeper compression of the fundamental concerns that could have impacted the amount of financial satisfaction (Yilmaz, 2013). Just like with all research, the outcomes of the study looked at both the amount of similarity among the variables without assuming cause and effect.

Delimitations

The delimitations refer to the bounds and scope of the study. The boundaries identified in the study were limited to current or previous military members that completed the FINRA

survey. The military members in the sample consisted of 2,003 adults (18 and over) who completed the 2018 State-by-State Survey and indicated that they had investments outside of retirement accounts (by answering “yes” to question B14 in the State-by-State Survey) (FINRA IEF, 2019). Comprehending the correlation concerning observed levels of financial capability and financial literacy, in addition to addressing a gap in the literature on theoretical motivation of military veterans, was essential to both the overall study and the target population.

Significance of the Study

This portion of the study was designed to identify the primary reason why this research was needed. It was intended to point out the “so what, who cares” test by showing that there was a need to offer the field of finance additional research to fill in the gaps in literature.

Additionally, the significance included how the research was able to establish a connection between biblical principles and the theories presented.

Reduction of Gaps

The significance of this study could be discovered through an examination of the existing literature dealing with financial education and seeking financial advice. Kramer (2016) clearly pointed out in his research that there was a great need to fully comprehend the impact that professional financial advice offered; however, he went on to say that there was greater need for additional research on the topic (p. 198). Current research showed a need for understanding the relationship of the impact that financial education had on the decision for seeking financial advice (Gentile et al., 2016; Kramer, 2012; Lim et al., 2014; Lusardi & Mitchell, 2010; Lusardi & Mitchell, 2014; Porto & Xiao, 2016; Porto & Xiao, 2019; Xiao & O’Neill, 2016; Xiao & Porto, 2017). The measure of financial literacy was determined using the 2018 National

Financial Capability Studies (NFCS), which was funded by the Financial Industry Regulatory Authority Investor Education Foundation (FINRA IEF).

Members of military service and the access they had to unlimited financial education became a significant portion of this research. The theory assumed that each military member was fully aware of the financial education available to them and used that education to seek out professional financial advice. The access to financial education was afforded to all members of military service who were active, guard, reserve, and retired either by going to an on-base facility or by accessing the education digitally online by logging on to the Military OneSource website. Financial literacy was the culmination of the education that military members received and the utilization of financial advice to make sound financial decisions. According to Liebowitz (2016) financial literacy was the ability for an individual to use their knowledge and skills to be able to properly manage their financial resources in an effective manner, which could help lead to improved financial well-being throughout their lives. Financial literacy could not only potentially set up individuals for future success but also increase the chances to seek financial advice and improve future outcomes. According to existing research (Gentile, et al., 2016; Kramer, 2012; Lim, et al., 2014; Lusardi & Mitchell, 2010; Lusardi & Mitchell, 2014) financial literacy was a precursor for seeking financial advice, which combined the financial education received and how that education was used to seek professional financial advice to help transform the education into action. The NFCS (2018) report correlated how the financial education service members received was statistically linked to military service members being more satisfied with their personal financial condition than those who had never served. This correlation was support by Lusardi and Mitchell (2014) who claimed that financial literacy had become an essential indicator of making wiser financial investment decisions.

This research was designed to assist in filling the gaps in academic literature and assist in promoting effective financial disciplines within the military community by examining whether a relationship existed between having access to financial education and if having that access increased their desire to seek out professional financial advice by military members who were surveyed by the FINRA IEF. The results are able to assist military leaders and financial advisors to develop a deeper understanding of how financial education and professional financial advice combined could reduce loans and hardship withdrawals from an individual's retirement account (Lu et al., 2017). Another significant characteristic of this study was that it added to the body of knowledge by offering an examination of the amount to which financial education was related to people that were serving or had served the U.S. military as compared to those who had never served.

According to Gentile et al. (2016) there was a strong relationship between having access to financial education and seeking advice from a financial advisor. Lusardi and Mitchell (2014) also revealed evidence to suggest that financial literacy preceded seeking financial advice. These authors recommended additional research on the relationship between financial literacy and seeking financial advice to provide financial advisors with the information to help guide discussions and practices that could increase saving for retirement and reduce loans and hardship withdrawals from retirement accounts. Understanding the implications of biblical integration of a military member's financial literacy and seeking professional financial advice was crucial to incorporating God's view of faith into financial stewardship.

Implications for Biblical Integration

All through the scriptures, the Bible provided clear instruction on the importance of being strategic with financial resources and how it played a large role when it came to advancing His

purposes for His glory on earth. The first verse of the twenty-fourth Psalm looked into the foundational understanding of that instruction, which stated “The earth is the Lord’s, and everything in it, the world, and all who live in it” (English Standard Version). Every dollar, every coin belongs to the Creator who has allowed His creation to manage His resources. God made Adam and Eve to be the very first managers for His creation. In the first two chapters of Genesis, the Heavenly Father made the heavens and the earth and gave power to Adam and Eve over the both the land and the animals. God gave guidance that they were to cultivate the land and to be fruitful. The thought behind this is that, “while God works for us as our Provider, we also work for Him” (Keller, 2012, p. 36).

Individual obedience is crucial to God’s calling, especially when it comes to being faithful stewards of His creation. Stewardship demonstrates obedience to God in how resources are committed back to Him (Peel, 2008). God finds pleasure in multiplying the resources He bestows; however, it greatly depends on how the resources are utilized. In the gospel of Matthew, chapter 25, verses 14-30, Jesus described the Parable of the Talents, and speaks of a wealthy man who was preparing to head out on a journey and divided his assets among three of his servants. To each of his servants he gave a significant amount of money. Two of the servants took their money and increased the amount, but the third servant took the amount he received and buried it. When the master came back, the first two servants were rewarded for being faithful to what they had been given and were, in return, they were given more. But the third servant was reprimanded for not investing the money. “Then you ought to have invested my money with the bankers, and at my coming I should have received what was my own with interest” (Matthew 25:27, ESV). Through this parable Christ was able to point out the significance of strategically using resources given, whether money, talent, or ability, to honor and obey the Heavenly Father.

Relationship to Field of Study

Collins (2012) along with Van Rooij et al. (2011) were able to demonstrate that individuals who were more financially literate were more likely to seek out and utilize advice from financial professionals especially when compared to individuals who were not as literate financially. This particular idea was solidified by additional researchers (e.g., Debbich, 2015; Gentile et al., 2016; Porto & Xiao 2016; Robb et al., 2012). Financial advisors in the past had placed a great deal of importance on procedures that tracked products and performance; however, they failed to pay attention to the interaction between the access to financial education and how that influenced a greater desire of seeking out professional financial advice. Individual investors had the ability to be more successful when they properly invested and diversified their assets with the advice and guidance of financial advisors. As U.S. service members utilized access to financial education provided on military installations and online, the probability that the education would encourage them to seek out the advice of a professional financial advisor would increase. Having this understanding, financial advisors that worked for full service financial firms would be able to properly implement strategic allocation methods. The approach of financial firms to utilize research provided by the FINRA IEF to help drive the firm's strategic management has long aided the firm's strategy and structure and it would also significantly impact the firm's financial performance (Arrfelt et al., 2015). Various researchers from the field of finance, particularly in the areas of strategic allocation of assets and diversification, have come to understand the importance of professional financial advice (Danes & Yang, 2014; Schuchardt et al., 2009; Xiao, Chen, & Chen, 2014). Through distributing the combined outcomes and having a clear understanding of the findings of this research, the study was

designed to help improve financial literacy and financial readiness in members of the armed forces.

Summary of the Significance of the Study

In summary, the research highlighted how this particular study was able to speak to the gap in the role of financial literacy. In particular, this study empirically examined the influence that unlimited access to financial education had on a military member's propensity to seek professional financial advice. Additionally, the significance demonstrated a connection between biblical principles and the theories of this research. As stewards for the Heavenly Father, Christians need to competently manage the resources God provides. The discussion demonstrated how the study was directly related to the financial education of military members. When working with individuals who had served and those who had not, it was important to understand that mindsets and disciplines differ between the two groups.

A Review of the Professional and Academic Literature

This section examined what had been written previously in the field of finance in regards to how financial education related to the financial capability of members of the U.S. military. The literature referenced defended the theoretical argument that was put forth and also provided an understanding of the major ideas and findings that pertained to this topic.

Historical Background

Xiao, Chen, and Chen (2013) researched the correlation that existed among individuals and their financial satisfaction based on their financial capability. Their research found that there were three variables that made up an individual's financial capability, which were based on how individuals viewed their personal financial capability, financial literacy, and financial behavior. Their research utilized information collected through the State-by-State Survey of Financial

Capability conducted throughout the United States in 2009. This survey produced outcomes that suggested a desirable correlation existed among observed financial capability and financial satisfaction. The outcomes from the research revealed that having positive financial behavior improved an individual's overall financial satisfaction; however, aggressive financial behavior had a negative impact on an individual's financial satisfaction. Individual financial education had been determined to provide an optimistic outlook towards one's financial self-efficacy. It was determined that a desirable correlation existed among objective financial education and financial self-efficacy when they ran a quantitative analysis of two variables; however, if their analysis had exceeded two variables, their results were not as positive. Their outcomes indicated that in order to improve an individual's sense of financial security, individual programs designed to improve financial literacy needed to highlight appropriate responses needed to inspire individuals to stay away from perilous financial conduct, participate in preferred financial conduct, and increase personal financial satisfaction.

Collins (2012) found that not having financial knowledge could reduce the capability of people being able to make educated financial assessments. Those individuals that demonstrated difficulties when making a decision regarding a financial issue, thought that it was possible that professional advice could take the place of financial capability and literacy. Nevertheless, information pulled out of the Financial Capability Survey completed by FINRA in 2009 suggested that advice frequently acted as a supplement to, instead of being a replacement for, financial capability. It was also found that people who had increased salaries, obtained advanced degrees from universities, and had higher quality of financial knowledge were more likely to seek out professional advice. Collins also found that current research regarding financial knowledge revealed a lot of similarities. One common trend was that, globally, people did not

have adequate mathematical or financial knowledge. In addition, trends indicated that levels of financial literacy were reduced for individuals that had lower salaries and those with less education. With that, it was found that individuals did not have a proper level of comprehension regarding the concept of interest rates. Lastly and potentially most critical, individuals who displayed flawed financial habits were more likely to make poorer decisions.

These flaws could explain the research by Porto, Nilton, and Xiao (2016), which looked at the possible impacts of overconfidence when it came to using professional advice regarding one's finances. Being over confident in financial knowledge was explained as the missing link among individuals' subjective and objective financial literacy. Through the use of a subset of a national survey that sought to accurately reflect the characteristics of the country as a whole, their findings revealed that more than 11% of participants showed that they were overconfident when it came to financial knowledge. Participants had an increased outcome when compared to the common individual on observed financial literacy; however, they were not able to accurately respond to at least three questions covering financial knowledge. Those individuals with extreme confidence were not as prone to look for guidance from a financial professional when looking to save money, invest in the market, or mortgage a home; however, they were more willing to request guidance concerning managing debt and preparing taxes. Porto et al. found that a primary purpose when looking for a financial advisor was to help with making wise and valid financial decisions. This quest for someone to guide them was a way of collecting data to help individuals would look for the fulcrum of where the minimal fees charged was equal to the minimal return. When it comes to the area of finances, the hunt for a quality financial advisor could partially be accredited to an individual's need to increase their comfort level with their finances. When it comes to professional financial advisors, individuals have stated that financial literacy has been

associated with the chances of being charged for advice by a professional financial advisor.

Overall, whenever perspective clients do not fully understand the amount of their financial literacy accurately, those clients may overlook the positive aspects that quality financial advice could provide and for that reason, they did not look for a financial advisor. It had been proven that financial advice acted as a supplement to financial literacy. Although, as explained in the literature, this rhythm was not always the case for every aspect of financial advice.

In 2018, the FINRA IEF (2019) conducted a study and laid out the results from a national survey conducted on financial investors. A similar study was conducted in 2015. Both studies provided insight into an all-encompassing deep dive of various financial issues that individuals encounter. Along with central components like investment tools, the implementation of investment information material, how individuals feel about investing, and investor literacy, the survey for this year added up-to-date issues and concentrated their focus on certain concerns like the different ways to invest (i.e., using a financial advisor, online resources, and smartphone apps), an understanding of the costs paid for investment advice, Bitcoin, and reaction to unexpected bear markets. Additionally, the research revealed that the level of financial literacy in America was low. On the questionnaire, barely 33% of participants were capable to correctly respond to half of the investment-related topics, with the mean of correctly answered questions being 4.7. Forty-six percent of participants thought previous performance of a particular investment was indicative of future outcomes. Not even a third of investors were able to comprehend that the primary positive aspect of an exchange-traded fund (ETF), when compared to a mutual fund, was that the indexed funds were typically not as expensive to own due to reduced fees.

Robb et al. (2012) utilized a significant, illustrative example from the U.S. offered by FINRA, investors' utilization of financial services was reviewed as it related to individual financial knowledge, financial satisfaction, comfort level with risk, and particular social and demographic factors. Their findings suggested that there were various features and qualities that linked investors who utilized various versions of professional services. Typically, knowledge and satisfaction had a positive relationship when it came to implementing any form of professional advice, and in particular when seeking guidance on ways to invest and save money, purchasing a house, protection needs, and preparing taxes. On the other hand, knowledge and satisfaction had a negative relationship when individuals utilized debt counseling services. Monetary matters pertaining to how money was spent and where, especially when that money was limited, were obvious sources of stress on the typical household. Added to that stress were the adjustments being made by corporations on how retirement plans were funded, the insecurity of higher healthcare costs, more and more confusing regulations concerning tax laws, and tremendous range investment products (with nearly 10,000 mutual funds and ETFs to choose from), could create some very complicated issues for households to make and crucial choices on how to allocate their money. The significant amount of complicated financial choices that a lot of families encountered is what led them to look for external advice. Often there was a turning point in a household, which would cause households to seek out assistance from a financial advisor. This could be an unforeseen lay off, birth of a child, adopting a child, or marriage. Additional examples that motivated individuals to look for an advisor could be realized mentally, like the sudden awareness that retirement was pending, credit card bills were overshadowing the conversation at the dinner table, or it could be that IRS regulations have become so complicated that families find the new tax-filing rules overwhelming. It does not matter what was the cause of

the search, what is important is that a significant portion of households depend on external advice when it comes to making financial decisions as a family.

The intent of the article by Xiao and O'Neill (2016) was to look at the possible consequences that any financially-based training had on the financial capability of investors in the United States. Information collected from the NFCS that was conducted in 2018 was utilized to evaluate the assumption whether financially-based training had a positive correlation to financial capability. There were different financial knowledge and behavior components that were implemented to create a financial capability profile. Outcomes revealed that, upon taking into account the backgrounds of the population group and financial factors, participants that had previous financially-based training scored higher in every financial capability area (unbiased financial knowledge, biased financial knowledge, appropriate financial behavior, etc.). It was also found that at all levels of education and within the workforce that financially-based training factors revealed that there was an optimistic relationship inside those financial capability gauges. Extra state assessment research showed proof that indicated finance-based training in freshman through senior years likely had both direct and indirect implications on individual financial capability. Their research revealed that programs designed to teach individuals financial knowledge was an area that had gained in popularity and had seen that there was a predominant uptick of individual research recently. Scholars had analyzed that position from different angles like theoretical support for or not for financially-based training, placing training as the fundamental control in financially-based training, creating a financial knowledge program in a collegiate syllabus, stressing supportable financial behavior in financially-based training, and customizing financially-based training material to satisfy personalized individual requirements. Although, limited earlier analysis on financially-based training had truthfully reviewed the

correlation that existed among that had financial-based training and how that related to financial capability measures. Their research was an effort to fill in the literary voids.

1. Put things in perspective.

1. What were the major issues, controversies, etc. that impacted the study. This included background on all relevant variables.

Kramer's (2016) research helped to explain and comprehend how there continues to be a critical need to understand the implications of professional financial advice and how this was a crucial area of concern for financial capability; however, it continues to be an area where research is lacking. Research has showed that there is a direct correlation between the level of financial knowledge an individual has and the desire to seek out a professional financial advisor. That was a critical revelation, especially since there continues to be a significant number of individuals who do not have adequate financial knowledge, which had a direct negative impact on how financial decisions are made. By seeking out an FA who would provide impartial guidance could, in theory, revolutionize the damaging impacts of financially illiterate decisions. Kramer's research made up a significant portion that helped to fill the gaps in literature that helped to illustrate the correlation between financial literacy and financial behaviors. A characteristic result was that individuals who had more education would act in a manner that was much more appropriate, like owning equities, preparing for and setting aside funds for future retirements, properly allocating their assets, and looking for fee-based accounts that charged less. An important factor which separated seeking financial counseling apart from other financial decisions was the challenge to determine what was normally appropriate. It was not certain whether clients were receiving an appropriate level of service from their FAs. The information provided by an FA might be influenced due to the fact that traditional FA compensation

processes could potential result in a conflict of interest. Research has definitely shown that FAs could have a more negative impact than positive; however, there are also studies that have revealed results that have a positive impact. Moreover, it was determined that even with limited articles, those available were contradictory. Their research found that financial knowledge and financial advice were supplementary for one another and not replacements. The study revealed that the process of the consumers that had more education would encourage FAs to offer a higher level of advice. Also, individuals that were more financially literate might have had greater tendencies of looking for advice due to having greater opportunity. Along that line of thinking, it was determined that individuals who lacked financial education depended on personal relationships for their financial guidance much more, like peers and colleagues, an outcome which could also be seen in psychological studies. Individuals with limited education do not have the capability to understand their lack of literacy, causing them to not fully understand their faults and, in turn, not look for professional advice. On the other hand, there are some that had determined an undesirable correlation between seeking professional financial advice and financial knowledge. Individuals with less literacy had a greater hurdle to overcome when it came to collecting and understanding advice; therefore, they fail to seek professional advice due to the fees associated with paying for an FA. Furthermore, individuals who are not as literate in the area of finance might also be unaware of possible conflicts of interest and for that reason they are not as cautious when it comes to consulting with an FA.

Mottola and Skimmyhorn (2019) utilized information collected from the 2015 and 2018 surveys of the FINRA Investor Education Foundation's National Financial Capability Study, their analysis offered fresh and current confirmation regarding the financial success of service members. They reviewed how military members were doing over a certain period, how they

were doing in 2018 when compared to non-veterans in similar positions, and how diverse population classes of military were doing in 2018. That report showed that service members were still outperforming non-service members in multiple sectors. Veterans had fewer challenges meeting their financial needs and paying creditors, less chances of having a decrease in salary and better chances of maintaining an emergency savings account and holding a separate IRA to compliment a defined benefit plan held by their employers. Military members in 2018 had a higher probability of identifying as having issues with credit card debt; however, when compared to non-service members, military members were still showing that they were outperforming their civilians' counterparts in a majority of the other categories. Veterans demonstrated greater financial success, reduced amounts of monetary fears, and greater odds of having an estate plan in place. Inside the military community, they found additional significant factors. An interesting fact was that service members who were young females who were either married or divorced, or had dependents that were financially-reliant on them, were not doing as well as their male counterparts. Additionally, members of the military community that identified as African-American were doing a little bit better than Caucasian members; however, individuals who classified themselves as "Other" were worse off.

Skagerlund et al. (2018) found that having financial literacy was a critical life talent, which was not only crucial for an individual's well-being but also for civilization as a whole. Research suggested that consumers were lacking the proper amount of financial education at the same time actions that were taken to improve the quality of financial knowledge were unsuccessful. The impact that education has had on financial actions revealed in similar research might have been led by an unidentified third variable, for example a person's ability to think rationally. This research explored what part intellectual and emotional influences played in

achieving financial knowledge. Using a subset of the general population that sought to accurately reflect the characteristics of the larger group, their regression models signified that a core element of financial knowledge could be tracked to numerical proficiency and the feelings that stir when thinking about figures in general. Therefore, a leading indicator to support obtaining an appropriate level of financial education could be found in the capacity to comprehend numerical figures. Additionally, by embracing a passionate appreciation of mathematics, which would not interfere with an investor's day-to-day involvement with behaviors relating to arithmetic and financial choices. Investors today have not had to face so many challenging financial decisions. Over the last twenty to thirty years, investors have encountered more and more complicated financial decisions, which could include various home loan documents, check-cashing services, tuition payments, complicated defined benefit programs, and credit cards. The overall financial well-being was actually the responsibility of the individual investor. Having financially literacy, which in turn meant that investors were capable of making educated financial decisions founded on a rudimentary understanding of financial theories, was a crucial proficiency that was just as critical for not only an individual's own wellbeing, but also for the benefit of humanity.

Globally, the current outcomes suggested that a majority of investors lacked adequate financial literacy, as a minimum when it came to determining their understanding on levels of financial knowledge. That finding was disturbing, because the large increase of newly introduced financial products that were complicated to understand. This along with an increase in standard issues that investors and their households were encountering daily, it was determined that day-to-day financial choices were just as crucial as long term financial planning. An expected response by legislators was to offer various programs to improve the quality of financial knowledge by different methods, like financial training and programs. Nonetheless, the authors reviewed

research where they examined the implications that financial knowledge and financial education had on financial capability, the findings were not very encouraging; financial knowledge only accounted for a tenth of one percent of the inconsistency in financial capability. In addition, Skagerlund et al. uncovered a rhythm that relational research of financial knowledge identified greater amounts of impact than previous research put into place to intervene on financial education. Potential reasons for this revealed by the writers was that the impact of financial knowledge on financial capability identified in relational research might be led by an anonymous third variable, like a person's ability to think rationally. That unknown variable helped to define the reasons that mediations focused on financial knowledge, like attending training that was concentrated on finance and investments, was not effective. Regardless of the fact that there was a unanimous understanding that financial knowledge was critical for financial actions and financial future, there remained key issues to be resolved. For instance, which individuals obtained financial education and what were the influences and talents that led to that knowledge? Through this research, they looked into those issues and attempted to uncover the supposed third variable revealed by the authors. Because of this, they looked at the part that intellectual and emotional elements play in obtaining financial knowledge.

The article by Lusardi and Mitchell (2014) dug deep into financial literacy and how it was becoming more and more crucial in the economic world. They began by giving a synopsis of how financial literacy could be utilized as a way to invest in the population as a whole. Being able to develop financial understanding internally could have a significant impact on the well-being of individuals, in addition to establishing regulation that could help improve the amount of financial understanding throughout the rest of civilization. From that point, the authors reviewed the outcomes of the survey participants to try and determine to what level the individuals

understood or at very minimum could comprehend different financial situations. Afterwards came a study on the influence of financial knowledge on making sound financial choices in the U.S. and other places. In the beginning stages of the research, assumptions might be concluded on the impact and significances of lacking appropriate financial literacy and what could be done to help eliminate those voids in knowledge. The latter part of the article provided input on issues that are still outstanding and require additional research in an effort to help educate future research methods along with future regulatory requirements. Globally, the ability to be involved in the stock market had developed over time to be made more readily available to the “little guy,” due to updated investment vehicles and practices that continue to expand extensively. Starting from the beginning of the 2008 market downturn, individual debt and home loans had increased drastically. Individuals who had revolving debt or subprime home loans found themselves in an unprecedented predicament of having the ability to determine whatever loan amount they desired.

Xiao and Porto (2017) pointed out that over the past 20 years, individual financial learning courses have attracted the focus of individual financial regulators, specialists, and academics. The author’s defined financial education as any type of individual-based training focused on improving the fundamental understanding of finances for individuals in their freshman through senior years, universities, and in the office environment. Increasing the amount of financial education and motivating positive financial actions by means of financial-based training were thought to improve individual financial literacy and increase individual well-being. Financial literacy was thought to increase an individual’s overall level of financial education, encourage the investor to make positive investment decisions, and improve economic success with individuals. Xiao and Porto had reviewed numerous articles concerning finance-based

training and knowledge on financial behaviors and determined there to be mixed reviews.

Nonetheless, recent research still reveals that financial education had a constructive impact on individual financial behavior and well-being. A majority of the earlier studies in that section was concentrated on either the connection that existed among financial education and financial knowledge or the correlation among financial knowledge and financial behavior. To their understanding, earlier literature had not analyzed the connection concerning financial education and financial satisfaction, which is an individual determinant of financial success. In an effort to eliminate that void, their research analyzed that relationship utilizing information collected from the NFCS conducted in 2018. The reason behind their research was to review if formal finance-based training had a primary or secondary impact on an individual's financial satisfaction by means of intervening influences like financial knowledge, actions, or capability.

Theory Relevant to Research Questions/Hypotheses

1. Theoretical models/perspectives that inform the research.

Danes and Yang (2014) suggested that scholarly instruction was described through its very design of the examination and through the academic principals that the analysis was structured. The hurdle for any discipline in the beginning stages was theoretical accuracy and dependability. Quite frequently it derived from and assumed the identity of theoretical structures and principles from various studies until scholars could create theoretical frameworks explicitly concentrated on the core of the financial discipline. The primary focus for Danes and Yang's research honed in on two key elements. Step one, the research looked at and translated the implementation of theory throughout this particular financial publication from 2012 back to when it was first established. Next, to eliminate any conceptual void uncovered during that evaluation, theories were suggested for the financial theoretical design that had been recently

announced out of an in-depth critical overview of the current scholarly knowledge. Family Financial Socialization was a theoretical design, which was particularly concentrated on the lifeblood of the financial field and propels the branch of learning past a consumer and cognitive theoretical emphasis. Their research suggested theories that could be tested beyond the subsequent level of progression of the theoretical design.

This particular scholarly journal has been considered a primary source that has produced academic articles that focused directly on disciplines that dealt with individual finances. This article's goal was to disburse academic examination pertaining to decisions made by people and households regarding their finances, their financial literacy and education methods, and the training of advisors, teachers, and coordinators. The authors reviewed and analyzed material that focused on previous studies and journal tendencies throughout the twenty years of the publication's production. Conversely, although hypothesis was crucial to the basis of any field of study, at this point, nobody had evaluated the implementation of previous article theories printed in this journal. The primary goals of their research were to conduct that objective and to reveal a theoretical framework, which had been established exclusively for the financially capable individual and households with financial discipline.

The research by Huhmann (2014) documented the challenges of investors when it came to comprehending and correctly utilizing the services provided by financial firms. The research looked at individuals of all salary ranges in both advanced and underdeveloped economies. Huhmann defined knowledge as the capability of an investor to understand and apply information that pertains to a particular topic. That knowledge originates out of an investor's ability to process financial data available to them, any previous financial literacy the investor

had, and the ability to make competent economic decisions and handle monetary resources to improve themselves financially. This research was designed to breakdown those concerns.

That viewpoint of matching up those abilities with actions help to explain the growing monetary challenges that individuals are facing. Individuals had minimum improvements in their finances, because they lack the required level of knowledge needed to make sound financial decisions. Nevertheless, literacy or knowledge could increase an individual's financial capability. Instead, professional financial organizations should look at ways to help individuals with limited financial knowledge by streamlining the way financial data is made available. Individuals exhibit an extra level of commitment toward financial organizations that demonstrate an extra level of attention to their limited financial knowledge by becoming even more devoted to that firm.

Kaiser and Menkhoff (2017) found that financial literacy had a direct impact on the financial decisions that investors made and, even more so, on financial knowledge. Those findings held true when compared to the examples ran during scenarios performed using random selection. Nevertheless, mediation influences were greatly varied, because financial education was not as beneficial when it came to investors who were just above poverty and this applied to the working-class as well. Particular habits, like managing credit, were more challenging to have an impact on and obligatory financial education quite often failed to seem to be successful. For this reason, effective involvement was critically contingent on improving the depth of the training material being offered while providing training of finances at an appropriate time during a student's education.

The financial actions of families and individual investors was starting to become the focus of more and more attention. The authors' revealed proof of an extraordinary occurrence of

less than ideal financial choices for investors regardless if those choices were significantly pertinent to the investor's well-being. Perhaps the most noticeable incident of these critical financial choices when it came to equity markets was the number and types of retirement accounts. Sadly, research revealed that not saving enough was predominant in several individual portfolios and that families were inclined to plan retirement in ways that were not the most effective, suggesting that a majority of families might not be able to handle the continuously more challenging issues faced when investing in the stock market. Additionally, that type of decision making crossed over into additional parts of their lives to include building a strong portfolio, taking out too many loans from their retirement account (and defaulting), in addition to just day-to-day involvement in the global markets. Similar grave issues arose in emerging markets more frequently with increasing concerns that individuals were experiencing significant impacts to their finances while not holding enough life policies or accounts with death benefits. Every part of that significantly encourages the idea that justifies the need to offer quality financial training to investors that would hopefully result in improved financial decisions.

The Department of Defense Office of Financial Readiness (n.d.) is where veterans would have access to material, training and assistance for every aspect of their financial readiness. This would include military members who were in the early stages understanding the basics of finances, those considering different ways of revamping their current financial strategy, or those who were prepared to go full-throttle. Their objective was to adopt a financially stable mindset and create a culture that was focused on the mission with all service members and their families being given every opportunity to achieve financial success now and tomorrow. Both financial consultants and advisors were accessible to assist military members in reaching and uphold financial readiness at each turn of their career in the service by having convenient, free, and

individualized support organizations. The site recommends that service members meet with a certified professional as soon as possible at the Readiness Center located on the military base. The Office of Financial Readiness suggested veterans seek out a Personal Financial Manager or a Personal Financial Counselor who could assist veterans improve tomorrow financially by creating a budget, establishing an emergency fund, and improving their credit, just to name a few. They also suggested that veterans utilize those free, individualized support services to help capitalize on their income.

Military members understand the importance of financial readiness, because it is a critical component of military service. Readiness is key in ensuring that service members are able to keep or even get a clearance to handle classified materials, provide for their loved ones when they were stationed overseas, and make sure they are able to maintain their attention on their assignment. Additionally, readiness positioned veterans to have as good as a life as possible not only as a veteran of the armed services now, but also have a comfortable living when they are in their retirement years. They had chances to lay out their path to financial stability by means of financial education on a consistent basis, or a point of reference, during their days in uniform. Overall, their office focused on the way forward using that collection of information that mapped out the “Road to Financial Readiness” and look for those moments that when faced with certain financial hurdles that knowledge could be put to work.

Military OneSource (n.d.) offers online access to data, responses and encouragement to assist military members obtain their objectives, remove obstacles and succeed 24 hours a day. Veterans of the armed services are allowed access to the DoD-backed system whenever and wherever. Veterans could utilize Military OneSource to help with preparing taxes, finding their spouse a job, web-based education, assistance with stateside and overseas assignments, just to

name a few. Financial stability was critical to all personnel and crucial to military preparedness. Military members do not have to handle difficult financial situations by themselves, they are able to get in touch with a certified Military OneSource financial coach. They have access to programs that could help the veteran understand how to save, information on how to deal with collection agencies, and professionals that could lay out various routes to reach their financial goals. This agency helped to provide financial stability at home, which allowed individuals to concentrate more and be focused on the mission at hand. To assist veterans in operating at peak performance not only in their finances but also at their jobs, OneSource provided financial advocates at no charge to veterans and their households on topics such as laying out a budget, managing their finances, and reducing their amount owed. Financial advising allowed veterans the chance to reach out to a competent certified specialist who was up-to-date on the problems that impacted veterans and provide them with recommendations to those who could assist and courses that addressed their particular issue. Veterans who are either active-duty, guard, or reserve along with their households and beneficiaries have access to this program at no cost.

2. Compare and contrast competing theories and justify the theoretical foundation of the dissertation.

Using research by Debbich (2015), it was determined that financially capable individuals (individuals who have higher levels of literacy and confidence on their capabilities) were more likely to seek out professional financial advice. Debbich's research looked at how the professional advice available through a Financial Advisor (FA) could replace the need for individuals to have financial knowledge. The author established a basic theoretical design that would assist an FA when it came time to provide advice to an investor who was not quite as educated when it came to financial decision-making. Since there was the potential that a conflict

of interest could exist, from the FAs point of view, the design suggested that only individuals who had higher levels of financial education would get pertinent advice from the FA. That truth is, that even though they need the advice and assistance of an FA the most, individuals with less financial literacy were less likely to seek out professional help. In the end, the theoretical design forecasted the association between financial knowledge and the request for professional counseling would neither decrease nor increase. Afterwards, Debbich implemented a statistical sampling of families to assess the hypotheses of that theory. The author determined that there was a strong correlation between having financial knowledge and the chances that the individual would seek out assistance from an FA. Separating the different levels of financial knowledge, the author revealed that the two factors offered weak proof that professional advice from an FA did not eliminate the need for sound financial knowledge neither decreased nor increased.

Xia et al. (2014) research gave the impression that being involved in equities was a display of individual financial security. Their research addressed the correlation that existed between an individual being overly confident in their level of financial knowledge and investing in the stock market. Their research on this overconfidence was gauged by the variance among a person's biased and unbiased literacy outcomes. Xia et al. compiled information collected out of a Chinese survey that reviewed consumer finances, which was conducted in 2012 was examined. The outcomes revealed that financial education overconfidence had a positive connection with involvement in the equities market. Meanwhile, a lack of self-assurance was destructively connected with involvement in investment activities. The authors' work added to the current research by linking a distinctive correlation, which revealed that an investor's willingness to be involved in investing in equities was tied to financial literacy overconfidence.

Proeger and Meub (2014) researched how social bias could impact an individual's level of confidence through pressure. What they found was that being overconfident played a significantly role in financial analysis; however, it did not hold true when financial motivations and responses were put into place. They determined overconfidence derived from social bias. While conducting a basic overview, they revealed that, personally, financial situations essentially prevented investors from being overconfident. To the contrary, there was no proof in their research that the need to be confident when in a social environment did not result in investors making rush decisions. Furthermore, by watching the way other people acted essentially removed any potential under confidence when matched up against an individual situation.

Zinman (2015) determined that the choice to take a loan had a direct impact on many families, this had a significant impact and consequences for the study. Zinman researched the overall impact of family debt to include how often it occurred, how much debt they incurred, how much it grew, what type of debt they had, along with different methods of understanding if individual decisions and stock fluctuations, movements, and values had a direct impact on wealth growth. In addition, Zinman laid out what were the pros and cons in strategy assessment. The main information obtained from this research was that there is still much more to uncover, and the author revealed several routes for future studies.

The reason for the author's review on family debt was due to how significant of an impact it was having on households. American families have owed nearly \$15 trillion, which has decreased just a bit from its high back 12 years ago. What was shocking was when that number was compared to the amount of debt owed by non-financial corporations, which is only \$10 trillion. Families are now able to take loans by different means (i.e., bank, against the 401k, margin loans against their investments, etc.) at APRs that go from zero to almost 100 percent.

The purpose of this research by Schuchardt et al. (2009) was to offer the authors' perspective on studies that were of great importance to academia that was able to determine the importance of financial education, regulatory guidance, ways that individual households could find comfort in their finances. In this particular study, their research connected bequests that were promised prior to passing with actual charitable endowments after the participants had passed away. Many of the participants who were surveyed stated that they had a legacy plan designed to give to charitable contributions preceding their passing; however, it was determined that no endowment was received after their passing. Research revealed that the chances were a little better for those who had established a donation to charity through an established trust verses those who were relying on their will. That disparity still continued even when certain variables for net worth, salary, and similar population background variances were removed.

Professionals in the field of financial behavioral and individual finances, risk tolerance, and those who reviewed financial training were requested to review the current outcomes of studies, in order to reveal areas in earlier analysis where there were holes, and determine and survey topics that should take priority in any future research. Members were comprised of academia selected out of state and non-state funded colleges and specialists from charitable groups and from the Federal Reserve. A significant amount of subject matter experts from colleges, government organizations, and the private sectors were all there to be witness.

3. Describe how the theoretical foundation of the dissertation applies to the problem.

The article by Bucher-Koenen and Ziegelmeyer (2014) revealed that previous bear markets had a direct negative impact on individual wealth. During their research they also found that investors that had less financial literacy were also less likely to own more aggressive assets. For this reason, illiterate investors reported greater financial loss. Remarkably, investors that did

not have adequate financial knowledge were also more likely to offload investments that had an unrealized loss. Therefore, those losses were locked in and those investors were not able to take advantage of any market recovery. That departure from aggressive investments was consistent, which meant that a market crash would likely result in a stressful enough event that molded future investment decisions. This avoidance would lead to negative investment diversification, which meant that investors that were financially illiterate would realize lower returns in the long term.

Research by Elnitsky et al. (2017) revealed that since the beginning of the 21st century, millions of veterans of the armed services had served in various operations in Afghanistan or Iraq. Veterans who were previous sent out to other countries to serve indicated significant amounts of issues to both their bodies and their minds. These issues included mental disorders caused from being exposed to traumatic events, intracranial injuries due to extreme blows to the head, severe nervousness and feeling like they are always on guard, clinical depression disorders, and the challenges faced when leaving the military and returning to their non-military positions. Even those service members who did not receive any bodily harm or experienced impacts to their state of mind, studies have revealed that more than one out of four respondents claimed to have trouble in functioning in social settings, taking proper care of themselves, or any other daily challenges they encounter after returning from overseas. A majority of military members claim to have trouble reconnecting with their family and friends, fitting back in with their colleagues at work, or even to the point of being homeless, inflicting self-harm, or taking their life. For this reason, providing assistance to those service members in returning back to normal life as a civilian became a priority for the federal government. Their analysis was based on nearly two decades of previous research that addressed how service members integrated back into their

previous way of life. They explained how this process was not only a procedure but also a result of getting back into doing their part in their households, hometowns, and in the office that could be impacted at various stages of an ecological structure. The present research explained the systematic process out of which that explanation was created, meanwhile an earlier study explained the crucial examination of the research focused on becoming reintegrated.

Lu et al. (2017) explained that a majority of institutions allowed those who contributed toward their retirement accounts to take loans out of their 401(k). The authors utilized data from an administrative collection of data that monitored over eight hundred retirement programs over five years, they reveal that one out of every five employees took a loan, and nearly 40% took a loan at some point during that five-year period. Additionally, the odds that an employee took a loan increased whenever a plan allowed more than one loan. When employees borrowed against their account, they were paid back 90% of the time; however, over 85% of employees switched employers while still owing on a previous loan. Their research revealed that approximately \$5 billion annually in loans that were defaulted on created tax dollars in excess of \$1 billion each year, significantly higher than originally expected.

Retirement programs in the United States commonly were offered as a way to inspire employees to plan for their golden years. It is important to note that the most of those retirement programs provided employees with access to retirement funds before they retired, by letting them borrow or take out of their accounts prior to reaching retirement age. Normally, the tax law in the United States would deter this type of behavior by having individuals pay ordinary income tax and, if the worker who have not yet reached age 55 and leave their employer's defined benefit plan, a 10% tax penalty would be accessed on funds that are pulled out (that would also include any outstanding loans that were not paid back). However, collective estimations of early

withdrawals out of all qualified plans equaled about 45% of combined contributions that are added to defined benefit plans every year. With the amount of money that was leaving the defined contribution plans being so high (as it related to the amount of the contributions), there was good reason for concern and a need to determine how much damage was being done to the future financial security of employees and what strain the current tax implications were causing, by allowing such convenient access to retirement funds.

Their research had looked into the makeup and spending habits of individuals that took out a loan against their 401(k); however, there was not any earlier research that looked into whether or not any rules that companies had in place impacted if and when employees would default on their loans. That was a critical issue due to the fact that many individuals who participated in defined contribution plans in the US had the ability to take loans against their 401(k) plans, combined with the failure to repay the loan whenever the employee would change jobs could quickly chip away at their future retirement. Additionally, their research looked at the many concerns dealing with the various issues that led to taking a loan out against their 401(k). To start off, they looked to see if there was a pattern of behavior that individuals exhibited in regards to their company's policy regarding borrowing against their retirement accounts. Next, they looked into the type of individual that was most likely to not pay off their 401(k) loan, and how those traits were associated with the company's borrowing procedures. In addition, they reviewed whether or not a loan had an impact on future contributions to the plan. Finally, they analyzed the financial penalties of individuals taking loans against their defined benefit accounts and then not pay back what they had borrowed.

Through this study, Stolper and Walter (2017) examined the extreme amounts of research that covered both the scope and causes that led to financial education. Where it was feasible, they

replaced current results with more up-to-date thorough verification of the amount families' financial education based on information collected from an extensive review of data that was an accurate representation of the current financial status of most families. Previous studies revealed particularly lower amounts of financial education, and in addition it found significant diversity in financial knowledge throughout the whole group, which indicated that those who were susceptible financially were put at an even greater disadvantage due to not having adequate financial literacy. Also, they reviewed the research that looked at financial literacy as a way to increase literacy and knowledge. Their research revealed that the proof regarding the usefulness of the training was particularly unacceptable. In addition, they went over the function of a person's education and how it relates to the utilization of a FA and determine if using a professional could take the place of financial knowledge.

In the past, individuals from all over the world had assumed a more personalized role when it came to the management of their monetary resources. Extensive modifications to defined benefit programs created the main starting point that required a deeper involvement by individuals because decisions about finances were being delegated to those working and also those that are already retired. Prior to now, participants around the globe have depended on either social security, pension programs through their company, or both. With the ever-growing transfer to company-sponsored 401(k) accounts, families were now provided the opportunity to have more say and responsibility in how their retirement savings were being invested. Simultaneously, investors had to understand their position on investing since there were more complicated issues involved that needed to be clearly understood. With a growing list of retirement options, individuals need assistance from a professional in order to understand what options are available.

Using that knowledge, there were some practical concerns that needed to be addressed to determine if families of today were prepared to effectively direct their own individual financial activities. Throughout their investigation, their research answered that issue by concentrating on individuals' financial education, such as their ability to understand vital financial theories along with a capacity to implement that understanding when making financial decisions.

Current Empirical Literature Relevant to Research Questions/Hypotheses

1. Include in this section:

i. literature relating to individual variables

Sims et al. (2017) explained how veterans and their households were vulnerable to a variety of issues that were very similar to what many non-veteran households encountered; however, this research revealed that the very design of the armed services could potentially magnify those issues or create additional problems. The branches of the military understood those difficulties and have since created a vast array of services and organizations to assist veterans and their households handle those challenges. This research explained the outcomes of a specific, all-inclusive review that was designed to reveal the most crucial issues veterans and their households encountered, the voids those issues created, the utilization of the financial programs offered to tackle those issues, and the hurdles to being able to access those programs. In addition, their research revealed veterans' observations about the efficiency of the programs provided and what the estimated impact would be if those programs were to cease. The research also described the correlation with the way veterans handled their current primary dilemma and key feelings about the Army. The data collected came from the opinions of over 7,000 veterans who were serving on active duty, which indicated that the veterans and their households were pretty satisfied with the military resources available. Sims et al. found that there were still areas

that could be improved upon, since many veterans still faced hurdles when trying to access the financial programs, and there were still some unresolved issues for select veterans even after contacting certain organizations and using the financial resources provided. Veterans with unresolved issues had a more negative outlook about the military than those service members who utilized the available programs and were able to get their issues resolved. The authors also discussed various possibilities for the military to look at in order to expand the capability of commanders and organizations to deal with the varied assortment of issues that veteran and their households had.

The article by Gaudecker (2015) explained how errors made by families, regarding financial decisions, were a key issue for both academia and regulators. Perhaps one of the most expensive lessons learned were for those families where investments were not properly diversified. As a matter of fact, the author's research found that investors did not even fully understand the importance of the overall foundation and significance of proper diversification. In the research, Gaudecker reviewed the numerical significance of proper diversification and looked at how each was impacted by the various denominators. Just about every family who rated higher in the area of financial knowledge either relied on the advice of a financial advisor or personal consultant, which resulted in favorable returns. When matched up against those investors, families with less-than-average financial knowledge who relied on their own skills and abilities experienced on average a fifty basis point reduction in return.

Mottola (2013) also collected information that came out of the NFCS conducted by FINRA. Unlike women, the author's data showed that men are less likely to have bad credit card habits, such as having delinquent payments and penalties caused from exceeding the credit limit. Once certain factors could be identified, like financial knowledge and a personal evaluation of

one's understanding of economics, cardholder habits were removed when the disparities were due to gender. His outcomes indicated that the variations in cardholder behaviors among the genders could be controlled if equality was present among males and females on key factors that females were inclined to lag behind males on, for example salary and financial knowledge.

A reoccurring theme of Mottola's research revealed that females did not score as high as males when it came to financial knowledge indicators, and that discrepancies based on gender might have negatively impacted the financial welfare of females. An instance of this was how the level of financial knowledge had a direct correlation on some very important concerns, like building wealth, willing to invest in equities, and ensuring they were prepared for retirement. Therefore, not being as knowledge when it came to financial decisions, there are greater odds that females were hindered when it came to being able to build wealth, manage investments and, ultimately, reduce any chance of creating a financial future for themselves. Mottola's literature went even deeper by looking at the correlation between gender, cardholder habits, and financial knowledge. In addition, his journal entry took an in-depth evaluation at the correlation among male and female, and the interest rates being charged by the various card companies. A clearer understanding of those connections would assist in revealing factors that may prove beneficial through further studies.

Lai (2016) pointed out that even though current studies on how financial institutions have increased in size and are more influential in day-to-day living, research has worked to explain the restructuring of how day-to-day individuals are more willing to take risks. The importance of professional advisors was often disregarded, although advisors were the critical go-betweens in communicating with investors and the understanding of global markets. Using an approach that looked at how finances impacted their surroundings, Lai's research concentrated on advisors in

order to show the uncertainties and discrepancies that were apparent in each of their practices. The various ways that advisors led and financial firms operated resulted in very different interactions that had a direct impact on the financial literacy and investment choices of investors. The researcher conducted a practical examination of industry standards, regulatory requirements, and individual conversations originating from attending formal education courses and conferences. The outcomes showed ways in which professional mediators such as financial advisors were crucial in helping investors understand the ever-changing and irregular makeup of individual issues. An important review of financial advisors showed the various ways that investment decisions were made and which of the investment methods of individuals were burdened with having a lack of knowledge and those that were entrenched in various financial approaches. The different approaches to investing were organized to describe the strength or weakness of the different styles as they would relate to the different elements.

PACFC (2013) offered some primary suggestions that could narrowed down to a few main topics. First, improving financial knowledge was an ongoing never-ending process that should start with families teaching their kids, transition with them into kindergarten through eighth grade, following them into secondary education in order to prepare them for their college years, and then continue even past that point in life. They sought out professionals, with help and backing from the U.S. government to inspire the insertion of financial literacy programs directly into homes and within the neighborhoods in which families live. This could be done through various resources including the PACFC's foundational website designed for families, and into institutes with the PACFC's website designed for educational institutions, a program to include key individual financial proficiencies, which could be embedded into the states' Common Core Standards.

Financial capability could be seen as a component of literacy, informed policies and the decision-making design process. By not having thoughtfully laid out financially-based products, that were up-to-date on the various types of errors that individuals were making, it was determined that even the smartest investors were expected to make mistakes, which would render carefully designed training programs unproductive. To fully comprehend what performed really well, would need additional research. Guaranteeing that good choices and acceptable coverage would be available would need the right policies in place. Academia that focused on financial training, financial philosophers, and policymakers need to educate one another and advise one another's efforts. For that reason, authorities in the U.S. need to create a web-based platform to assist analysis who focus their study on financial literacy and capability.

Research by Miller et al. (2015) revealed a methodical and all-inclusive review of previous research that concentrated on financial education research, which was created to improve both the financial literacy and the financial capability of individuals. Their research uncovered nearly 200 journals that provided significant outcomes that were created to improve individuals' financial knowledge, which they also referred to as financial literacy. They also looked at the financial abilities, thoughts, or behaviors, which they often referred to as financial capability. Their articles covered a wide range of issues related to their topic, which included what were the typical pushbacks experienced, anticipated findings, concentration and length of the training, which training method was utilized, and the demographics that the study was focused on. Nevertheless, their research revealed that there were some important earlier research that were similar, which discussed how individuals saved, how they had trouble paying off debt, and the ability to maintain proper financial records. The outcomes from the research suggested that financial knowledge and financial behaviors had an encouraging influence in certain areas

(i.e., they saved more) although it did not in other areas (i.e., they still carried large amounts of debt). Going back ten years there was very little concern when it came to the area of financial knowledge. Since then, that topic has been the priority of conversation for policymakers (nationally and globally), analysts, and professional financial firms. One of the main purposes behind the renewed focus on financial knowledge was the worldwide financial catastrophe that emphasized how critical financial knowledge was and how it was a much needed skill for individuals. One outcome identified from the global crisis was that individuals were invested in products where they did not understand what they were invested in or how much risk they were taking. Additionally, through their research they found proof from across the globe that revealed some people had a more challenging issue comprehending simple financial ideas. Their research discovered that although financial education could protect an investor against taking unnecessary risks, it could also help investors see opportunities that prior to training could have easily been overlooked. Research had revealed that financial knowledge was directly related to better decisions toward planning for retirement years as well as for current savings.

ii. literature relating to specific combination of variables relevant to the dissertation

Fox and Bartholomae's (2008) research reviewed the vast amounts of financial literacy curriculums that were designed to increase the financial knowledge of investors. In particular, they took an in-depth look at recent studies that showed the positive difference of programs that were designed to increase financial knowledge. They pushed to embrace an all-inclusive structure to take a closer look at strengthening the programs that are being provided, and those in the process of being distributed, while they emphasized the crucial encounters of financial literacy as a whole.

The idea behind their research was to look at the correlation that existed among individual how versed individuals were financially and if they were satisfied with the level of their current financial situation. Fox and Bartholomae utilized three different variables to help measure an individual's financial abilities, which were how they rated their financial abilities, how they understood financial decisions, and what financial decisions they made. By utilizing information collected through a financial capability survey, the findings revealed that there was a favorable correlation between alleged financial abilities and financial gratification. Their outcome revealed that favorable financial tendencies went up but unfavorable financial tendencies had a negative effect on financial self-awareness. An individual's personal feelings of their financial knowledge had been determined to have a positive impact on financial contentment. There was an optimistic correlation determined between impartial financial knowledge and financial contentment when the research had two variables but not when the research had more than two variables. The outcomes suggested in order to improve individual financial security, individual financial literacy courses would need to highlight activities individuals were involved in, while suggesting to individuals that they should stay away from unfavorable financial activities, participate in favorable financial activities, and increase financial self-confidence.

In their research, Atuel and Castro (2018) offered an updated explanation regarding service members' ability to interact effectively with people of different cultures and socio-economic backgrounds founded through an overview of previous research. As a beginning foundation, the primary features of the military ethos was examined and incorporated the military's leadership hierarchy, customs and courtesies, and their distinctive characteristics. Since they prepared the foundation, the significant various components of the services' ability to

interact when it came to attitudes, intellect, and conduct were all examined. Quantifiable inclusion of those various proficiencies were measured.

Initially, Atuel and Castro turned their focus to what they mean by cultural competency. Their research identified the cultural identity of the armed services by initially separating cultural competency from the armed services' way of doing things, offered different explanations for every scenario, and by doing so, they were able to provide a cohesive assessment. Initially, it looked like as if they were overcomplicating what appeared to be a basic understanding. Even though there was some truth to that, they were committed to their detailed examination in an effort to be clear about what was at risk in current and potential discussions on the armed service cultural capability.

Lusardi and Mitchell (2010) reported on many self-evaluations and unbiased features of financial knowledge and it connected those achievement data points to struggles individuals made to prepare for when they retired. They looked at the fundamental correlation between financial knowledge and retirement readiness by exploring data collected from survey participants on the education covering finances that they were taught in school prior to joining the workforce and definitely prior to establishing a retirement goal. Findings revealed that individuals who had greater financial literacy were the ones who had greater odds of being prepared for retirement.

Their research revealed that a majority of day-to-day individuals are constantly being forced to deal with extremely complicated financial choices, and to make matters worse there was now increasing proof that families lacked the appropriate level of knowledge to make educated decisions needed for some pretty serious financial encounters. Previous research showed that the lack of financial knowledge was prevalent with more senior investors. Research

revealed that only 50% of investors over 50 years of age could accurately respond to a couple basic topics concerning compound interest and inflation, and only 33% could accurately respond to those concerns and one additional question on diversifying risk. Young adults had an obvious knowledge gap when it came to finances. Not even 50% of the participants between the ages of 23-27 were able to explain what compound interest was, what impact inflation had on finances, or what was meant by having a properly diversified portfolio. Probably the most crucial revelation was that their research revealed proof that those who were not as financially literate were much less financially prepared to retire.

Their research looked to address the concern of: which individuals had greater financial knowledge, did those individuals understand their financial decision-making abilities correctly, and from where did those abilities originate from. To that point, they had created and applied an updated group of survey topics on financial knowledge and retirement readiness for participants. With these new questions, they made it where they could determine financial knowledge in a more practical way than before now. That collection of data also allowed the authors to connect those enhanced unbiased methods with participants' self-evaluation of their amount of financial literacy, and to match up what individuals actually understood with what those same individuals assumed they understood. First and foremost, they sought to uncover the connection between financial knowledge and retirement readiness by analyzing the data about participant's financial education obtained through training prior to going into the work force and definitely prior to beginning the retirement planning process.

Their findings revealed that individuals had a hard time accomplishing simple financial computations, and also those surveyed did not have the appropriate level of understanding of stock market fundamentals like how the equity markets operated, how to spread out risk, and

how assets were priced. Additionally, they found that individuals that claimed greater amounts of financial literacy typically rated particularly well on the impartial data they collected. Lastly, they revealed that financial knowledge is critical to increasing retirement readiness, after making adjustments for possible causes for predispositions.

The primary purpose of the U.S. Securities and Exchange Commission (2016) was to safeguard consumers; ensure fair, orderly, and efficient markets; while enabling investors to build wealth. The commission was designed to encourage a situation where equities could earn the faith of the general public. The commission provided online tools that could be utilized by everyday consumers to validate the history and experience of a securities broker and to find frequently asked questions regarding the security markets.

Due to the number of new investors in the market who were looking at equities as a way of assisting them in protecting their financial dreams, paying their mortgages, and paying for their kids' tuition, the SEC's goal of watching out for the consumer was even more convincing now than ever before. While different investments might be captivating and complicated, at the same time, there is significant potential for reward. The world of banking is different because funds are protected by the Federal Deposit Insurance Corporation (FDIC); however, equities, fixed income and similar holdings could go down in value, meaning that they were not guaranteed. For this reason, being involved in investments was not for the faint of heart. Without doubt, the best approach for consumers to make the wisest financial decisions on how they invested in the stock market was through due diligence and seeking advice.

The regulatory guidance that oversees the markets here in the U.S. came from a basic and candid notion, which is every consumer, regardless if it is a big firm or an individual investor, should have accessibility to pertinent information regarding a particular stock before purchasing

it, and for the time that they own that security. To obtain that, the U.S. Securities and Exchange Commission mandates that corporations that are traded on the market be required to fully reveal important financial data to all investors. The website offered basic information to all consumers to utilize for individual consideration if they should purchase, sell, or own a certain equity. Only with consistent access to well-timed, all-inclusive, and valid data could individuals come to logical conclusions about investments.

The U.S. Securities and Exchange Commission is crucial in governing investors when it comes to the equities arena, which involve the various exchanges (i.e., DJIA, Nasdaq, and the S&P), registered broker-dealers, financial advisors, and investment companies. In the U.S. Securities and Exchange Commission was mostly focused on encouraging the distribution of key equity data, helping to ensure fairness, in an effort to eliminate the potential of fraud.

The research by Liebowitz (2016) advocated that individuals who have recently completed college needed to fully understand the principals of individual finance and acquire the abilities and understanding that would be necessary to make educated choices and be accountable for their individual financial welfare. Recent college grads are encountered immediately with a vast assortment of complicated financial hurdles and high-level choices; however, most did not have the education and know-how to come up with sound, educated assessments on how they should use their resources and prepare for their financial goals and objectives.

Liebowitz's literature reviewed what individuals could do to enhance their understanding of financial comprehension and training. The research went over the implementation of collaborative tournaments and seminars, networking, and financial knowledge competitions along with more formal training. It provided consumers an example of methods and familiarities

in the area of financial knowledge. Separated into three sections, the literature went over the various financial knowledge tutorials for all levels of schooling including graduate and post-graduate.

Financial knowledge courses, provided findings from industry leaders throughout the field of financial knowledge. Liebowitz's literature was a continuity guide for professors, professionals, and politicians on the way and reasons to approach this country's inability to properly teach future investors in the principles of financial knowledge. It needs to be mandatory reading for anybody that is concerned about the future development and consistency of the country's economy.

Quite possibly the most argumentative concerns from Arrfelt et al. (2015) was the comprehension of organization effectiveness and the part that corporate leadership played. Strategic management articles going all the way to the roots of strategic leadership have consistently defended that the corporate role in strategic management and configuration have drastically influenced the economic outcome of the departments inside the organization. Academia that focused on the field of strategy had attempted to measure the comparative influence that an organization's home office had on the outcomes that stemmed from individual branches. Findings were mixed, earlier research found there was an impact; whereas, later research found the opposite.

Previous research, though, normally did not offer any explanation on ways in which the home office could drive outcomes other than indicating that any influence connected to the home office impacted branch office outcomes was in its own a home office impact. Namely, the research did not explain which policies, competencies, or choices, was the result of a home office directive, understood in this research to match up with earlier studies as an indicator that proved

impact of home office factors on how the individual branches performed. Their research was directed at understanding what was preventing any potential progression by looking at and understanding to what extent the strategies of the home office impacted the results of the individual branches.

Overall, it was determined that by looking into the impacts of a crucial home office implementation of ensuring the individual branches properly diversified asset portfolios, their research revealed and looked at the various gaps in the existing literature, which provided exceptional comprehension into ways a key active leadership ability could have an impact on the home office's influence on individual branch performance. Since very little research had looked into that correlation, their research needed to be seen as the initial process in creating a better understanding when it comes to the impact of how financial allocations influence performance overall.

The reason behind the article by Porto and Xiao (2019) was to look at the possible impacts of individual financial literacy and the need for professional financial guidance. Earlier literature had reviewed the various backgrounds, financial situations, and financial capability issues on the need to have professional financial advice. Their research determined that there was a significant need out there for financial advisors. Getting financial education was comparably connected to credit counseling. Those outcomes revealed proof of the corresponding design of financial education. What was so important about Porto and Xiao's research was how they revealed that investors with financial knowledge had increased odds of looking for financial guidance.

In consumer and individual financial studies, there was an increasing concern about the relationship that education had on seeking out a professional financial advisor. Along with

obtaining financial training, getting advice from an advisor could give individuals the knowledge to make improved financial choices. That knowledge could be presented in a class setting or virtually. Financial education needs to be offered primary and secondary education, universities, and in the office environment. Financial knowledge added to financial literacy and the individuals' overall financial quality.

Financial knowledge could be generally understood as the individuals' capacity to utilize financial data to help make wise choices in regards to creating a financial plan, building finances, managing credit, and preparing for retirement. To eliminate any possible misunderstanding, they used financial knowledge as a way to address the limited description of financial literacy in their article. Investors might elect to go out and look for professional advice or they might decide to take a financial training course depending on their own opinion of the financial knowledge they feel they possess and focused on the particular financial problems that they were experiencing. Additionally, it is possible that individuals who have completed a financial training course may even start to understand the pros and cons of looking for assistance from a professional financial advisor.

Lim et al. (2014) reviewed how the worry that undergraduates experienced over finances and self-efficacy and how that related to searching for a professional to help them. By taking an intellectual methodological approach, the authors concentrated on the impact of that financial self-efficacy had on the correlation that existed among stressful financial situations and reaching out for professional advice. Information collected from surveys conducted on students were examined. The outcomes of the research revealed that individuals who were African-American, who attended some level of financial education, had higher outstanding college debt, were more worried about their finances, and had greater financial self-efficacy are more likely to look for

assistance from a financial advisor. A diminishing position of financial self-efficacy was seen, even though the impact was somewhat insignificant. This is great news for financial advisors, professors, and specialists, because they are able to use this information to help finding groups of people that are not taking full advantage of all the services offered, improving the chances of locating the individuals who could use their help, and improving the chances that financial data would be included as a precursor to providing quality service.

Moreland (2018) determined that guidance from a financial advisor was one way to help develop financial behaviors and the financial future of investors. Moreland's article looked at if taking advice from a professional advisor had any connection to any other aspects of that person's financial life. A thorough review of the information collected from the NFCS revealed seeking financial guidance did have a positive connection with monetary habits and took into consideration other significant factors, one of which included financial knowledge. In addition, the outcome found individuals benefitted more when they sought out professional guidance when the individuals did not have a lot of financial knowledge. The author's findings revealed that the impact that professional advisors had on individuals when they offered sound financial guidance could increase the overall quality of financial decisions within society as a whole.

People today encounter much more complicated financial situations than there ever has been. There is the transition that has occurred over the years from the old style pension programs to what most people are familiar with, the 401(k) plans. There has also been a move that has seen more individuals taking out larger student loans to fund college, a pretty drastic increase in the various option when it came to investing, and the monetary problems that people could experience due to living longer. All of these concerns had amplified the intricacies of individual

finances. Being able to come up with sound financial choices was becoming more imperative to having a positive impact on an individual's financial future.

The correlation that exists among “knowing and doing” when it came to facing financial scenarios had seen substantial focus from academics. A person's financial behavior had been identified as one of the key influences that had a direct impact on financial success. Often, financial behaviors had been measured by observation when consumers do particular things like establish a budget, stay away from payday loans, not bouncing checks, establishing a nest egg for when they retired, and having an emergency fund. A particular financial behavior, seeking out a professional to provide sound guidance, was different because it might reveal certain financial aspects of individuals and encourage people to make positive adjustments to other financial areas of their life.

Professional advisors were able to help clients achieve economic success by offering investors training programs and conferences. Those activities were designed to increase the financial capabilities individual preparing to pay for college, people thinking about creating a business, people thinking about getting a mortgage for the first time, and those getting ready to retire. Moreland's research increased their comprehension of the correlation that exist among getting guidance from a finance professional, knowledge and other financial activities.

Sayinzoga et al. (2016) designed a study that focused on individuals to determine what influence financial literacy education had on financial knowledge and the associated actions. The education improved the financial literacy of respondents, modified how they saved money and the likelihood of taking a loan, and had an encouraging impact on entrepreneurship. That being said, in the immediate-term, it did not have a substantial effect on salary. Their research uncovered that improved financial literacy had a direct impact on clarifying changes to financial

behaviors. In addition, the authors went on to evaluate if financial literacy poured over from those who attended training to others around them, however they were unable to see any proof to justify that.

The research by Van Rooij et al. (2012) depended on all-inclusive levels of financial literacy, they offered proof that there was a direct connection that exists among financial knowledge and household wealth. They went over a couple of areas that financial knowledge could enable the chances of gaining additional wealth. To begin, financial literacy improved the chances that the individual would invest in equities, which offered the opportunity for investors to take advantage the stock market. Next, financial knowledge had a positive correlation when preparing for when they retire and the creation of wealth accumulation strategy had been proven to increase financial standing.

The connection between financial literacy and the associated behaviors is critical since households are expected to play a large role when it comes to managing household finances and planning for retirement. Families accumulate significantly various degrees of capital. Having a diverse array of salaries, likelihoods of leaving behind an inheritance, reasons behind having an emergency savings, time tables, and life expectancy, all added to the overall distribution of wealth and had been studied considerably. The correlation between gathering wealth and financial knowledge had not had nearly as much focus. The authors released the details on the outcomes from an extensive survey which was created to help improve investors' financial knowledge and dissect the connection that exists among financial knowledge and family financial stability.

Fernandes et al. (2014) had found that representatives had supported the idea that financial literacy was a required remedy to the growing intricacy of individuals' financial

decision-making as compared to previous investors. This research found that mediations to increase financial literacy described a minuscule percentage of the discrepancy in financial behaviors reviewed, having a lower impact on individuals with lower income. Similar to most things learned over time, financial training would also slowly degrade as months pass by; including very in-depth training that include significant amounts of time dedicated had no impact on financial actions nearly two years following. Relational examinations determined that literacy found connections that had a more solid tie to financial behaviors. They led a few different experimental evaluations, and they found that a portion of what they learned through education would decrease significantly once the researcher removed certain variables for emotional habits that had been left out in previous studies. Finance-based training as understood currently had severe restrictions that had seemed to have been removed to create a greater impact on research. They envisioned an abbreviated approach to financial training that was less developed. They recommended a reduced yet realistic opportunity for timely financial education connected to particular attitudes it was designed to assist. The authors ended their research by looking at the features of behaviors that could have an on financial education and how it could provide options to assist financial behaviors of individuals.

Gentile et al. (2016) reviewed the correlation that existed concerning the tendency to obtain advice from a financial advisor, as it related to financial literacy and overconfidence. The urgency for seeking a financial advisor was determined to have an association that benefited the investor's financial knowledge; however, it was adversely associated with overconfidence, which was determined through the misunderstanding with what investors thought they were able to do and what knowledge they had in reality. The investors who thought highly of their own abilities ended up being considerably and adversely related with greater amounts of financial knowledge;

however, financial knowledge was increased for male investors who had more money and were more reluctant to take risks. Those outcomes revealed that professional advice was more supplemental then it was a replacement to financial capability; therefore, this meant that issues regarding regulatory guidance of financial advisors was insufficient to watch out for consumers with less knowledge who needed it the most. Additionally, behavioral characteristics like self-confidence did have a part in monetary decisions and were directly connected to the quality of financial knowledge. Consequently, it was determined that consumer literacy programs were likely prove to be positive both directly by increasing financial competence, and indirectly by increasing individual insight into their financial capability and by reducing overconfident behaviors and developmental preferences. Their research added to the discussion on the progression of financial counsel as a means of watching out for the consumer. In addition, the research offered pertinent regulatory awareness; there were particular instances where a large percentage of people demonstrated a reduced level of knowledge, which resulted in an increased tendency where investors would seek out unprofessional advice instead of professional financial advisor.

The purpose behind the research of Grable and Chatterjee (2014) was to report on how much families were able to mirror what the expected financial behavior was as compared to their individual timeframe for preparing for their future. Their theory forecasted that families would typically try to avoid risk whenever possible. The families who are investing with the least amount of time to plan should be the ones who are most concerned with avoiding market fluctuations. Their research projected to what extent adjustments to net worth and fluctuations of net worth would change the period in which planning would take place. In contrast to the anticipated connection that was expected to exists among planning timeframe and how it related

to fluctuations to net worth, outcomes from the authors' research revealed that survey participants who had the least amount of time to plan for their retirement years saw less volatility to the growth and their wealth fluctuated more. The outcomes of Grable and Chatterjee's research identified a void and should be able to identify the importance of having a professional firm prepare a solid financial roadmap for the future.

Calcagno and Monticone's (2015) research revealed that families with reduced amounts of financial knowledge indicated that they were more vulnerable of making poor choices when it came to their finances. During their research, they reviewed what impact that the consumers' financial knowledge had on the decision-making process of seeking out a professional financial advisor. They found that most financial professionals had trouble solving financial literacy issues. Largely, this was due to investors who did not have adequate amounts of financial knowledge were not as probable to seek advice from a financial professional; however, those that did were more willing to allow discretionary trading in their accounts or, if not, they would avoid aggressive investments all together. Financial professionals would spend more time and energy on consumers who were more knowledgeable, because they expected those investors would be more willing to take advice from them. A key takeaway from their research was that individuals that were not as knowledge on investments, were not as willing to talk to a financial advisor; however, investors that had higher levels of financial literacy were more willing to heed professional advice.

Timothy Keller (2012) revealed some of the ways the Lord would want individuals to use their occupations and professions to demonstrate significance and commitment. Pastor Tim Keller provided this advice to all levels, which included students, blue-collared workers, and corporate leaders. For more than 25 years, Keller taught on the connection between occupation

and spiritual calling. Through this book, Keller gathered his thoughts into a meaningful and realistic way to be available to people everywhere. Having an unfathomable belief and frequent enlightening guidance, the author demonstrated to individuals that Christian knowledge was extremely applicable to their concerns relating to their everyday work. The truth of the matter is that the believers' idea of occupation is that they work to serve not themselves but others. Words of wisdom that could be the basis of a prosperous professional and well-maintained social life. The author revealed ways in which being one's best, being upright, maintaining self-control, having a creative spirit, and holding a desire greater than self in the place of business could assist others and could also be seen as a way to praise God and not self.

Peel (2008) researched how those in a position of authority have certain rights, roles, and power due to God giving that authority. A trustee is not the owner; the trustee directs and manages what has been bestowed upon him for the Lord who is the owner. Conceit and vanity cannot maintain a position of power in that configuration. The owner of every life and the whole creation was God alone. The Lord maintains all the privileges of being the owner.

No institution, regardless if it is family, corporations, or religious institutions, was designed for those positioned to lead, and it was not designed by those who lead. All things that everyone has and that is to come, comes from the King of the universe. The Holy Word was precise and to the point. Psalm 24 verse 1 explained that God controls everything, the world and everybody who lives in it. The author reacted to this heavenly statement, by revealing that there is not a single portion of the universe that the Savior fails to claim ownership! All things in the universe was the Lord's simply due to the fact that He was the creator and maintained that right. Everything that everyone had contributed to help fulfill God's plan, including the talents and capabilities, were from the Lord, Jesus Christ. Even more, they did not maintain ownership of

the outcome produced by their labor. God proclaimed this to His rescued chosen prior to going into Canaan. Some people might think to themselves that what they have financially was created their own hard work and perseverance; however, Deuteronomy 8:17-18 helps to remind Christians to never forget that all of that came from Christ the King, for it was He who provided every person with the wisdom and strength to create those financial blessings.

Additionally, each single person was God's through the design of his creation and through the restoration story. Individuals need to understand that their body was a sanctuary of God's Spirit, that dwelled within them, through which was gifted to them through the Savior. Individuals were not their own; they were purchased at a cost. For this reason, they should respect the Lord through respecting themselves.

People do not have ownership of anything, this includes their own bodies. Even though many people would like to be identified by how large their house is, how fancy of a car they drive, or their position in the corporate world, the author explained that everything he was and everything the author had was the Lord's. As a manager, the author understood that he needed to always be cognizant how his time here on Earth, special talents, and stamina, along with all the resources, the individuals, and various opportunities were a gift given by the Lord. Those were not theirs to use any way they wanted, regardless of how difficult they might have toiled and regardless what they had added to it. Their only role was to oversee, they never owned.

Creswell (2014) understood that even though quantitative studies and qualitative studies were both approaches that analysts could use to collect data and come to a decision, the theoretical framework of the two were not similar. Those dissimilarities of the two frameworks were typically seen as distinctly opposing methods with completely opposite epistemological fundamentals. Epistemology was the area of study that dissected the concern of ways individuals

would gain knowledge and the way individuals would validate the accuracy of that knowledge. The epistemological foundations between quantitative studies and qualitative studies were not at all similar, because quantitative research was focused upon positivism and qualitative research was more focused with constructivism or interpretivism.

The way that both positivism and quantitative studies were related to each other was pointed out through the study material along with the formal explanation of the type of quantitative study. Quantitative studies was founded in the belief that there are universal truths that apply to all could be understood and that the truths that were understood were pretty reliable over a certain period and throughout various cultural factions.

Garson's (2012) research explained how every statistical process had fundamental expectations, several were even more rigorous than the rest. One set of examples, disruption of those assumptions would fail to have an impact to the outcomes of those valuable studies. While other examples, any disruption of the assumptions would undercut important studies. Determining that an individual's information qualified the assumptions of the process that was being used was an anticipated part of every peer-reviewed entry, study, and academic research that was based on quantitatively. For every part of the Statistical Associates series on statistical and research methodology topics, the expectations of every statistical process were specified in a segment focused on assumptions. His research delivered an over-all summary of the statistical expectations that a researcher would likely come across during statistical studies most often.

Lavrakas (2008) wrote on how highly-respected academics across the globe and with academic research has shown that the Encyclopedia of Survey Research Methods offered advanced material and procedural instances in the area of survey research. Even though there were existing material and resources available for analyst to utilize for their studies, there were

not any as detailed as Lavrakas' collection, and not one offered the information in a way that was presented in such a targeted and user-friendly way. Having significant options available, this research utilized a Total Survey Error approach which looked at every characteristic of potential survey error.

This study was a methodical flow of processes designed to collect data to improve understanding and to assist in making wise choices. By the 1950s, surveys were starting to be regularly implemented in federal establishments, corporations, universities, legislators, and the media outlets. It was not an overstatement to proclaim that valid surveys had transformed into an essential requirement for the effective running of today's cultures, and therefore a person's future.

Even though there was enlightened and increased research that was created primarily in the last fifty years regarding the numerous approaches of conducting research by analyst, there was not a centrally located collection of data that could highlight all the different styles of surveys where analysts could go, particularly individuals who had never conducted these types of studies. Therefore, the determination of the Encyclopedia of Survey Research Methods was to meet that need by offering an extensive (but not all-inclusive) collection highlighting the various approaches that analysts and researchers could turn to in an effort to create accurate and significant surveys.

Yilmaz (2013) identified that academic scholars in all fields of study should be aware of different ways of researching when it comes to making a choice about which approach is the best to implement at the beginning of their research. There were a couple of primary methods of study that could be used in the analysis of both the public and the private arena. Those methods were quantitative qualitative research. Even though articles existed that covered the various

methodologies that explained the similarities and dissimilarities between the two different methods. The goal of the author's research was to describe the primary dissimilarities between the two different methods.

The quantitative method would be used for a study that defined a phenomenon based on numbers that were examined using a statistical approach. The qualitative approach was harder to explain since it was a complex design reinforced by varying examples. The author explained the qualitative method as any approach to a study that generates an outcome that was not determined by statistics or through another type of quantification. Yilmaz's explanation was basic because it concentrated on processes and methods utilized to gather and examine information, disregarding additional features of other study methods. It also typically explained the definition using a quantitative viewpoint instead of concentrating on features. Yilmaz described the qualitative method as one that had a wide-ranging assortment of information covering a multitude of scenarios during a prolonged amount of time in an effort to get a better understanding not available when utilizing other approaches to explore various studies. Pulling from various studies, Yilmaz explained it as research that was a developing, informative and representational method of individuals, instances, occurrences, public conditions and procedures in their expected surroundings, so that it could show the significance that individuals attribute to everything they see around them.

Transition and Summary of Section 1

Lu et al. (2017) argued that when individuals took hardship withdrawals or loans from their retirement accounts, it had a negative impact on the long-term success of an individual's retirement financial goals. Financial education had been associated with an increase in an individual's financial literacy and capability. In turn, reduced literacy and capability pose a threat

to the financial well-being of military members and military readiness (Sims et al., 2017).

Research on the association between financial education and financial capability had been focused primarily on the general population, while overlooking military members.

Comprehending how those constructs influenced the military community was critical given the importance of military readiness (Atuel & Castro, 2018). Being able to understand the relationship between financial education, financial literacy, and financial capability would assist in providing the missing piece to the financial condition and well-being of military men and women. This study was designed to assist military leaders and financial advisors design a response plan to proactively address and enhance individual financial literacy and capability, while reducing the amount of loans and withdraws from retirement accounts. It was important to recognize the history of the issue at hand in order to have a deeper understanding of the problem itself.

Section 2: The Project

This section reiterated the purpose statement from section one and then defined the role of the researcher and the research methodology. This section also clearly defined the purpose of the research and how the researcher fit into the process, which would allow readers to better understand what was being researched and who was conducting the research. Explaining the methodology would give the readers a deeper understanding of the process used to conduct the research.

Purpose Statement

The purpose of this quantitative study was to add to the body of knowledge by expanding on and examining the potential effects financial education had on overall financial decision-making and utilization of personal financial resources for U.S. military personnel. The larger

problem that was explored was through an in depth study of military members and the effect that financial education had on seeking out professional financial advice. The objective was to add to the body of knowledge relating to how access to financial education impacts financial capability and assist in closing the gaps in existing literature.

Role of the Researcher

The researcher has worked in the field of finance for 23 years and served over 20 years in the United States Air Force as a Senior Financial Analyst. The researcher holds an Associate in Applied Science in Financial Management, a Bachelor of Science in Business Management, and a Master of Business Administration. Additionally, the researcher currently works for a Fortune 500 investment firm and is a FINRA Series 7 and 66 licensed financial advisor/broker. For this research, the role of the researcher was to identify and analyze the data collected from the 2018 National Financial Capability Studies (NFCS), which were funded by the Financial Industry Regulatory Authority (FINRA) Investor Education Foundation (IEF).

Overall, the researcher conducted this research and analyzed the data while maintaining a completely unbiased position. It was not the role of the researcher to take a position in the study, but only to present the facts for review. The goal was to present evidence collected from well-respected peer-reviewed journals covering an area that applies to the researcher's profession. Ultimately, the end result should produce research that, Zyphur and Pierides (2019) suggests, is ethically sound and is able to stand the test of empirical scrutiny.

Research Methodology

The researcher selected the quantitative research method in order to understand how members of the U.S. military compare to the general population when it comes to the amount of access they have to financial education. This quantitative research was accomplished by the

researcher analyzing secondary data, which was initially compiled using a respected research collection process. By utilizing a national survey with significant data, the researcher was able to use the extensive information that is made available to many organizations, which offers researchers the ability to conduct independent research utilizing quality data that is highly regarded. This is a fixed research design, which utilized and analyzed data collected from the 2018 National Financial Capability Studies (NFCS), which were funded by the Financial Industry Regulatory Authority Investor Education Foundation (FINRA IEF). The NFCS data pulls from an online survey of over 25,000 American adults from all 50 states and the District of Columbia. The data is representative of the American population (FINRA IEF, 2019). Quantitative studies rely on numerical data that has been collected and analyzed to describe, explain, and predict phenomena of interest and help to fill in the gaps in existing literature (Creswell, 2014; Yilmaz, 2013).

Quantitative researchers have to adhere to strict moral and ethical standards while researching any study. Researchers are required to show a certain amount of respect and take caution to protect the privacy of participants (Bodgan & Biklen, 2007; Creswell & Poth, 2018). Prior to a researcher moving forward with a study that involve individuals, they need to ensure that the Institutional Review Board (IRB) has provided approval for the study and methods (Neuman, 2011). This study ensured that all participants who participated in the research maintained their privacy and autonomy (Bodgan & Biklen, 2007; Neuman, 2011). This study looked at both the possible pros and cons of all the data and then implement purposeful processes to maximize the protection of those surveyed (Creswell & Poth, 2018; Bodgan & Biklen, 2007; Neuman, 2011).

Participants

The participants for the 2018 study consisted of 27,091 adults (FINRA IEF, 2019). The FINRA study allowed for 500 participants from each state, to include Washington D.C. In order to allow researchers more flexibility, the 2018 study had oversamples. The study allowed for an extra 1,250 each from Oregon and the state of Washington. Participants were collected through the use of the non-probability quota sampling approach derived from well-known and respected web-based panels that included millions of Americans who were requested to participate, and were enticed with something in return for completing the survey. Research Now, Survey Sampling International (SSI), and EMI Online Research Solutions, offered the panels for this survey. Participants took the survey themselves online at their convenience.

The study included a military survey that was designed to better understand the numbers between the state-by-state and those who were veterans of the military. Before completing the Military Survey, the survey was modified to increase the likelihood that an adequate sample size could be established, improving the number of participants who were younger and who were considered to be of junior rank. This modification was done in cooperation with the U.S. military to help improve participant classification questions and establish a weighting structure to more accurately estimate the genuine veteran population. The 2018 State-by-State Survey had 3,055 participants that indicated that they were or have served in the military (FINRA IEF, 2019).

Population and Sampling

Since a population could often times be too large to properly investigate, quite often research would be limited to one or two samples pulled out of the population. An appropriate sampling would include a majority of the data regarding a specific population limitation; however, the difference that exists among the sample and the population would need to be set up

in a way that would let accurate extrapolations be established regarding a population pulled out of that sample (Rahi, 2017).

Subsequently, one of the primary components needed for sampling required that each participant that was pulled to not have any knowledge that they had the possibility of being incorporated into it; an expected proposal would be that the chances would likely be even. The survey was designed so that the decisions would be made autonomously; therefore, the selection of one participant would not have an impact on the odds of another individual being selected. To make sure the survey made the selection in a manner that was purely random, like flipping a quarter or, more specifically, the implementation of a random number table. For this reason, the term “random” is more designed to describe the way in which a sample was chosen and not be confused with the way in which the sample was identified.

Discussion of Population

The population included adults from all 50 states and the District of Columbia who were at least 18 years old or older. There were an average of 500 participants from each state, including Washington D.C. In order to allow for extra flexibility for analysts handling the information collected, the 2018 study allowed for oversamples. The 2018 study allowed for 1,250 respondents both in Oregon and Washington. Participants were collected through the use of quota sampling that was non-probabilistic using reputable web-based panels comprised of 2,576,330 Americans who were requested to participate.

Discussion of Sampling

All three of the panels involved in the survey utilized survey methods by which a prospective candidate was led to one of many surveys that were open, which was determined by sample needs and if the participant met certain qualification criteria (FINRA IEF, 2019).

Consequently, the invites that were emailed out to the population were not direct solicitations to the NFCS survey. While web-based research collection methods are consistently being develop and improved, survey routers have since established themselves an approach that is universally recognized and utilized as the preferred method in sending out the sample more proficiently, especially when it comes to administering the panel and retaining the information (FINRA IEF, 2019). The results of the survey were weighted to be an accurate reflection of the U.S. Census distributions, founded on information from the American Community Survey (FINRA IEF, 2019).

FINRA IEF (2019) designed the research in a way that national numbers were weighted to be a more accurate representation of the national population based on age, sex, ethnic background, level of education and region (allowing for modifications for states that were oversampled when compared to previous state-by-state surveys). Regional numbers were also weighted to be an accurate representation of each regional population in terms of how old the participant was, their sex, their race, their level of education and the state they lived in. Likewise, each state's numbers were also weighted to be a true reflection of each individual state in terms of age, sex, race, and educational attainment. Each weight is designed to create an accurate depiction of the entire population for that particular geographic level of research (i.e., national, regional, or state). It is important to note that there is no guarantee that the breakdowns of any subsets within the larger populations, inside these three geographic levels, are able to be captured. There were not any additional weightings utilized to take into consideration if the responses were different from the potential responses of those who did not answer (also known as non-response bias).

All of the panels applied established standards required to validate the true identities of each participant and confirm that the demographic characteristics were both accurate and current. For each individual state, allocations were established to estimate Census distributions for year of birth by sex, ethnic background, highest level of school completed, and salary founded on information collected from the American Community Survey provided by the U.S. Census Bureau. An uncontaminated probability sample having more than 25,000 observations allowed for a projected margin of error of half of one percent ($\pm 0.5\%$), which means the margin of error could continue to go up slightly for sub-groupings pulled from the original sample (FINRA IEF, 2019). Additionally, the survey did not explicitly single out those who were considered the head of their respective households or individuals who were likely to have the final say in decisions that were financial in nature.

Three panels were used to collect surveys for the State-by-State collection. It would be unrealistic to expect that one panel alone could collect enough completed surveys to meet the requirement; therefore, surveys were collected SSI, EMI, and Research Now. All three providers were used in the 2018 survey. Table 1 shows where 1,410,923 invitations were emailed out to prospective participants. From the invitations sent in 2018, 100,611 actually received the survey and at least clicked the link (Table 1). From the surveys that were started, 59,207 were labeled “terminates” because of quotas or if the participant failed to qualify (normally caused by not willing to offer the needed demographic data required for the survey). An additional 14,313 in 2018 did not finish the survey, resulting in 27,091 qualified completes (FINRA IEF, 2019).

Table 1

Participation Data for 2018 (NFCS) State-by-State Survey

			Research	Total	% of	% of
	SSI	EMI	Now	Count	Invitations	Survey Starts
Invitations Sent	676,620	449,966	284,337	1,410,923		
Survey Starts	33,831	26,998	39,782	100,611	7.13%	
Terminates	19,676	13,957	25,574	59,207	4.20%	58.85%
Incompletes	4,140	4,900	5,273	14,313	1.01%	14.23%
Qualified Completes	10,015	8,141	8,935	27,091	1.92%	26.93%

Summary of Population and Sampling

The multi-year National Financial Capability Study (NFCS) is an all-encompassing venture, which was designed to identify the financial capabilities of Americans. The Financial Industry Regulatory Authority Investor Education Foundation (FINRA IEF) authorized this study in cooperation with the Treasury Department and various government agencies. The study was originally started back in 2009 and now continues every three years. The primary goal of the study is to identify fundamental standards of the financial capability of Americans along with studying the ways in which the capabilities change within the various characteristics of not only the social, economic, and geographic, but also includes the literacy of the population. With each study, the research dug even deeper into understanding more about issues that were becoming more and more pertinent as time progressed.

The NFCS compiles data on the financial capability of Americans by pulling from over 25,000 participants. By having a sample size of this magnitude, analysts have the ability to analyze financial capability from the entire population. In addition, a sample this large provides

opportunities to be able to dissect the information in various manners, which allows a more thorough analyses of the various subgroups within the United States.

Data Collection and Organization

Selecting the method in which to collect data was a critical stage during the research process. This quantitative data collection involved utilizing a survey collected through the National Financial Capability Study (NFCS), which was conducted by the Financial Industries Regulatory Authority (FINRA) for the Investor Education Foundation (IEF). Having established clear and concise research questions, the literature was examined to determine which parts of the survey the research needed to focus on to collect the data. Furthermore, the information needed to accurately and fully address each research question was studied before selecting the most applicable method of data collection to make sure that the data needed for the study is comprehensive enough to meet the overall requirement of the research. Finally, the goal was to determine that this data collection method was feasible and would provide the research with more than enough participants to allow for sufficient data to be collected.

Data Collection Plan

Financial capability combines knowledge, resources, access to education, experience, and behaviors. This study is designed to collect comprehensive data in order to analyze and gain a better understanding of perceptions, attitudes, experiences, and behaviors across a significant and diverse group of individuals. The data utilized in this research analyzed the difference that existed between the variables in this study. The analysis utilized archival data that was collected for the 2018 National Financial Capability Study that was conducted by the Financial Industries Regulatory Authority for the Investor Education Foundation. Whitley et al. (2013) identified that there are benefits to using archival data when conducting this type of research. First, the

participants pulled for the survey did not have any knowledge that they had the possibility of being incorporated into it. The survey was designed so that the decisions would be made autonomously, which meant that the selection of one participant did not have an impact on the odds of another individual being selected. For this reason, the invitations that were emailed out to the population were not a direct solicitation from the NFCS survey itself. Additionally, archival data allowed the researcher to utilize a very costly survey that took significant time and resources to create and offered a larger and deeper sample of veteran and non-veteran participants. Lastly, another consideration involved in determining the collection method was how accurate the data was and the trustworthiness of the data collection process. For the FINRA survey, respondent could answer honestly and openly with limited researcher bias.

The archival data for this research is published information created from the NFCS from 2018 conducted by FINRA for the IEF. The NFCS is a survey that compiles data on perceptions, attitudes, experiences, and behaviors of Americans in order to provide a comprehensive analysis (FINRA IEF, 2019). The primary objectives of the National Financial Capability Study is to establish a baseline of key indicators as it relates to financial capability and then gauge how the various indicators vary among demographic, behavioral, attitudinal, and financial literacy characteristics.

Instruments

The 2018 NFCS survey was comprised of data collected and compiled between June and October of 2018. The NFCS did not collect any personally identifying information of the participants any either of the surveys. The survey provides dataset that is available publicly, which contains only individual-level data. The existing surveys have been proven to be reliable and valid (Fan & Chatterjee, 2020; Mottola & Kieffer, 2017; Xiao & Porto, 2019). The surveys

are comprised from previous questionnaires, which were updated and modified to include input from academics, policy-makers, and researchers who have used the data from this research from previous years. The survey had 112 questions that covered 10 topics which included: demographics and classifications (for screening), financial attitudes and behaviors, banking, retirement accounts, government benefits, home and mortgages, credit cards, other debt, insurance, and self-assessment and literacy. Section A of the survey consisted of 22 items which were demographic in nature to assist with screening candidates to make sure the qualified for the study and to determine military affiliation. The remaining 90 survey items measured participant perceptions (See Appendix A for survey).

For this study, the archival data collected from the survey questions that were most significant to the researcher were the questions that had to deal with access to financial education, financial capability, and financial decision-making (Gentile et al., 2016; Kramer, 2016; Lim et al., 2014; Lusardi & Mitchell, 2014; Porto & Xiao, 2019; Xiao et al., 2014; Xiao & O'Neill, 2016). For this study, the independent variable was the access to financial education. This is defined as the participants who identified as having ever served in the U.S. military in any compacity. In this research, financial capability was identified as financial knowledge, financial satisfaction, financial concern, and financial confidence (Robb & Woodyard, 2011; Sherraden & Morrow-Howell, 2015; Xiao et al., 2014). Financial decision-making was identified as taking loans against a retirement account and taking hardship withdraws from retirement accounts (Lu et al., 2017; Thaler & Benartzi, 2004; Young et al., 2017).

Question AM21 was used to determine if the survey participant was affiliated with the U.S. military. In addition, question M40 and M20 was used to determine access to education. To determine if the participants were satisfied with their personal financial condition, questions M4,

J1, J33 and J43 was used. Financial decision-making was determined by using responses to question C10 and C11 from Section C. Table 2 lays out the variables, the related constructs, and the survey questions for the research.

Table 2

Variable, Construct, Survey Question

Variable	Construct	Survey Question
Demographic/Education	Military Affiliation	AM21: “Have you ever been a member of the U.S. Armed Services, either in the active or reserve component?”
	Financial Education Required	M40: “Were you ever required to take financial education?”
	Financial Education Offered	M20: “Was financial education offered by a school or college you attended, or a workplace where you were employed?”
Financial Capability	Financial Knowledge	M4: “How would you assess your overall financial knowledge?”
	Financial Satisfaction	J1: “How satisfied are you with your current personal financial condition?”
	Financial Concern	J33_1: “I worry about running out of money in retirement”
	Financial Confidence	J43: “If you were to set a financial goal for yourself today, how confident are you in your ability to achieve it?”
Decision-Making	401K Loans	C10_2012: “In the last 12 months, have you [or your [spouse/partner] taken a loan from your retirement account(s)?”

401K Hardship Withdrawal

C11_2012: “In the last 12 months,
have you [or your [spouse/partner]
taken a hardship withdrawal from
your retirement account(s)?”

The terms of use section on the FINRA website provides permission to use the data assuming that the research would not violate any of the approved rules or requirements for fair use. While there is sufficient proof that the survey and the data collected is public information and would not violate the terms within the agreement, an extra level of due diligence led the researcher to submit a formal request to FINRA to use the data for this research. A confirmation letter was received from a manager at FINRA giving full authorization for the intended use of this research (See Appendix B for letter of authorization).

Data Organization Plan

The entire survey and all responses is made publicly available online that is available for download either by SPSS file or an Excel file through FINRA’s secure website. The digital file holding the raw data required for this research was maintained on a private computer system that is protected by password. A secondary backup was maintained on iCloud, which uses industry-standard security technologies that employs strict policies to protect private information, and applies the industry-leading technology of end-to-end encryption to preserve the privacy of the data. No one (even Apple) has the ability to access end-to-end encrypted information. None of the participants private personal identifying information (PII), with the exception of general demographics, exists in the data file. For this reason, none of the participants PII was saved to the computer used during the research. At no point during the research was the private information of participants ever be sent or exchanged using unsecured networks. All research

data from the survey was discarded or destroyed in a responsible manner once the information was no longer needed.

Data Analysis

This research is designed to explore how access to financial education impacts financial capability based on available literature. Financial capabilities were reviewed through decision-making and financial capability. According to literature, financial capability is improved by access to financial education (Gentile et al., 2016; Kramer, 2016; Lim et al., 2014; Lusardi & Mitchell, 2010; Lusardi & Mitchell, 2014; Porto & Xiao, 2016; Porto & Xiao, 2019; Xiao & O'Neill, 2016; Xiao & Porto, 2017). Financial education was assessed by the level of access to financial education and participant's rating of the quality of the education based on financial education's strong connection to decision-making and its position as an indicator of financial capability (Gentile et al., 2016; Kramer, 2012; Lim et al., 2014; Lusardi & Mitchell, 2010; Lusardi & Mitchell, 2014; Porto & Xiao, 2016; Porto & Xiao, 2019; Xiao & O'Neill, 2016; Xiao & Porto, 2017).

A thorough review of the data outcomes between financial capability and financial decision-making and how they are impacted based on the access to financial education provided an opportunity for the research questions to look for and determine if there were any difference between education and capability. A thorough review of the existing research allowed for the difference to form the hypotheses to be tested. Once both research questions were answered and the hypotheses of this research were tested, outcomes allowed for better comprehension of what impact financial education had.

The Variables

There were two dependent variables from the data that was pulled based on literature. The first was poor decision-making due to taking loans from retirement accounts or hardship withdrawals (Lu et al., 2017; Thaler & Benartzi, 2004; Young et al., 2017). The other dependent variable was the financial capability of the individual. Both of these outcomes could potentially change based on the independent variable. The independent variable was the treatment measure, which was access to financial education. The third variable were mitigating variables. The mitigating variable was the way that certain people perceived certain events. For example, there were certain events that applied to military participants that did not apply to their civilian counterparts (i.e., how service member might be financially impacted from deployments, etc.). However, the survey was designed to reword questions based on military status. This meant that respondents were shown military-specific wording for several questions, to help eliminate mitigating variables (FINRA IEF, 2019).

Independent Variables: Financial Capability and Financial Decision-Making. Based on the literature, there were four constructs that represented financial capability, the individual's ability to deal with financial matters, financial knowledge, financial capability, financial concerns, and financial confidence. There were two constructs that represented financial decision-making, the individual's decision to take loans against their 401k or to take a hardship withdrawal. The NFCS survey used a Likert scale to measure participant's perceptions. The survey results were converted into numerical values in order to conduct statistical analysis. Table 3 lays out the conversion values for the Likert Scales for the financial capability and decision-making variables.

Table 3

Decision-Making and Financial Capability Conversion

Financial Capability Construct: J1											
Not at all						Extremely				Prefer	
satisfied						Satisfied				Don't	Not to
1	2	3	4	5	6	7	8	9	10	Know	Say
1	2	3	4	5	6	7	8	9	10	98	99
Financial Capability Construct: M4, J33											
Neither											
Agree or											
Disagree,						Strongly					
Strongly				Neither				Agree,			
Disagree,				High or				Very			
Very Low				Low				High			
1	2	3	4	5	6	7	8	9	10	Know	Say
1	2	3	4	5	6	7	8	9	10	98	99
Financial Capability Construct: J43											
Not at all			Not Very		Somewhat		Very			Prefer Not to	
Confident			Confident		Confident		Confident			Don't Know Say	
1	2	3	4	5	6	7	8	9	10	98	99

Decision-Making Construct: C10, C11			
Yes	No	Don't Know	Prefer Not to Say
1	2	98	99

Dependent Variable: Education Access. The response to the survey question AM21, “Have you ever been a member of the U.S. Armed Services, either in the active or reserve component?” was used to determine military affiliation. The possible responses on the survey were “Currently a member of the U.S. Armed Services,” “Previously a member of the U.S. Armed Services,” “Never a member of the U.S. Armed Services,” or “Prefer not to say.” FINRA also asked M40, “Were you ever required to take financial education?” and question M20 “Was financial education offered by a school or college you attended, or a workplace where you were employed?” These questions also determined access to education.

For the initial stages of the analysis, a dichotomous variable was used, which are nominal variables that have only two levels or categories (Morgan et al., 2013). A dichotomous variable was established based on the answer to the question, “Have you ever been a member of the U.S. Armed Services, either in the active or reserve component?” The participants who responded “Currently a member of the U.S. Armed Services” or “Previously a member of the U.S. Armed Services” was coded as 1. The participants that responded “Never a member of the U.S. Armed Services” was coded as 2. A positive response to “Currently a member of the U.S. Armed Services” and “Previously a member of the U.S. Armed Services” were both considered financial education for the purposes of this study since legislation (10 U.S. Code § 992) requires military servicemembers to undergo financial training (Financial Literacy Training, 2016).

Level two of analysis only included the participants who were not serving or have never previously served. The participants who responded “yes” to “Were you ever required to take financial education?” were coded as 1, and the participants who answered “no” were coded as 2. Level three identified participants who were offered financial education by their school or their employer. Participants who answered “Yes, and I did participate in the financial education” were coded as 1, and those who answered “No” or “Yes, but I did not participate in the financial education offered”, were coded as 2. Those who answered “Don’t know” or “Prefer not to say” on both level 2 and level 3 were coded 98 and 99 respectively. Table 4 details how the financial education variable were recoded.

Table 4

Demographic/Education Conversion

Variable/Construct/Question	Current Scale	Recoded Values
Level 1 Military Affiliation: AM21	<ul style="list-style-type: none"> • Currently a member of the U.S. Armed Services • Previously a member of the U.S. Armed Services • Never a member of the U.S. Armed Services • Prefer not to say 	Affiliated = 1 Not Affiliate = 2 Prefer Not to Say = 99
Level 2 Financial Education Required: M20	<ul style="list-style-type: none"> • Yes • No • Don't Know • Prefer Not to Say 	Yes = 1 No = 2 Don't Know = 98 Prefer Not to Say = 99
Level 3 Financial Education Offered & Utilized: M40	<ul style="list-style-type: none"> • Yes, but I <u>did not</u> participate in the financial education offered • Yes, and I <u>did</u> participate in the financial education • No • Don't Know • Prefer Not to Say 	Yes and Did = 1 No and Yes Did Not = 2 Don't Know = 98 Prefer Not to Say = 99

Descriptive Statistics

Descriptive statistics helped to give the research more information regarding the distributions of the variables. By helping to review and define the data, descriptives help to identify for patterns that may not necessarily be immediately obvious to the researcher when reviewing just the raw data on its own (O'Dwyer & Bernauer, 2016). Using the descriptives command in SPSS, the researcher was able to look at broad category of measures. Skewness was used to measure to what extent the distribution deviated from the mean. During this stage of the research, the total number of observations (sum of N) and the number of missing values were

calculated. Based on literature by Morgan et al. (2013), variables that were between -1.00 and 1.00 were considered to be an acceptable range of skewness and the data was determined to be normally distributed. The decision tree was applied to measure for deviation from normality and to find out if parametric or nonparametric statistical analysis was required.

Inferential Statistics. Once descriptives were analyzed, inferential statistics were used to determine an outcome that could go past the data alone. The decision of which statistical analysis that was used was based on the Likert scale data. Traditionally, the answers to individual Likert-type questions are considered ordinal data, because they may have obvious rank order, but not equally distances between variables (Bonett, 2020). By focusing on military verses non-military with no different people groups, the decision for parametric and non-parametric data was used. For non-parametric with data that was ordinal (or skewed interval), with two samples that were independent, it was recommended to apply the Mann-Whitney U test (Sprinthall, 2012). Sprinthall (2012) also suggested that for parametric with 2 samples that are independent, to use the Independent Samples t Test. Research suggested that if the data were approximately normally distributed, then parametric tests would be more appropriate (Bonett, 2020; Salkind, 2014; Sprinthall, 2012).

The two dependent variables for this research, decision-making and financial capability, were collected from the survey and were treated as ordinal data for purposes of statistical analysis. For the initial stage of the analysis, financial education was established as a dichotomous variable. For the first part of the analysis, a Mann-Whitney U test was used to look at the difference between both the independent and dependent variables that were being studied. It was suggested to use the Mann-Whitney U test when a variance was found to exist or for skewed data (Karch, 2021). The Mann-Whitney U theoretical range of U is from 0 to $U_1 + U_2$, in

which 0 is complete separation between groups, (H_0 most likely false and H_1 most likely true) and U_1+U_2 is little evidence in support of H_1 . Under the direction of Cohen (1988), the research examined the strength between variables in which $r = \pm 0.10$ was weak/small, $r = \pm 0.30$ was medium, and $r = \pm 0.50$ was strong/large (Rosenthal, 2012; Kühberger et al., 2014).

During the next stage of the research the access to financial education variable was coded for dichotomous variables, but in this case the objective was to review the changes in the observation of decision-making and financial capability between those who have a military affiliation and those who have never served. This analysis was directed to the second research question. To conduct the research, the two sample t-test was applied. The application of this inferential statistical test was dependent upon the two sample t-test assumptions not being violated. If the t-test assumptions were violated, the non-parametric Mann-Whitney U test would be applied. The two sample t-test and the Mann-Whitney U test are beneficial when looking to see if there was a statistically significant difference between the means of two unrelated groups. (Allen, 2017).

Hypotheses Testing

For each hypothesis, a Mann-Whitney U test or an Independent Sample t Test was performed to measure for the strength and direction of the monotonic difference between two variables. This test was the most appropriate based upon the variables that were included in the research and the type of question being addressed. The research included all pre-tests that were needed to justify the selected test as well as any possible post-hoc tests. For any tests that group data using mitigating variables, the research discussed if and how the sample size was appropriate to maintain generalizability.

Summary of Data Analysis

To analyze the data, the Morgan and Leech SPSS software was applied along with literature dealing with SPSS and statistics was studied to help with this section. In the end, each hypothesis and variable in the study was included in this section and analyzed. The ways in which the hypotheses would individually and collectively address each research question in the study was also discussed.

Reliability and Validity

Reliability and validity are both concepts that assisted in determining the quality of this research. Both concepts helped to identify how well the chosen method or technique was able to test or measure accuracy of the research. Reliability focused on how consistent the research was, while validity was more about how accurate the research actually measured the construct being studied. One benefit of the survey material utilized in this research was the quality of the research panels. According to the 2018 NFCS survey methodology report, three online panels (Survey Sampling International, EMI Online Research Solutions, and Research Now) utilized “industry-standard techniques” in order to validate participants and ensure that the demographic characteristics were accurate and current.

Reliability

Reliability was focused on consistency. The focus was to make sure the same result or outcome could be consistently achieved when applying the same methods under the same circumstances (Frey, 2018). For this research, the objective was that each time the test was ran that the outcome was the same every time. To assess the homogeneity (or internal consistency) of the independent study variables, the Cronbach’s α was applied. This analysis helped to determine if the reliability of the independent variable and construct could be established.

Literature supported this type of reliability test when conducting research based on the use of a single survey (Taber, 2018).

Internal Consistency Reliability. A reliability analysis was conducted to ascertain the internal consistency of the test items within the survey that was used to determine the dependent variables. For this part of the analysis a Cronbach's alpha was computed, which was considered to be a measure of scale reliability. If the reliability coefficient was .70 or higher, it was determined "acceptable". An exploratory factor analysis (EFA) technique was used for the financial decision-making variable and the financial capability variable. Using previous research, it was determined that there were variables that were unobserved (or latent variables) in the research and were inferred. The exploratory factor analysis helped to identify the structure of the difference between the decision-making and financial capability components with the responses from the survey participants (Hayton et al., 2011). The outcomes of C10 and C11 for financial decision-making and J1, J33, J43, and M4 for financial capability were studied to find out if any of the questions had high or low impact to the independent variable. Any difference that was $>+/- .30$ was considered to have high factor loadings.

The reliability of the data was based primarily on the expertise of the Financial Industry Regulatory Authority (FINRA) that oversaw the study. FINRA falls under the authority of the U.S. Securities and Exchange Commission (SEC) that was led by five Commissioners who were appointed by the President of the United States. In the NFCS technical report, the Office of Personnel Management (OPM) offered an overview of how measures were put into place to help with quality control. The OPM applied two different stages of quality control for the survey data. The quality control was designed to ensure not only the accuracy of the survey data but also the validity. For the first stage, two independent coders designed data numbers using specifications

established in advance and then afterwards they noted the similarity of the outcomes to make sure they agreed. For the next stage, observers conducting the quality control measures were separated into two groups to look at the input and output of data to make sure the data was consistent and homogeneity or consensus existed. This method was brought into line with inter-rater reliability, which is a widely accepted process of determining reliability that is able to address the issue of consistency to the extent in which two or more examiners (or observers) agree (Ock, 2016).

Validity

As with all research, there exists the need to evaluate for potential threats, both internally and externally (Creswell, 2018). Validity was determined by how much and to what level the intervention accurately affects the outcome and not some other factor (Creswell, 2018). There was a high likelihood of internal validity when there was found to be a difference that existed among two or more variables that were not created by another variable (Creswell & Poth, 2018). The factor analysis method was applied to check the validity of the independent variables. Using Factor analysis for decision-making and financial capability determined the validity of distinct internal structure evidence needed to account for the pattern of difference among the set of measures in the sample (Hayton et al., 2011).

For the independent variable, validity needed to be considered since only one survey was utilized to examine the independent variable, access to financial education. In research conducted by Langbein and Felbinger (Shipman, 2007), it was suggested that when only a single item was used that a non-random measurement error presented a potential threat to not only the internal validity but also the reliability of a measure. Mathieu et al. (2020) explained how internal validity was when the survey actually dealt with what the intended purpose of the instrument was

designed to measure. Other research that also conducted studies using only one measure from the NFCS to understand the impacts of financial education were studied in order to address any concerns to validity.

Birkenmaier et al. (2016) used a single survey response from the NFCS to establish access to financial education as an independent variable. Likewise, previous research also looked at sources of financial education (Xiao & O'Neill, 2016), demographics and financial education (Kim & Xiao, 2021), decision-making and financial education (Henager & Wilmarth, 2018) and financial knowledge and characteristics (Lee et al., 2019), all using a single variable from the NFCS to examine financial education or access to education. The single survey items applied to these studies are in line with very similar survey components, if not the same in some cases, that is being recommended within this research. Due to the overwhelming acceptance of similar practices to use the NFCS to produce an education or access to education variable, and the capacity to reliably generate conclusions from this approach, it was determined that no threat existed to the internal validity of the financial education measure.

Summary of Reliability and Validity

The NFCS has been frequently cited by the media, both locally and nationally, along with hundreds of scholarly peer-reviewed journals have applied the data to their research (for example, Kim & Xiao, 2021; Mottola & Kieffer, 2017; Porto & Xiao, 2019; Xiao & O'Neill, 2016). In addition, Mottola and Kieffer found that the data from the NFCS survey had been used by various government agencies (both in official reports and testimonies before Congress) more than a dozen times. Overall, due to prior research being conducted in similar fashion, applying similar methods, it was determined that there was no threat to the validity of the study.

Summary of Section 2 and Transition

This section of this research examined the approach and method in which this study was completed. Along with that, a defense was offered explaining the methodology implemented to meet the objective of the study. In particular, this section of the research looked at what role the researcher had in addition to what was expected of the survey participants. Additionally, evidence was provided that examined the suitability of the research method and research design that was chosen accompanied by data concerning the sample size and population. Ultimately, this section ended by looking to see if the research was able to determine how consistent and accurate the data was by examining the reliability and validity.

Section 3: Application to Professional Practice

Overview of the Study

This section provided the results of this quantitative study using publicly available datasets to identify factors that may impact military members by having access to unlimited financial education. Information within this section summarized the inferential statistical tests and measures of association used to identify factors hypothesized to predict the impact of how the access to education applied to financial decision-making. According to literature (Gentile et al., 2016; Kramer, 2012; Lim et al., 2014; Lusardi & Mitchell, 2010; Lusardi & Mitchell, 2014; Porto & Xiao, 2016; Porto & Xiao, 2019; Xiao & O'Neill, 2016; Xiao & Porto, 2017) financial education had a direct correlation to financial capability. Applying the 2018 NFCS, which was funded by FINRA, a quantitative correlational research design was conducted. The archival data that was applied to this research, which was compiled from June through October, 2018, offered an abundance of detail to evaluate the variables under study. There were a total of 27,091 survey responses from a population of 1,410,923 surveys that were sent out.

Based on the literature there should be a positive correlation between financial education and financial capability (Gentile et al., 2016; Kramer, 2012; Lim et al., 2014; Lusardi & Mitchell, 2010; Lusardi & Mitchell, 2014; Porto & Xiao, 2016; Porto & Xiao, 2019; Xiao & O'Neill, 2016; Xiao & Porto, 2017). Literature defined financial capability as seeking the expertise and advice of professional financial advisors (Kramer, 2012). While the amount of access to financial education may not be consistent in the civilian sector, military members have unlimited access to free financial education (Office of Financial Readiness, n.d.; Military OneSource, n.d.). Although military members have unlimited access to financial education, they have taken more loans and hardship withdrawals from their retirement accounts when compared to their civilian counterparts (FINRA IEF, 2019). The influence and impact that access to financial education, financial literacy, and financial capability have on each other is still unclear within the military community (FINRA IEF, 2019). However, literature observed that financial education and capability were critical and played a key role in the long-term financial success and financial wellbeing of military individuals (Elnitsky et al., 2017).

Presentation of Findings

The third section was focused on presenting the findings, application to professional practice, recommendations, reflections, and summary and study conclusions. The beginning of this section laid out the steps required to analyze the data using IBM's Statistical Package for the Social Sciences (SPSS) Version 28 and the NFCS IEF 2018 survey and to present the findings of the research. Section three went on to discuss the findings that addressed both research questions. In addition, this section laid out the findings and outcomes of the analyses. The section then explained how the findings can be applied to professional practice. Recommendations for action and further study were then presented to reveal how to apply what was learned and made

suggestions for future research thereby expanding the knowledge found in the research. This section culminated with reflections on the researcher's experience and a summarization of the research and key findings.

Descriptive Statistics

Utilizing a Spearman correlation, data from the 27,091 survey participants were examined. The research focused on questions AM21 (military service), C10 (loan against retirement account, C11 (hardship withdrawal from retirement account), J1 (financial satisfaction), J33 (financial concern), J43 (financial confidence), and M4 (financial knowledge). Any respondent that answered 98 or 99 (do not know or prefer not to answer) on any of the focused questions were eliminated from the study. Survey question AM21 asked about military service. All responses that were either 1 or 2 (currently serving or previously served) were coded as 1 for military service. All responses that were coded as 3 (no military service) were coded as 2 for no military service. All responses that were coded 99 (prefer not to say) were left coded as 99 but were not applied to the research. Out of the 27,091 survey participants, 2,787 were removed due to those conditions. This left 24,304 participants for the study. The majority of the survey respondents (20,786 or 85.5%) were non-military with the remaining 3,518 (14.5%) either currently serving or have served. See figures 2 through 4.

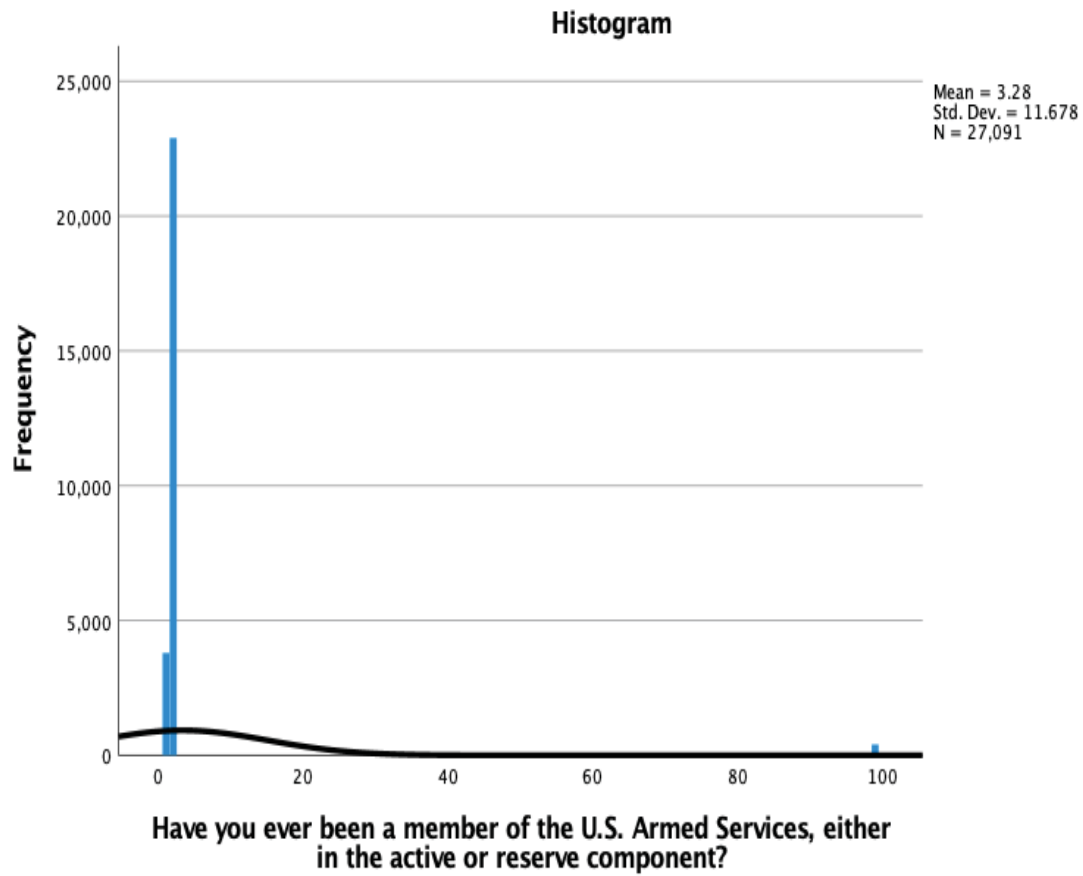


Figure 2. Histogram of the Distribution of Military and Non-Military Members Combined.

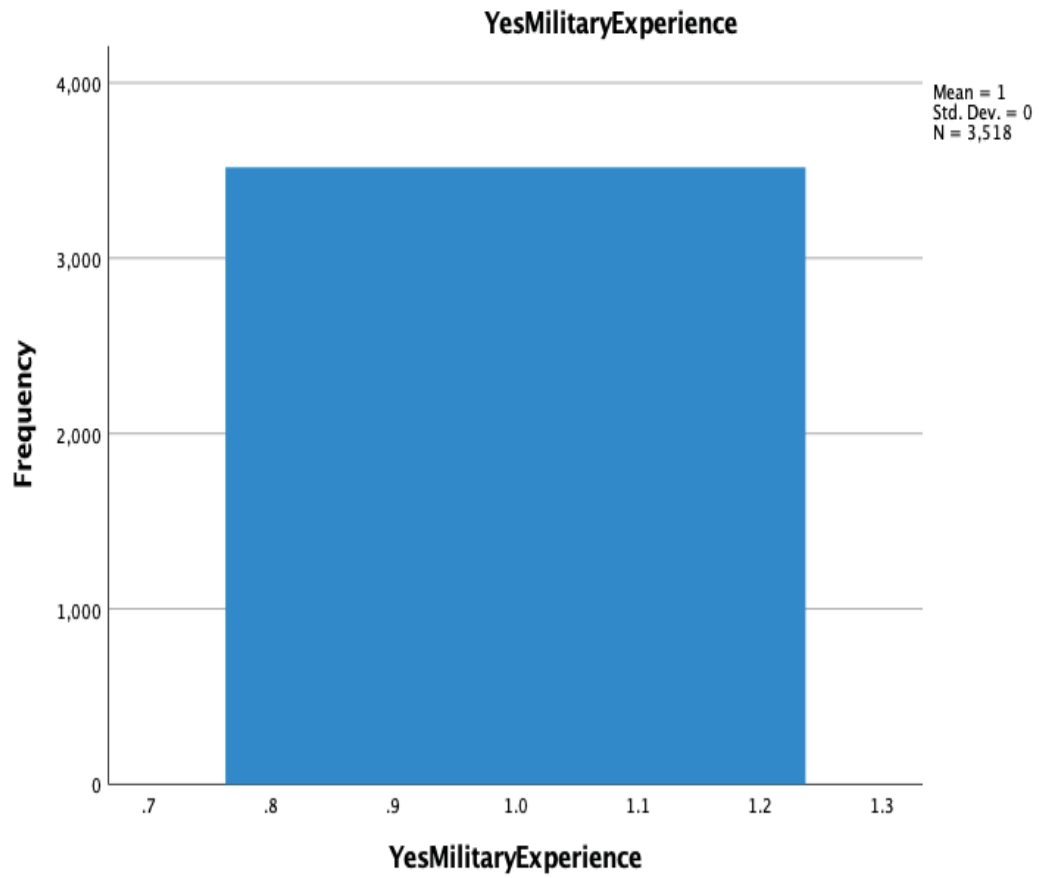


Figure 3. Histogram of the Distribution of Military Members Filtered.

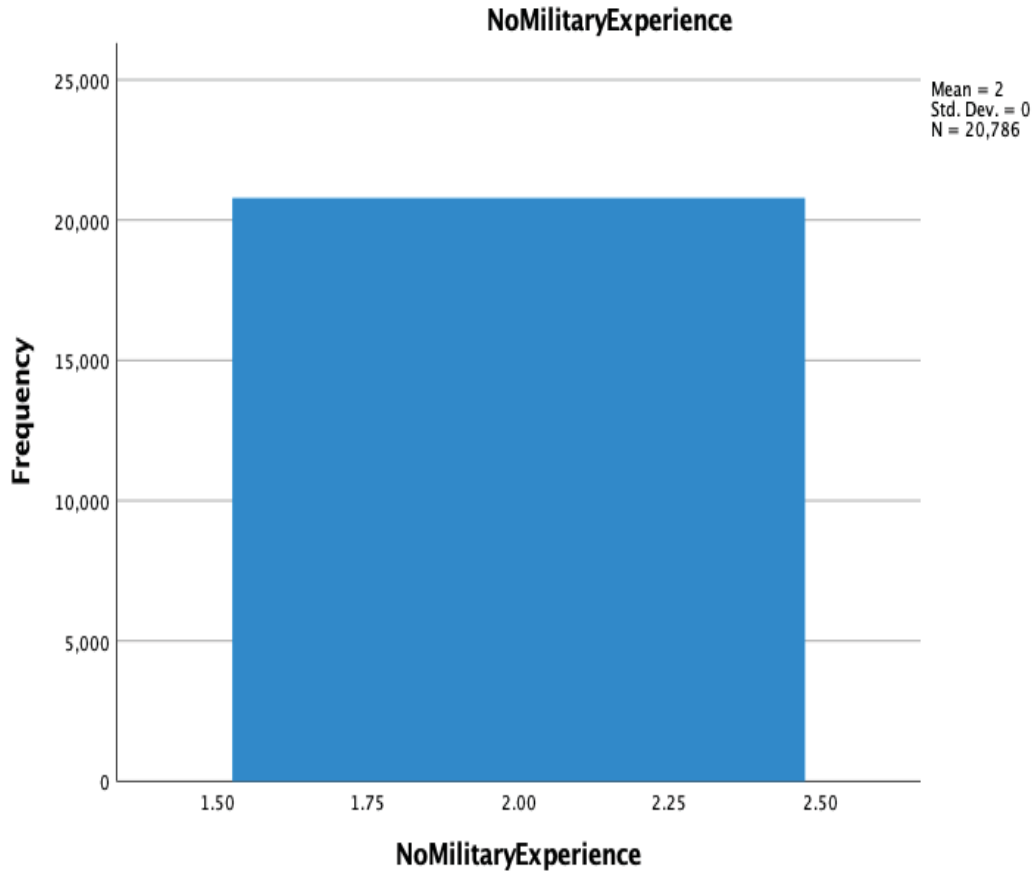


Figure 4. Histogram of the Distribution of Non-Military Members Filtered.

A Shapiro-Wilk's test ($p > .05$) (Shapiro & Wilk, 1965; Razali & Wah, 2011) and a complete examination of both the histograms and normal Q-Q plots revealed that loans taken from retirement accounts were not normally distributed for either military or non-military, with a skewness of -1.148 (SE = 0.050) and a kurtosis of -0.683 (SE = 0.100) for military and a skewness of -3.048 (SE = 0.024) and a kurtosis of 7.290 (SE = 0.047) for the non-military (Cramer & Howitt, 2004; Doane & Seward, 2011). Due to the non-normally distributed data, the researcher utilized a Spearman Rho since no assumptions were made regarding either the parameter mean or the parameter standard deviation. See figures 5 through 8 and table 5.

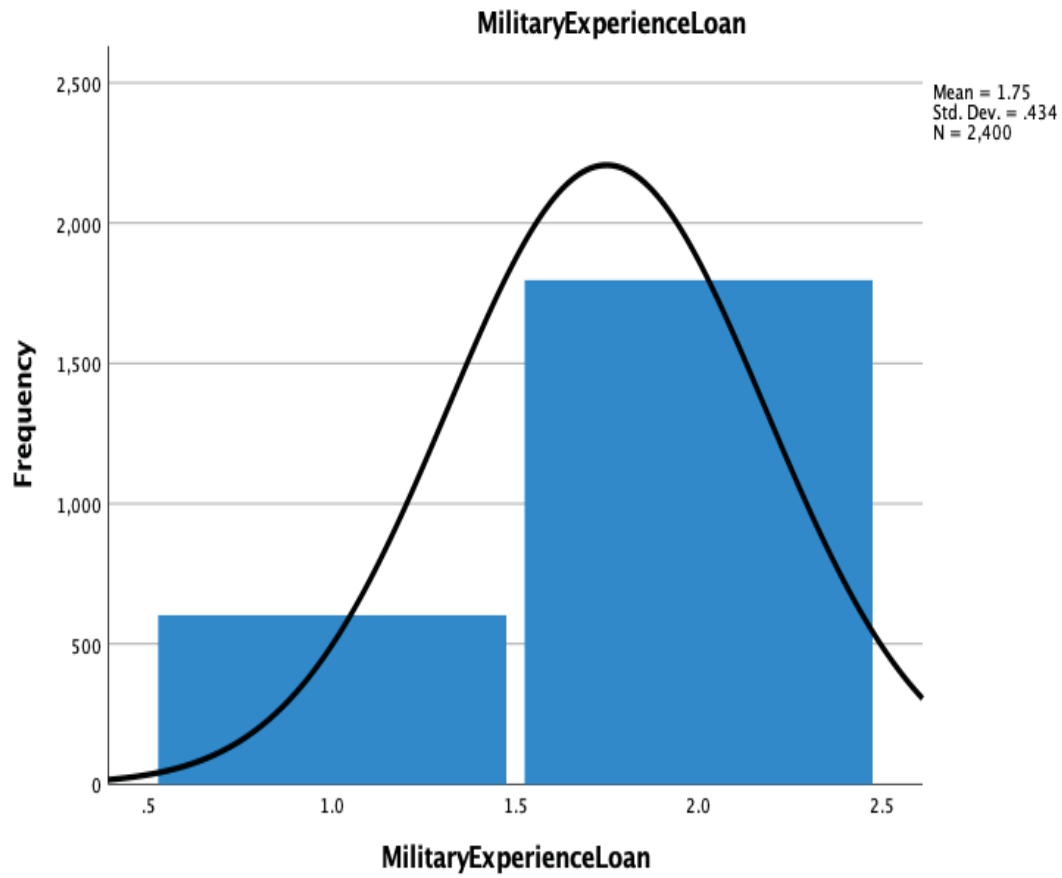


Figure 5. Histogram of the Distribution of Retirement Account Loans by Military.

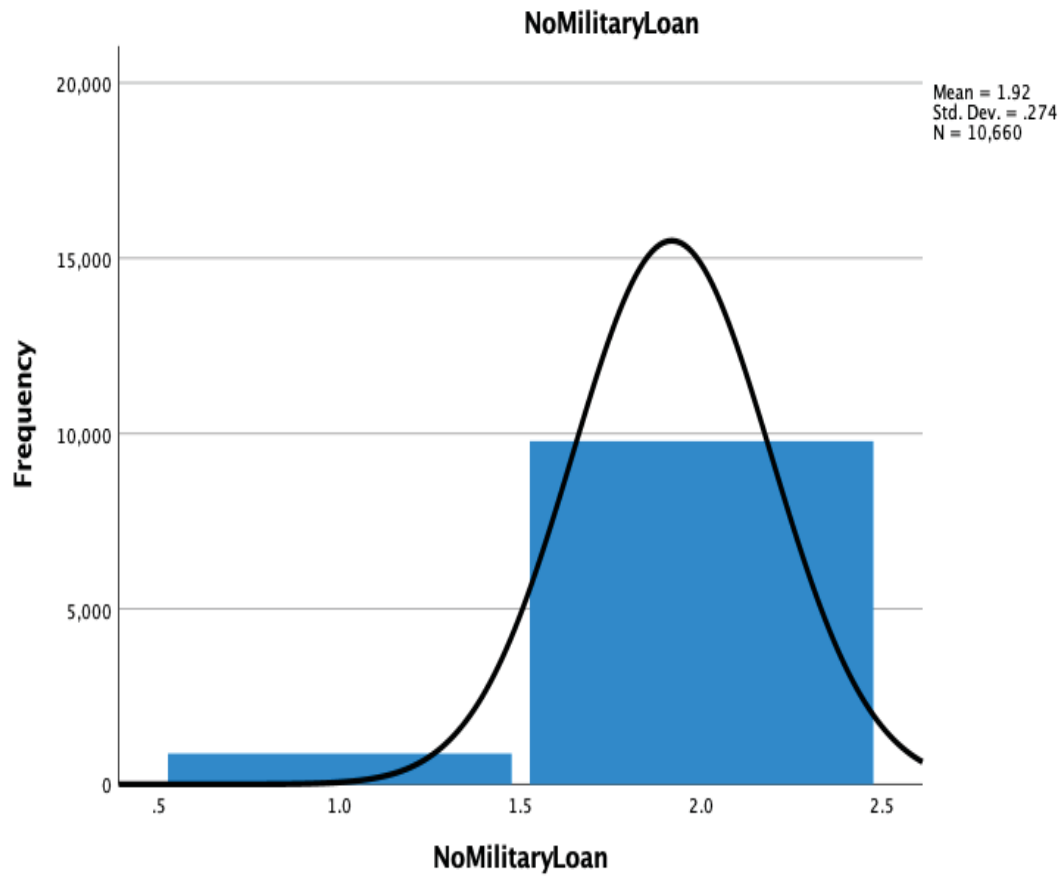


Figure 6. Histogram of the Distribution of Retirement Account Loans by Non-Military.

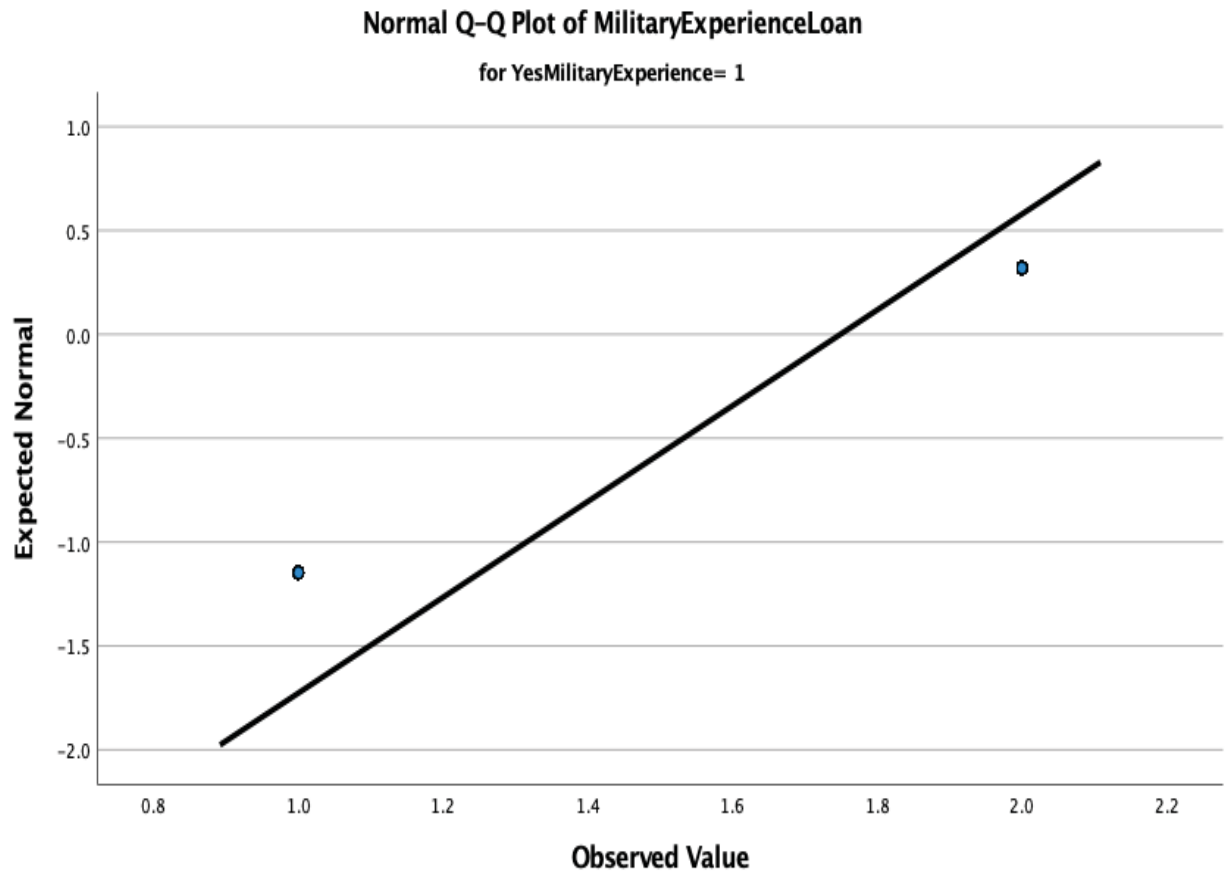


Figure 7. Q-Q Plot of the Expected and Observed distribution of Retirement Account Loans by

Military Members.

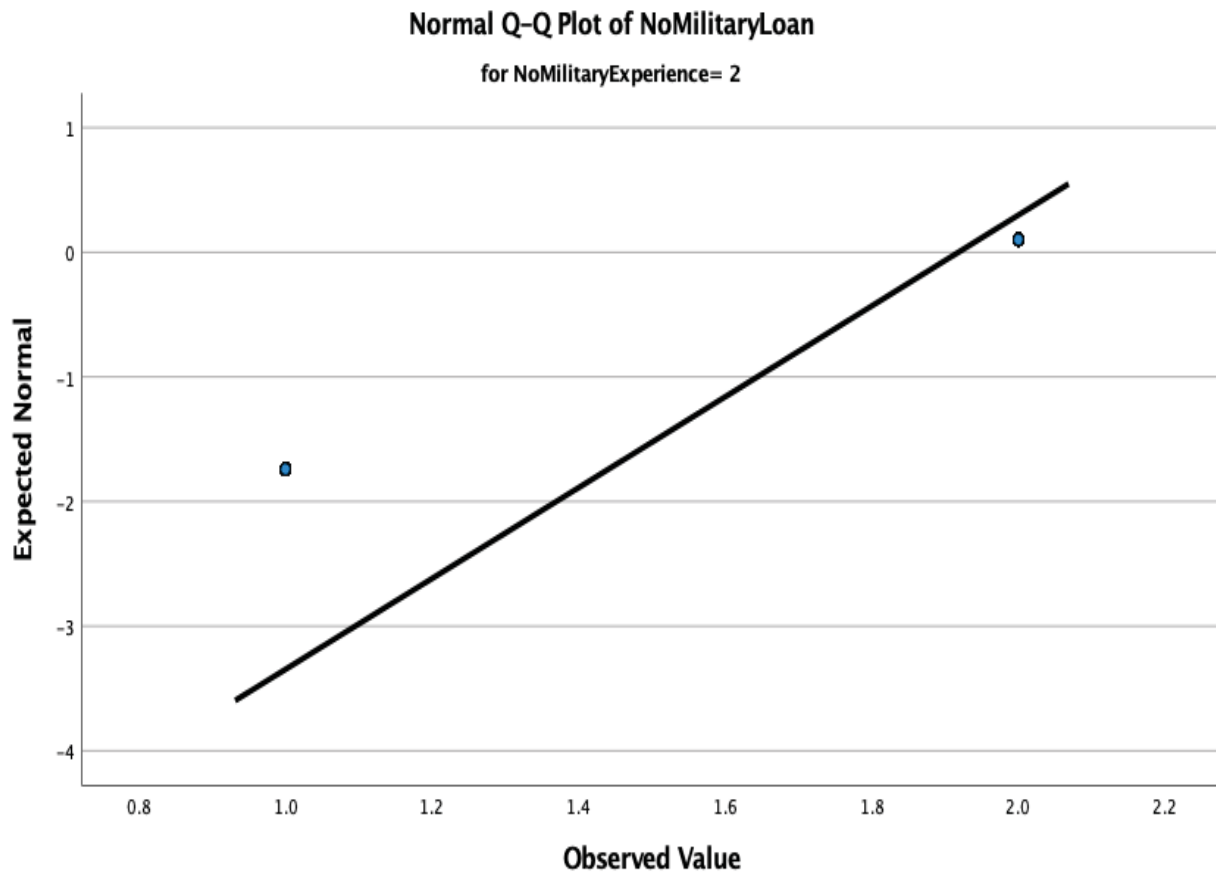


Figure 8. Q-Q Plot of the Expected and Observed distribution of Retirement Account Loans by Non-Military Members.

A Shapiro-Wilk's test ($p > .05$) (Shapiro & Wilk, 1965; Razali & Wah, 2011) and a complete examination of both the histograms and normal Q-Q plots revealed that hardship withdrawals taken from retirement accounts were not normally distributed for either military or non-military, with a skewness of -1.262 (SE = 0.050) and a kurtosis of -0.408 (SE = 0.100) for military and a skewness of -4.181 (SE = 0.024) and a kurtosis of 15.481 (SE = 0.047) for the non-military (Cramer & Howitt, 2004; Doane & Seward, 2011). Due to the non-normally distributed data, the researcher utilized a Spearman Rho since no assumptions were made

regarding either the parameter mean or the parameter standard deviation. See figure 9 through 12 and table 5.

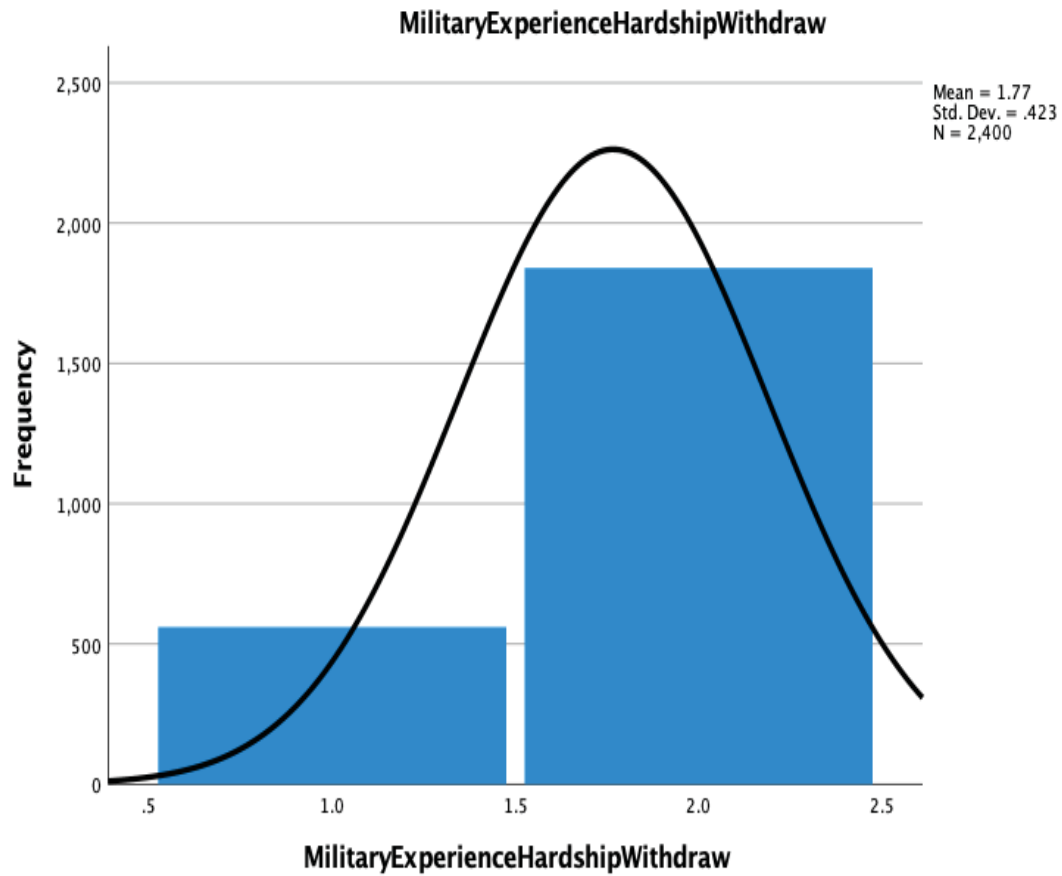


Figure 9. Histogram of the Distribution of Hardship Withdrawals by Military Members.

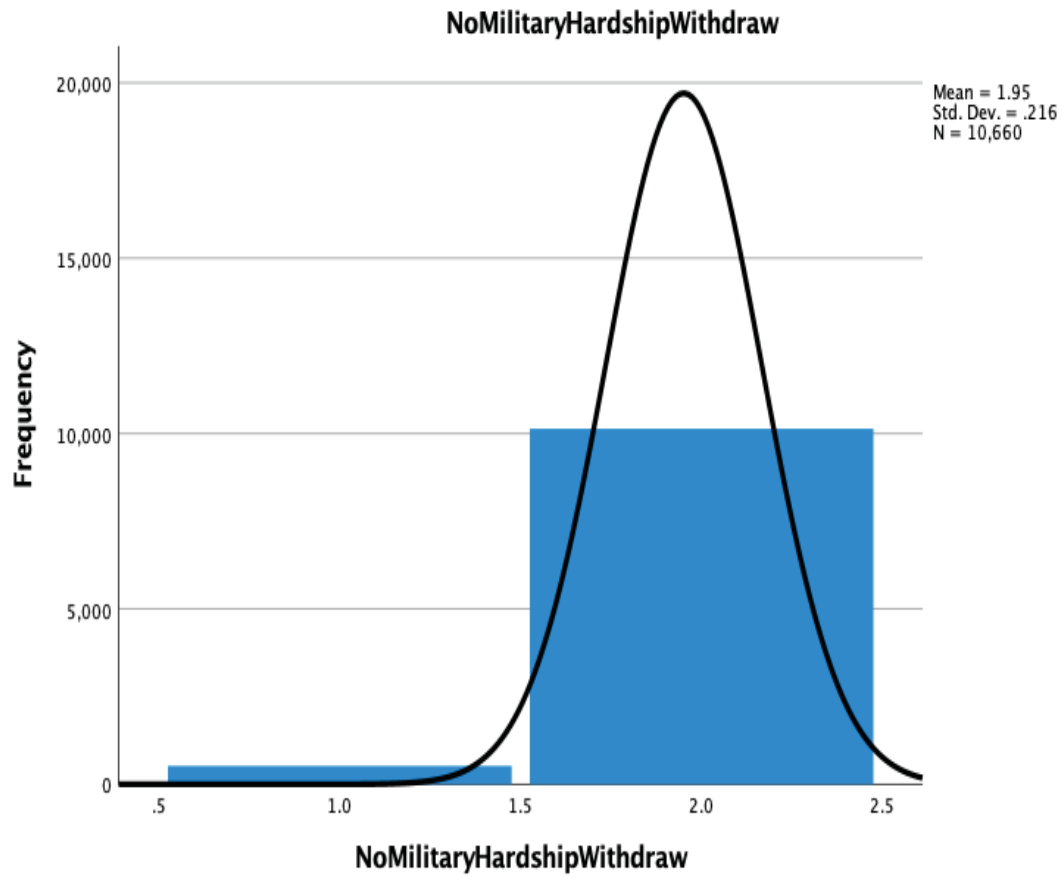


Figure 10. Histogram of the Distribution of Hardship Withdrawals by Non-Military Members.

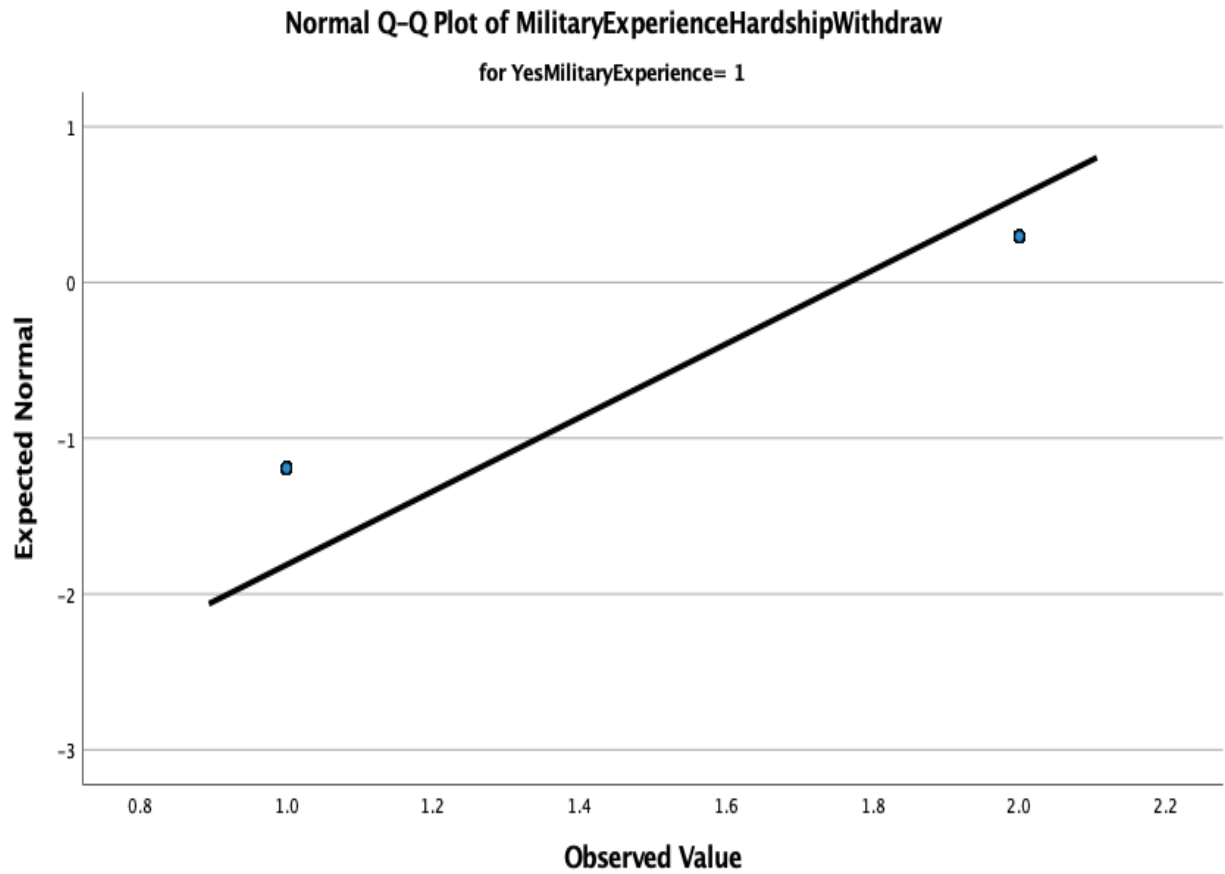


Figure 11. Q-Q Plot of the Expected and Observed distribution of Hardship Withdrawals by

Military Members.

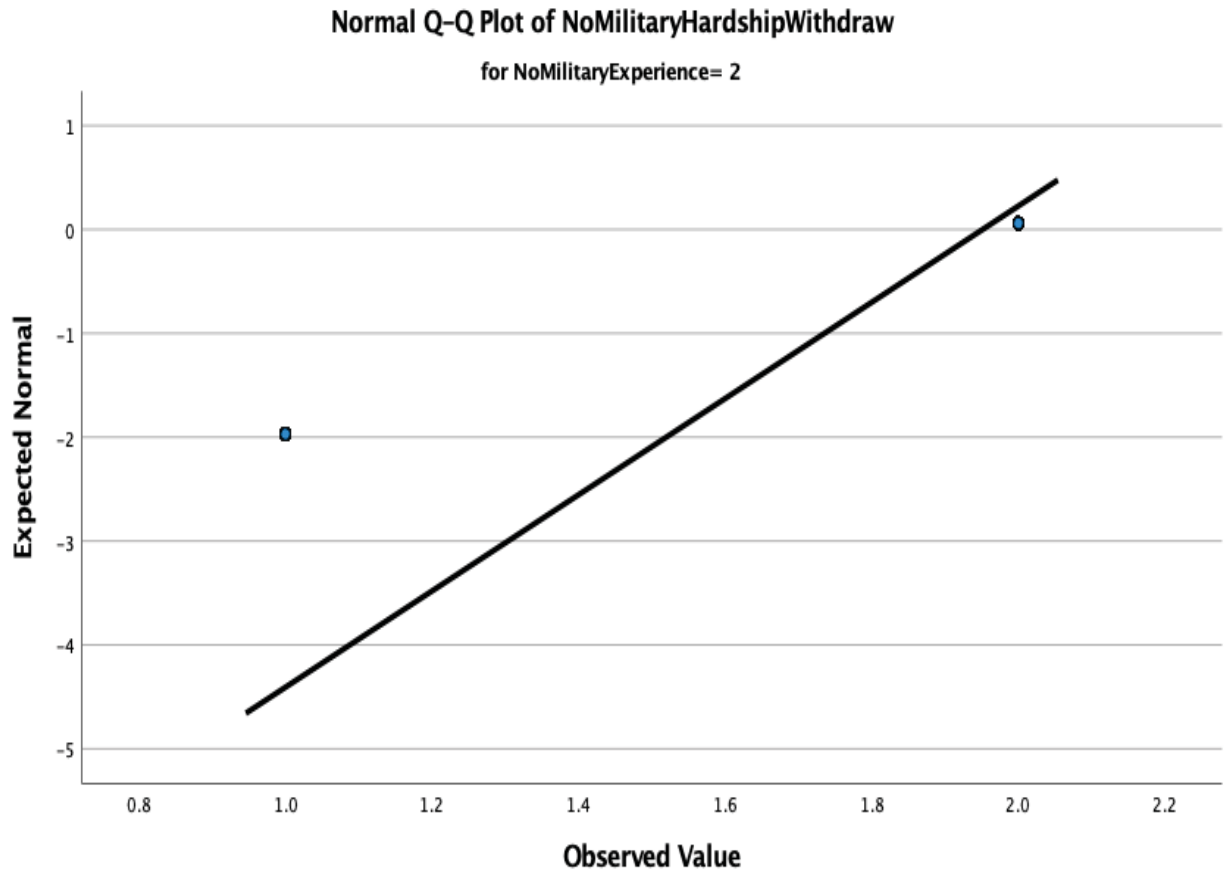


Figure 12. Q-Q Plot of the Expected and Observed distribution of Hardship Withdrawals by Non-Military Members.

A Shapiro-Wilk's test ($p > .05$) (Shapiro & Wilk, 1965; Razali & Wah, 2011) and a complete examination of both the histograms and normal Q-Q plots revealed that the financial satisfaction were not normally distributed for either military or non-military, with a skewness of -1.103 (SE = 0.050) and a kurtosis of 0.608 (SE = 0.100) for military and a skewness of -0.695 (SE = 0.024) and a kurtosis of -0.296 (SE = 0.047) for the non-military (Cramer & Howitt, 2004; Doane & Seward, 2011). Due to the non-normally distributed data, the researcher utilized a Spearman Rho since no assumptions were made regarding either the parameter mean or the parameter standard deviation. See figures 13 through 16 and table 5.

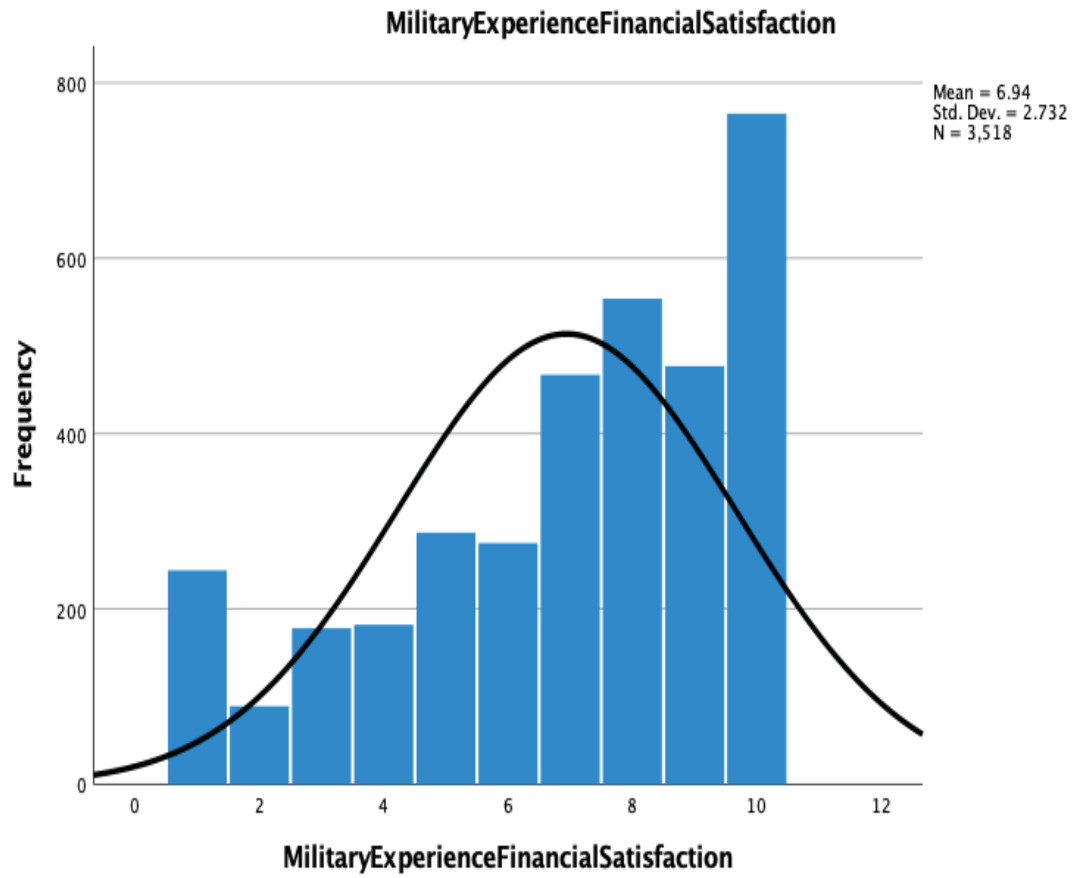


Figure 13. Histogram of the Distribution of Financial Satisfaction of Military Members.

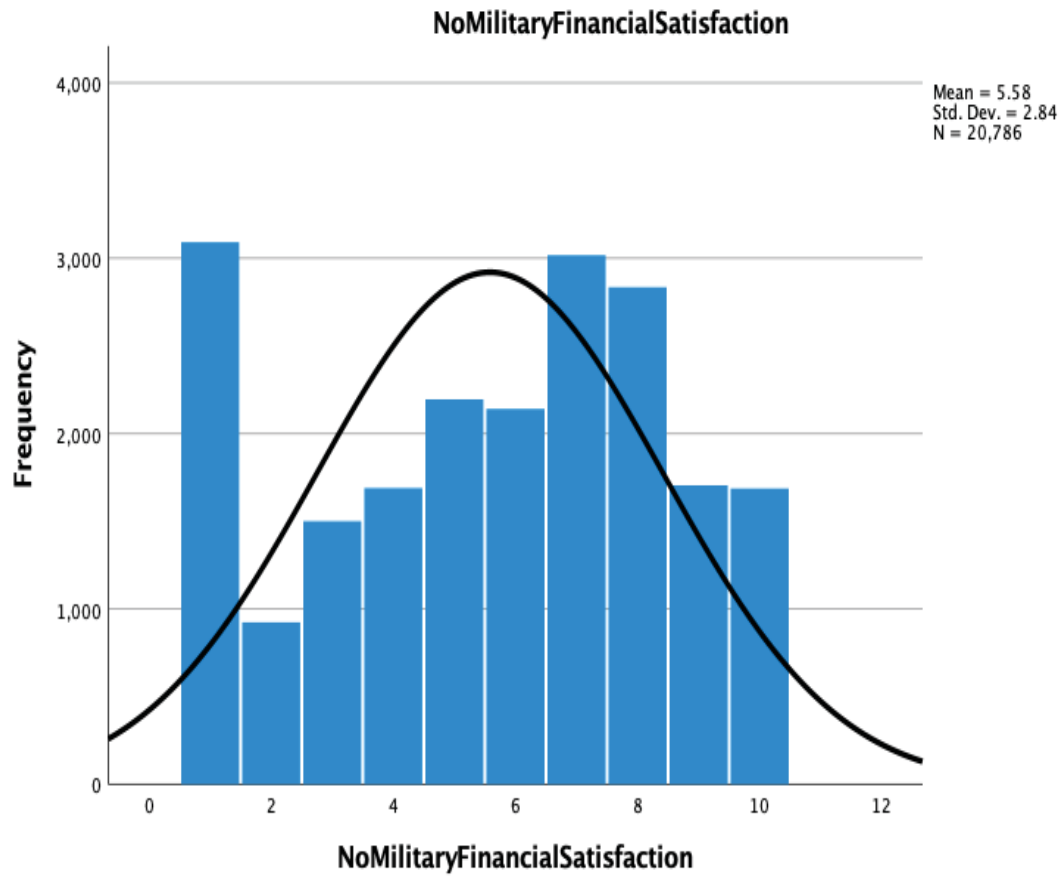


Figure 14. Histogram of the Distribution of Financial Satisfaction of Non-Military Members.

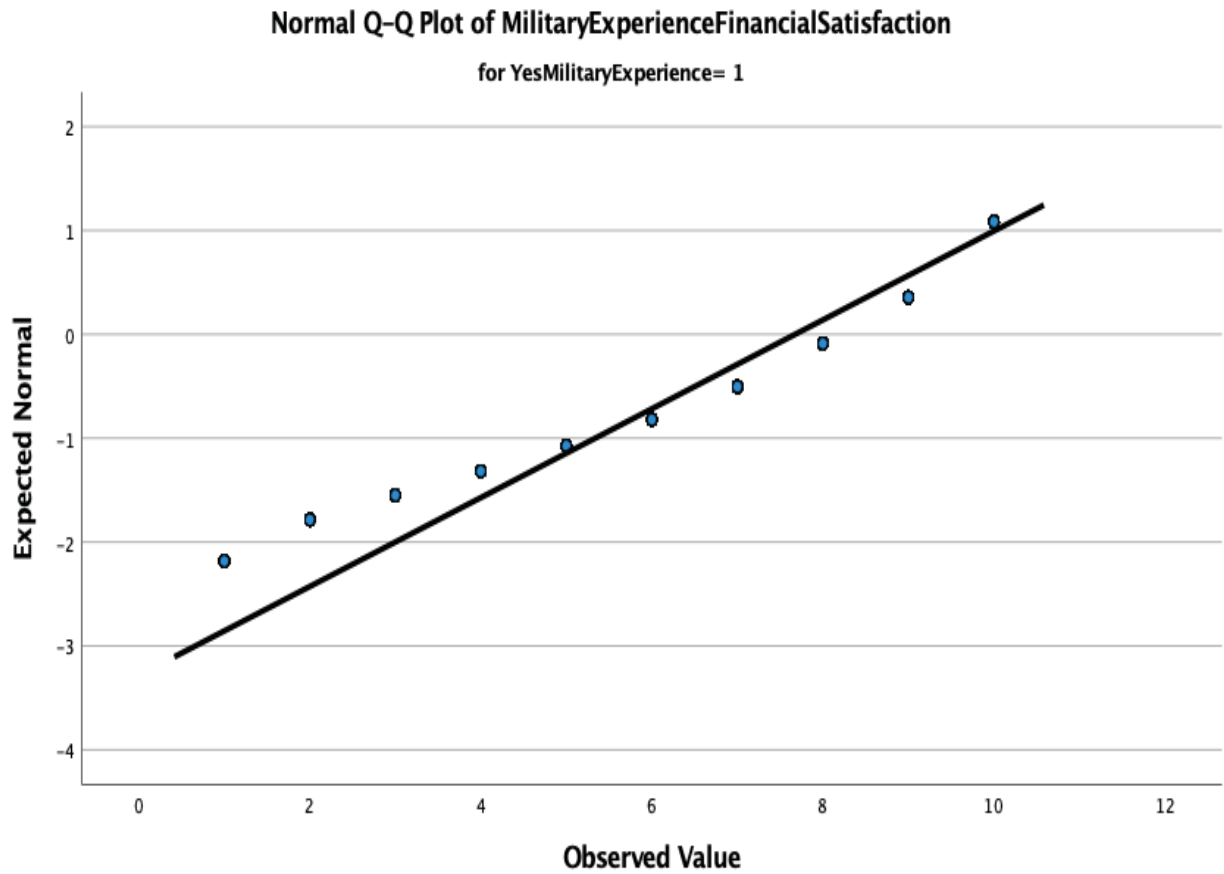


Figure 15. Q-Q Plot of the Expected and Observed distribution of Financial Satisfaction by

Military Members.

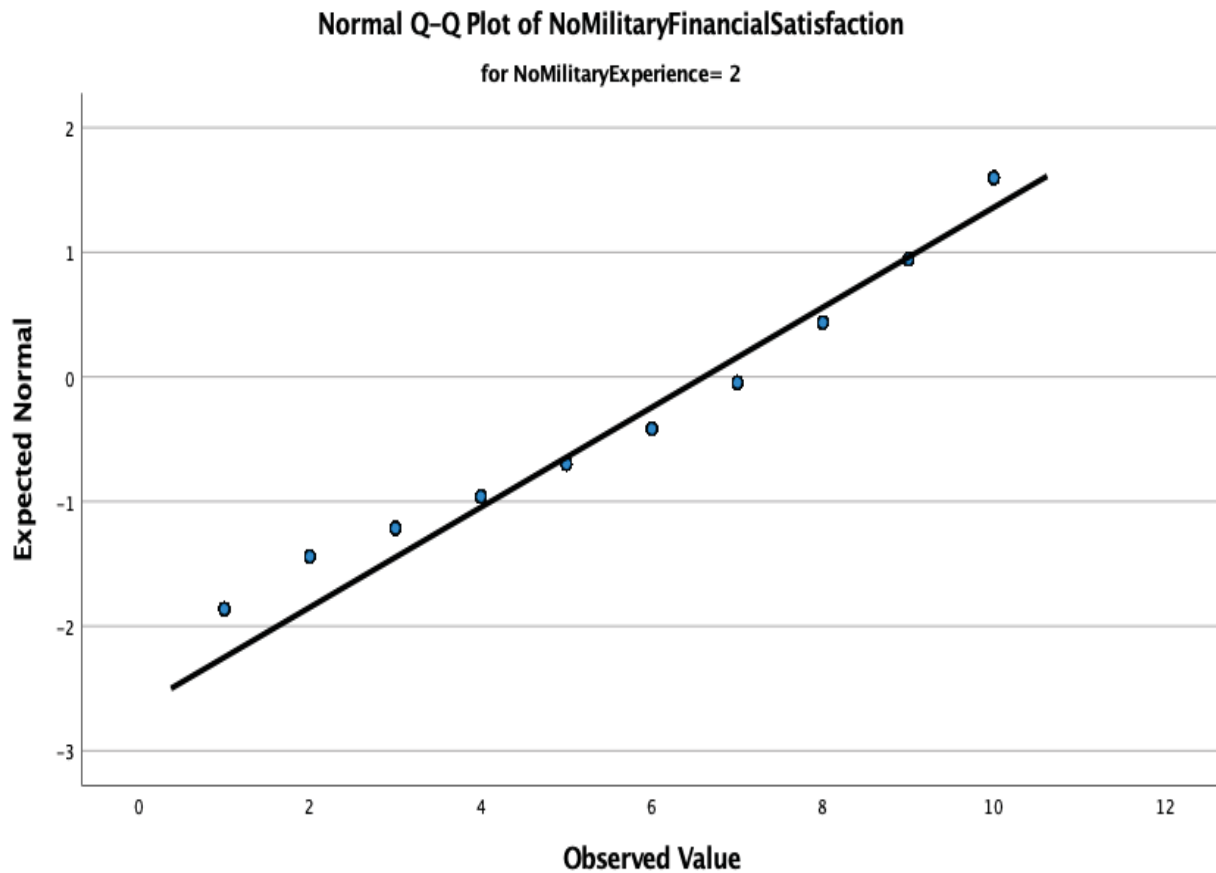


Figure 16. Q-Q Plot of the Expected and Observed distribution of Financial Satisfaction by Non-Military Members.

A Shapiro-Wilk's test ($p > .05$) (Shapiro & Wilk, 1965; Razali & Wah, 2011) and a complete examination of both the histograms and normal Q-Q plots revealed that the financial concern were not normally distributed for either military or non-military, with a skewness of -0.094 ($SE = 0.050$) and a kurtosis of -1.407 ($SE = 0.100$) for military and a skewness of -0.185 ($SE = 0.024$) and a kurtosis of -1.171 ($SE = 0.047$) for the non-military (Cramer & Howitt, 2004; Doane & Seward, 2011). Due to the non-normally distributed data, the researcher utilized a Spearman Rho since no assumptions were made regarding either the parameter mean or the parameter standard deviation. See figures 17 through 20 and table 5.

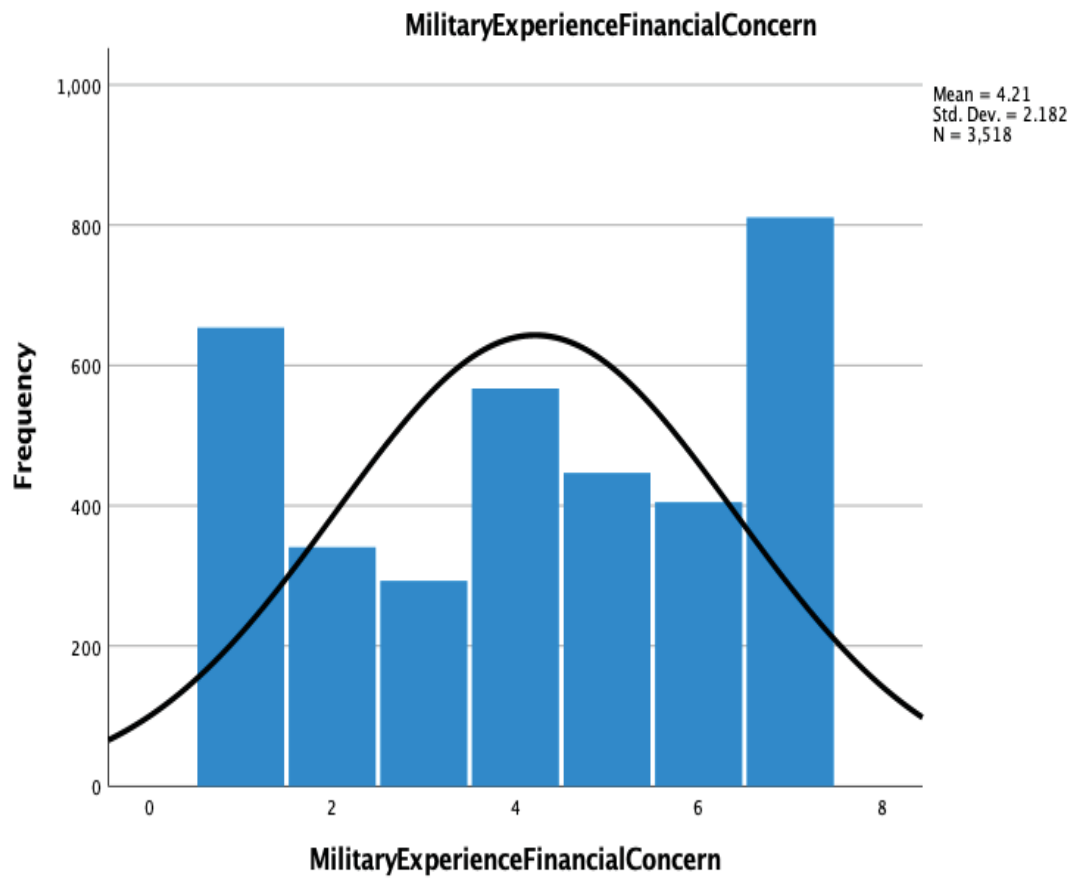


Figure 17. Histogram of the Distribution of Financial Concern by Military Members.

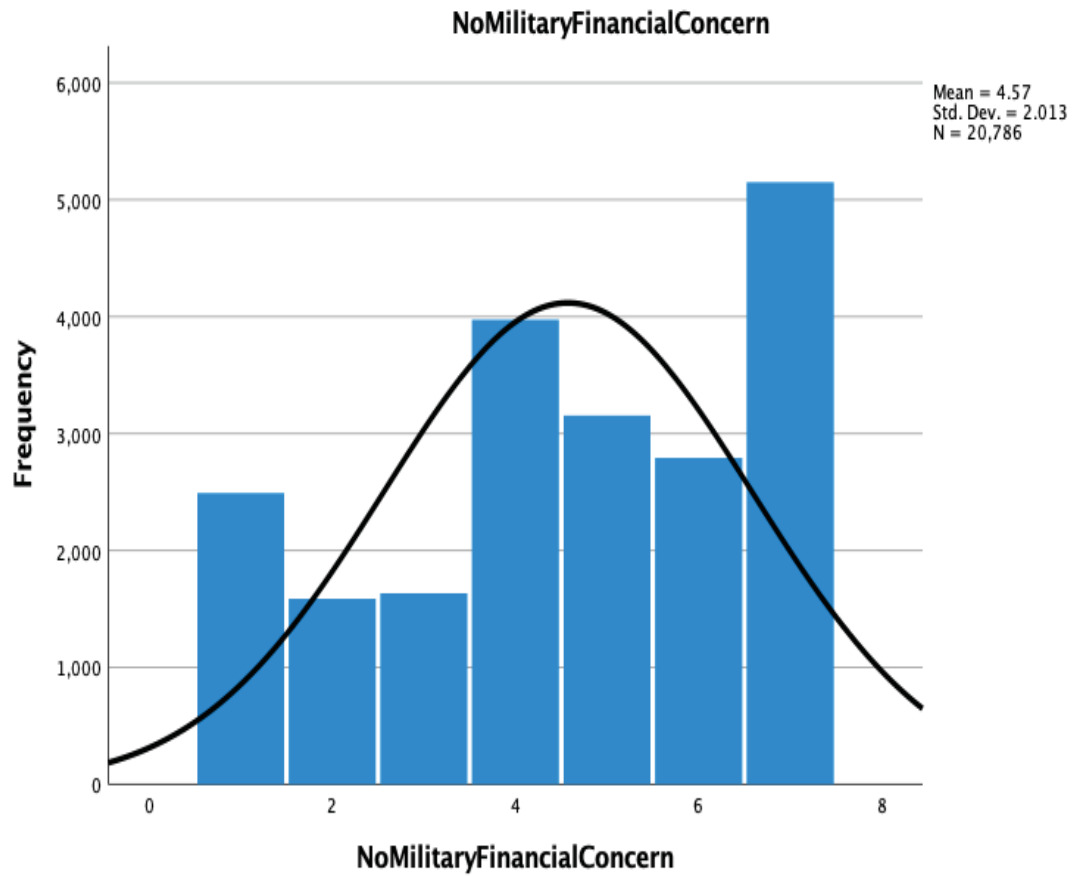


Figure 18. Histogram of the Distribution of Financial Concern by Non-Military Members.

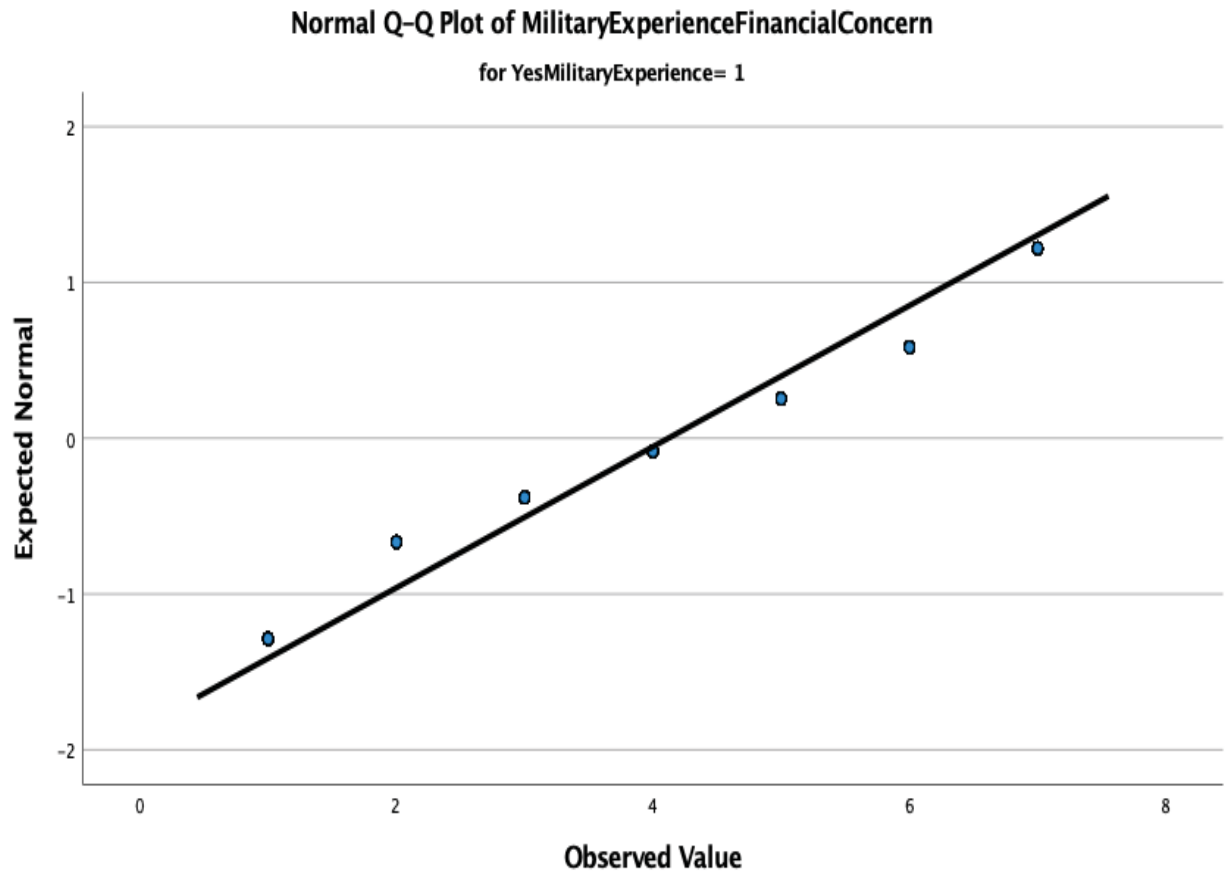


Figure 19. Q-Q Plot of the Expected and Observed distribution of Financial Concern by Military

Members.

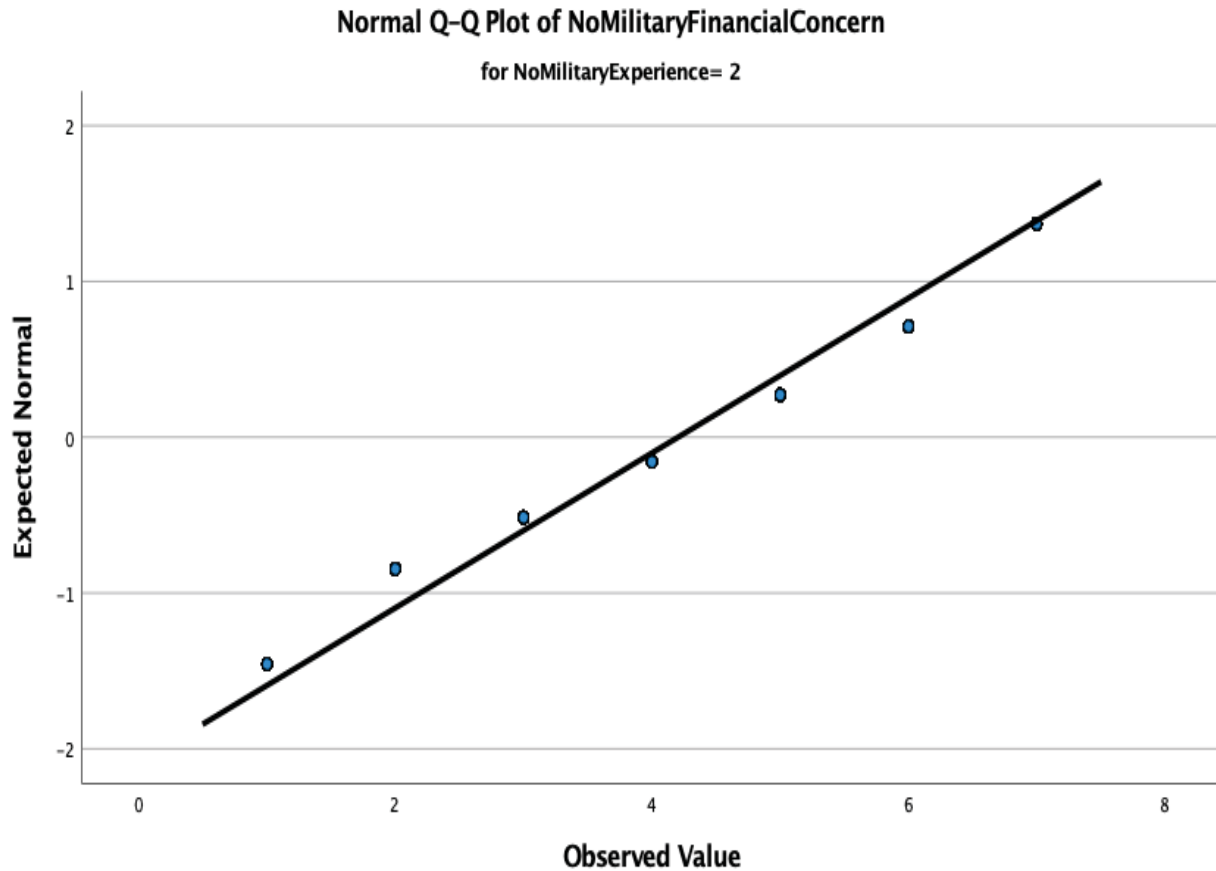


Figure 20. Q-Q Plot of the Expected and Observed distribution of Financial Concern by Non-Military Members.

A Shapiro-Wilk's test ($p > .05$) (Shapiro & Wilk, 1965; Razali & Wah, 2011) and a complete examination of both the histograms and normal Q-Q plots revealed that the financial confidence were not normally distributed for either military or non-military, with a skewness of -1.323 (SE = 0.050) and a kurtosis of 1.603 (SE = 0.100) for military and a skewness of -0.801 (SE = 0.024) and a kurtosis of 0.355 (SE = 0.047) for the non-military (Cramer & Howitt, 2004; Doane & Seward, 2011). Due to the non-normally distributed data, the researcher utilized a Spearman Rho since no assumptions were made regarding either the parameter mean or the parameter standard deviation. See figures 21 through 24 and table 5.

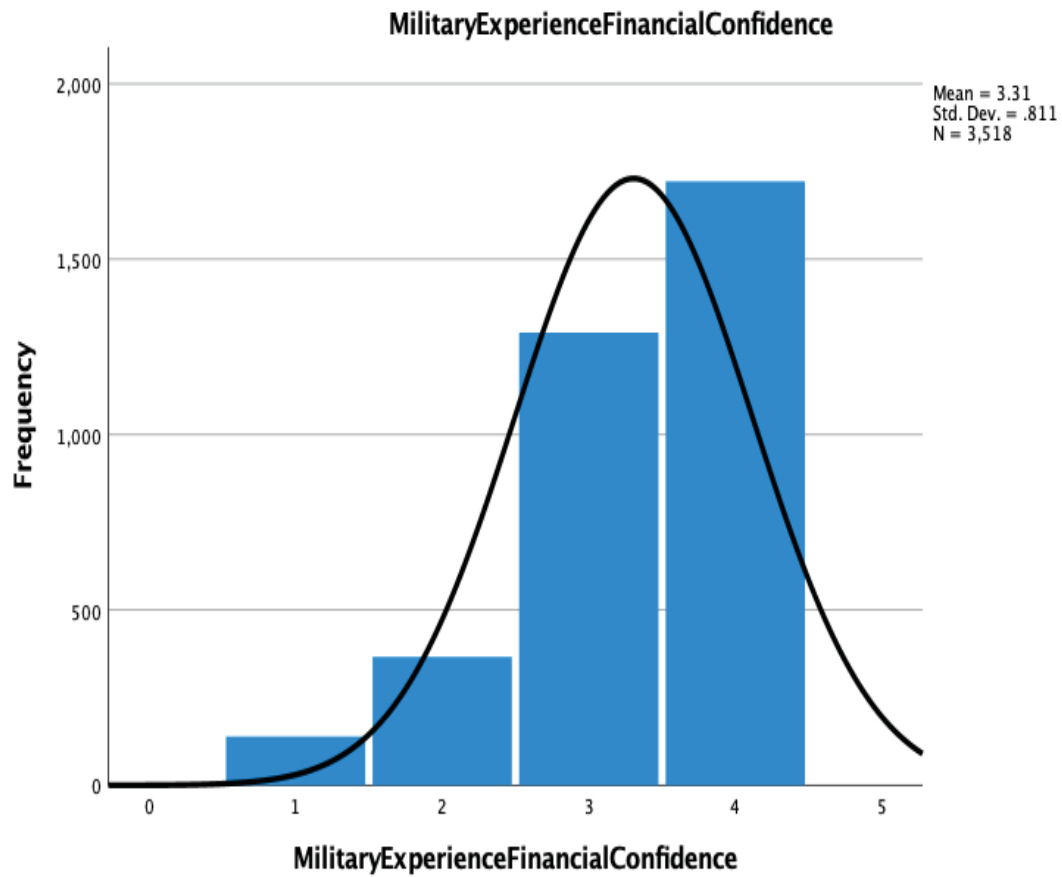


Figure 21. Histogram of the Distribution of Financial Confidence by Military Members.

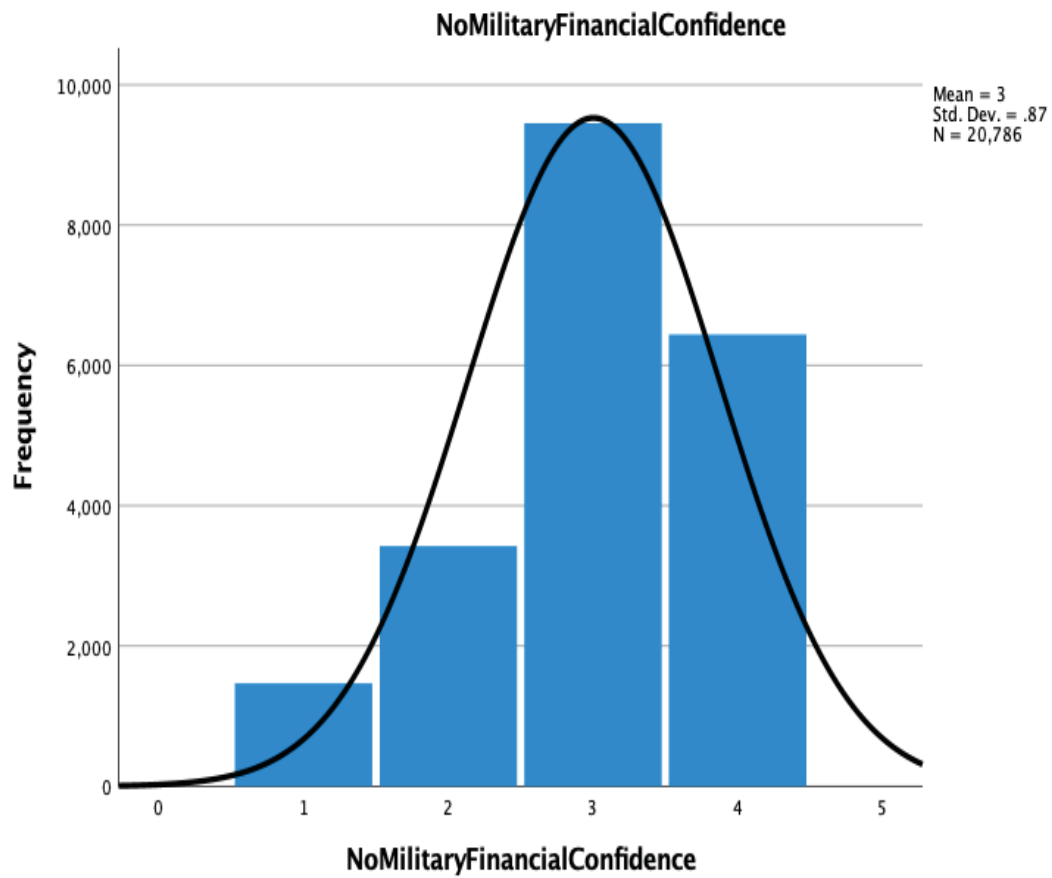


Figure 22. Histogram of the Distribution of Financial Confidence by Non-Military Members.

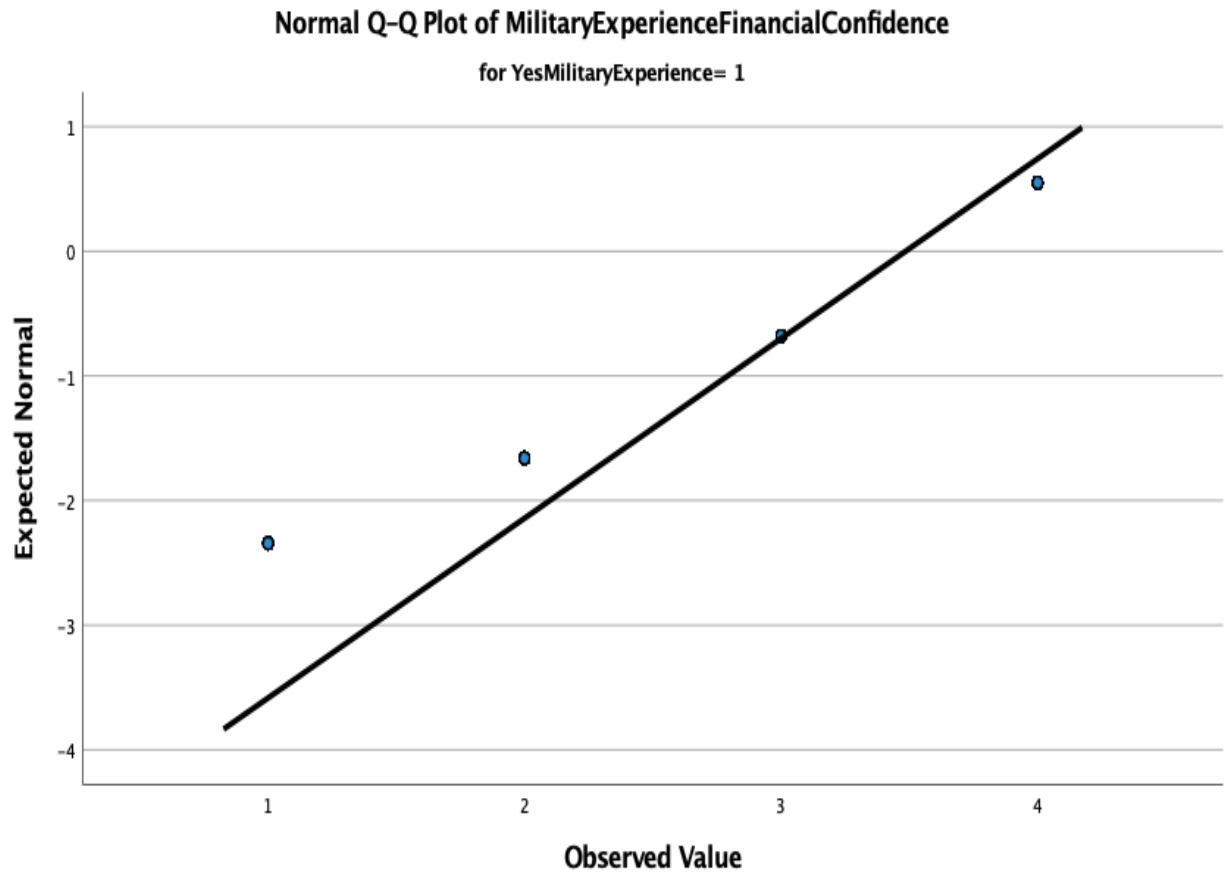


Figure 23. Q-Q Plot of the Expected and Observed distribution of Financial Confidence by

Military Members.

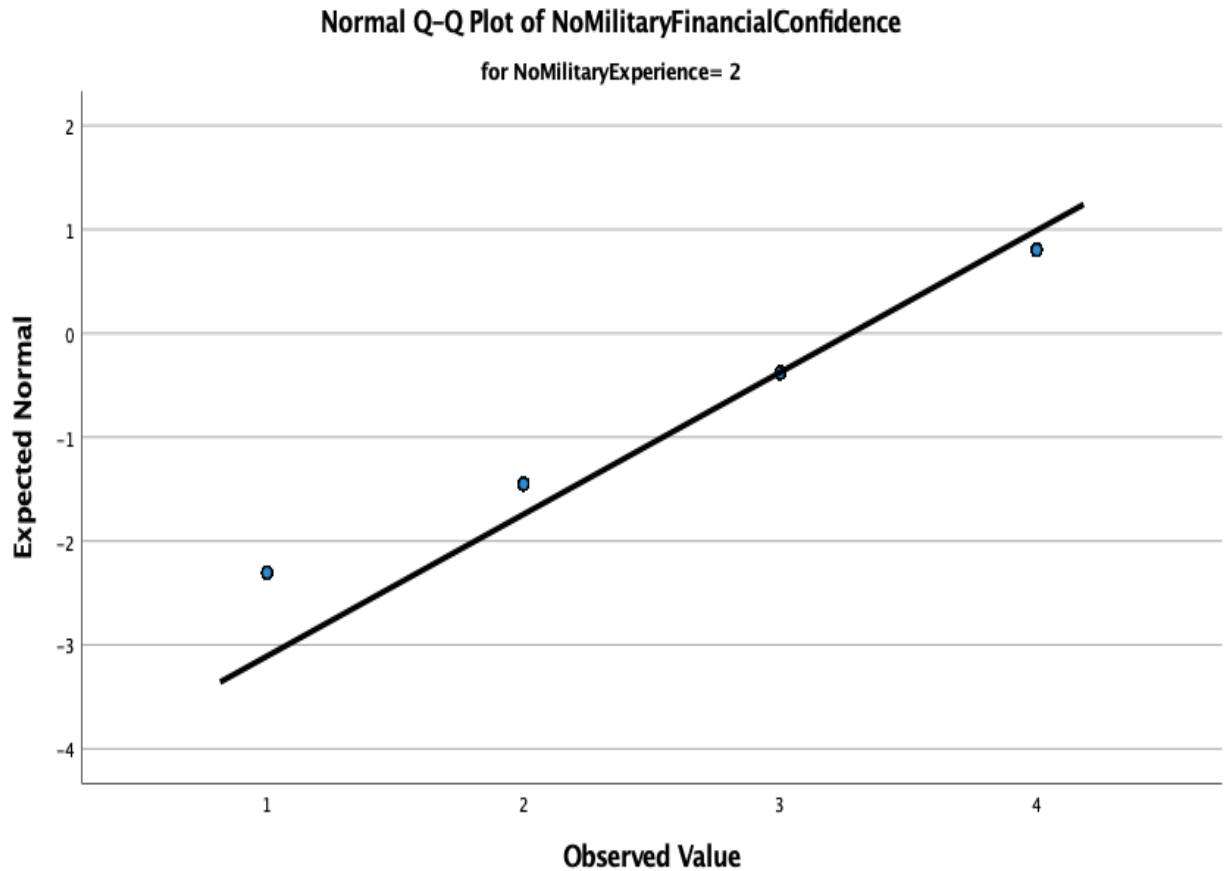


Figure 24. Q-Q Plot of the Expected and Observed distribution of Financial Confidence by Non-Military Members.

A Shapiro-Wilk's test ($p > .05$) (Shapiro & Wilk, 1965; Razali & Wah, 2011) and a complete examination of both the histograms and normal Q-Q plots revealed that the financial knowledge were not normally distributed for either military or non-military, with a skewness of -1.210 (SE = 0.050) and a kurtosis of 2.176 (SE = 0.100) for military and a skewness of -0.723 (SE = 0.024) and a kurtosis of 1.121 (SE = 0.047) for the non-military (Cramer & Howitt, 2004; Doane & Seward, 2011). Due to the non-normally distributed data, the researcher utilized a Spearman Rho since no assumptions were made regarding either the parameter mean or the parameter standard deviation. See figures 25 through 28 and table 5.

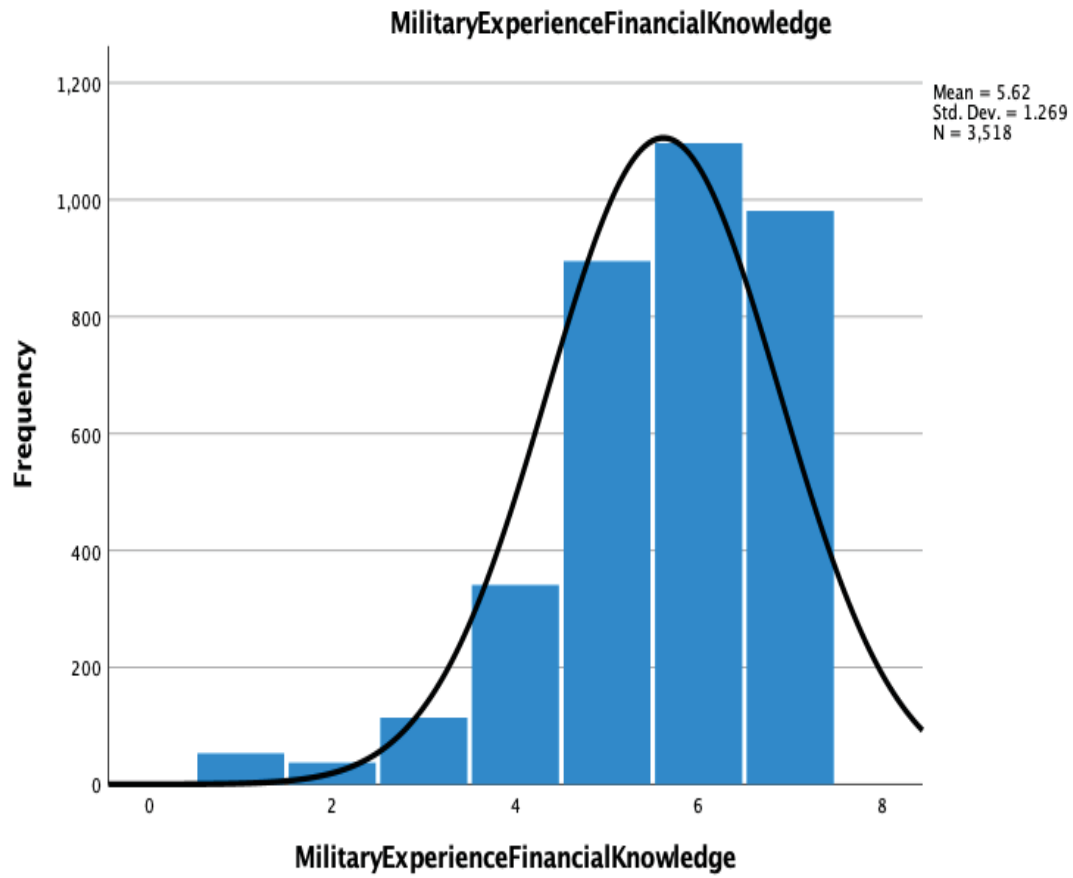


Figure 25. Histogram of the Distribution of Financial Knowledge of Military Members.

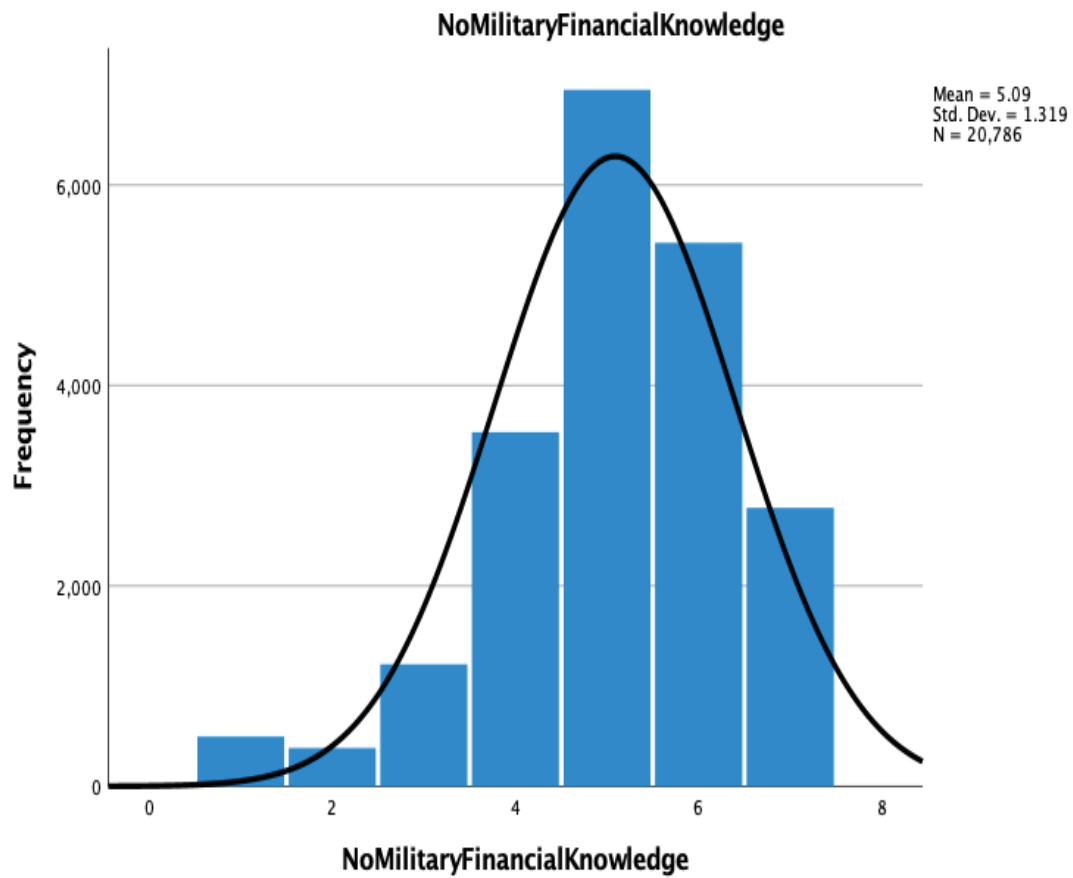


Figure 26. Histogram of the Distribution of Financial Knowledge of Non-Military Members.

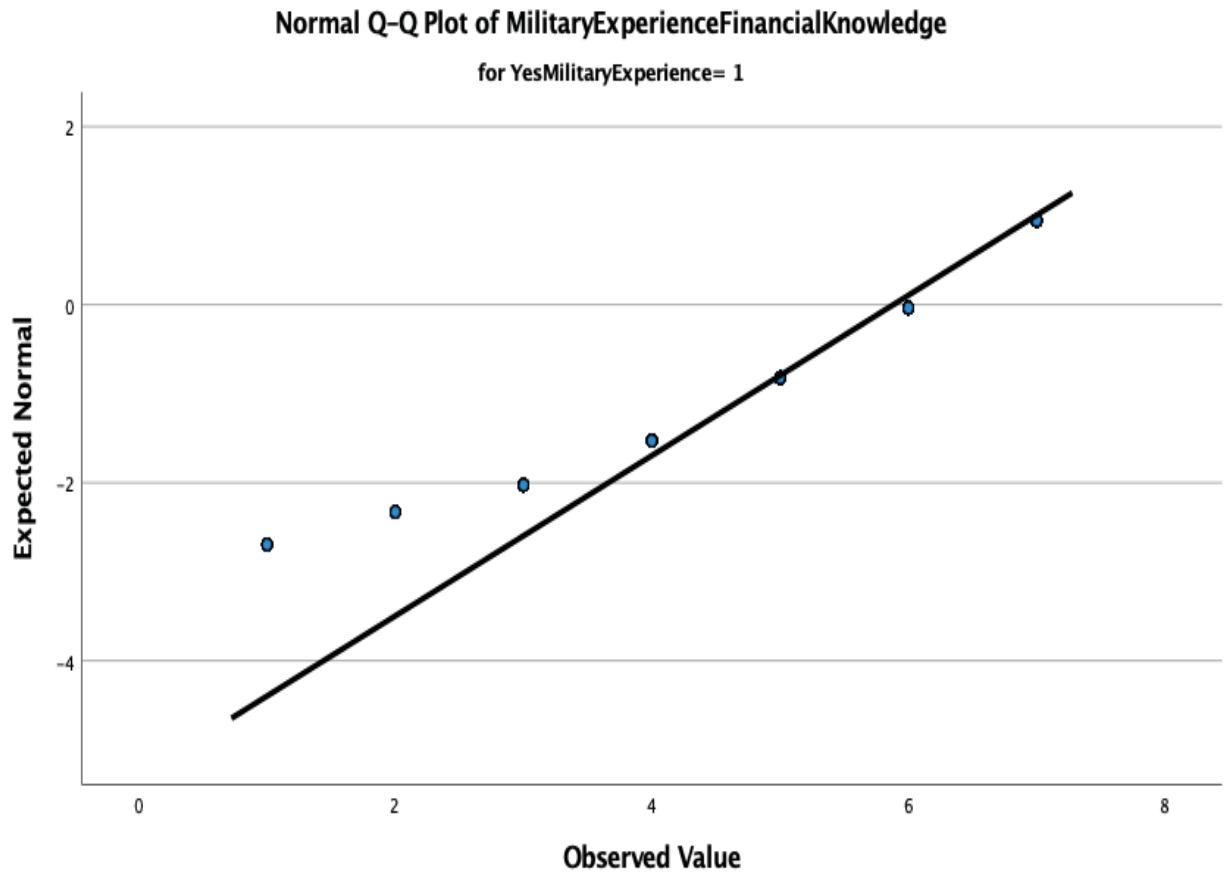


Figure 27. Q-Q Plot of the Expected and Observed distribution of Financial Knowledge by

Military Members.

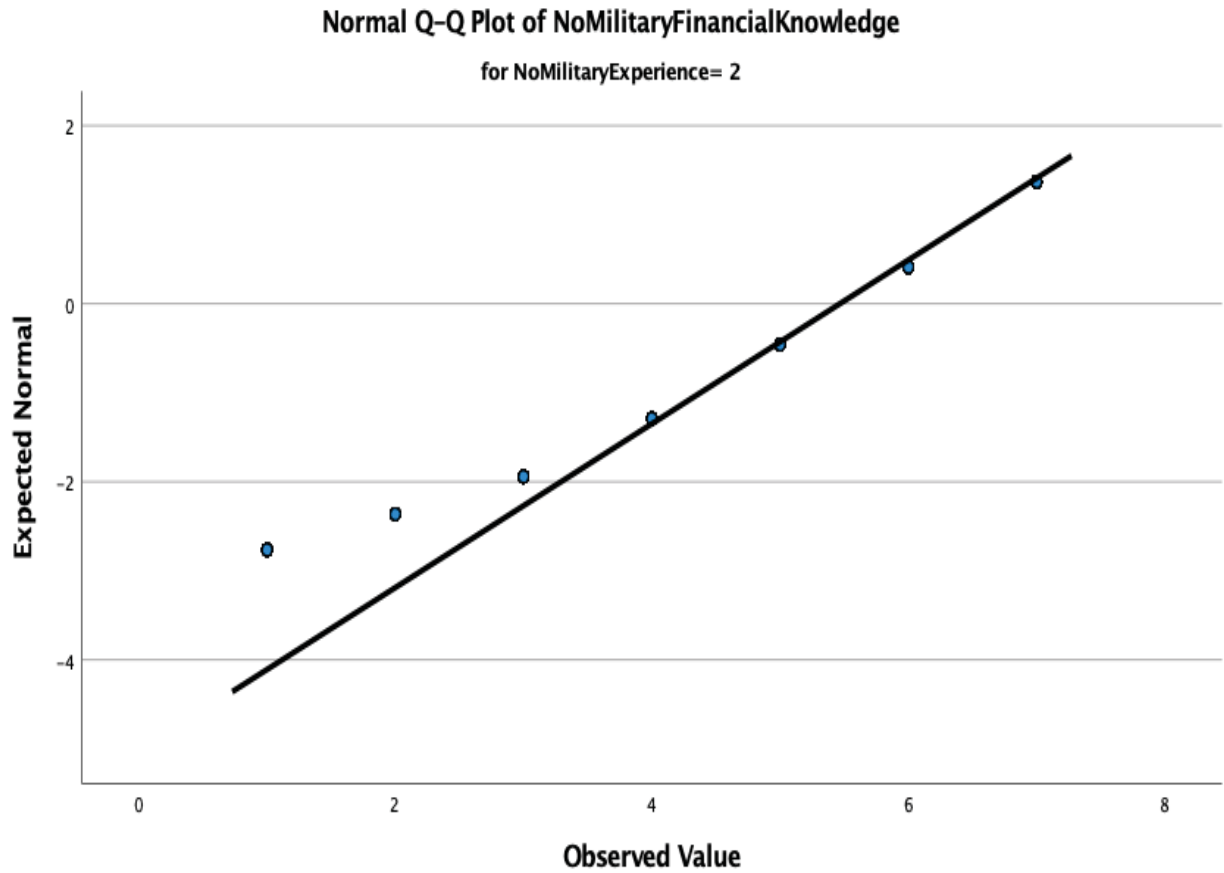


Figure 28. Q-Q Plot of the Expected and Observed distribution of Financial Knowledge by Non-Military Members.

Table 5

Descriptive Statistics

Variables	AM21			Statistic	Std Error
C11	1	Mean		1.77	.009
Hardship Withdrawal	Mil	95% Confidence Interval for Mean		Lower Bound	1.75
				Upper Bound	1.78
		5% Trimmed Mean			1.80
		Median			2.00
		Variance			.179
		Standard Deviation			.423
		Minimum			1
		Maximum			2

		Range		1	
		Interquartile Range		0	
		Skewness		-1.262	.050
		Kurtosis		-.408	.100
	2	Mean		1.95	.002
Non		95% Confidence Interval for Mean	Lower Bound	1.95	
Mil			Upper Bound	1.96	
		5% Trimmed Mean		2.00	
		Median		2.00	
		Variance		.047	
		Standard Deviation		.216	
		Minimum		1	
		Maximum		2	
		Range		1	
		Interquartile Range		0	
		Skewness		-4.181	.024
		Kurtosis		15.481	.047
J43	1	Mean		3.48	.014
Financial	Mil	95% Confidence Interval for Mean	Lower Bound	3.46	
Confidence			Upper Bound	3.51	
		5% Trimmed Mean		3.56	
		Median		4.00	
		Variance		.481	
		Standard Deviation		.693	
		Minimum		1	
		Maximum		4	
		Range		3	
		Interquartile Range		1	
		Skewness		-1.323	.050
		Kurtosis		1.603	.100
	2	Mean		3.27	.007
Non		95% Confidence Interval for Mean	Lower Bound	3.26	
Mil			Upper Bound	3.29	
		5% Trimmed Mean		3.33	
		Median		3.00	
		Variance		.536	
		Standard Deviation		.732	
		Minimum		1	
		Maximum		4	
		Range		3	
		Interquartile Range		1	
		Skewness		-.801	.024
		Kurtosis		.355	.047
J33	1	Mean		4.12	.045
Financial	Mil	95% Confidence Interval for Mean	Lower Bound	4.03	
Concern			Upper Bound	4.21	

		5% Trimmed Mean		4.13	
		Median		4.00	
		Variance		4.879	
		Standard Deviation		2.209	
		Minimum		1	
		Maximum		7	
		Range		6	
		Interquartile Range		4	
		Skewness		-.094	.050
		Kurtosis		-1.407	.100
	2	Mean		4.20	.019
Non		95% Confidence Interval for Mean	Lower Bound	4.16	
Mil			Upper Bound	4.24	
		5% Trimmed Mean		4.23	
		Median		4.00	
		Variance		4.047	
		Standard Deviation		2.012	
		Minimum		1	
		Maximum		7	
		Range		6	
		Interquartile Range		4	
		Skewness		-.185	.024
		Kurtosis		-1.171	.047
J1	1	Mean		7.67	.048
Financial		95% Confidence Interval for Mean	Lower Bound	7.58	
Satisfaction	Mil		Upper Bound	7.77	
		5% Trimmed Mean		7.89	
		Median		8.00	
		Variance		5.465	
		Standard Deviation		2.338	
		Minimum		1	
		Maximum		10	
		Range		9	
		Interquartile Range		3	
		Skewness		-1.103	.050
		Kurtosis		.608	.100
	2	Mean		6.61	.024
Non		95% Confidence Interval for Mean	Lower Bound	6.56	
Mil			Upper Bound	6.65	
		5% Trimmed Mean		6.73	
		Median		7.00	
		Variance		6.214	
		Standard Deviation		2.493	
		Minimum		1	
		Maximum		10	
		Range		9	

		Interquartile Range		3	
		Skewness		-.695	.024
		Kurtosis		-.296	.047
Financial	1	Mean		5.88	.023
Knowledge	Mil	95% Confidence Interval for Mean	Lower Bound	5.84	
			Upper Bound	5.93	
		5% Trimmed Mean		5.98	
		Median		6.00	
		Variance		1.234	
		Standard Deviation		1.111	
		Minimum		1	
		Maximum		7	
		Range		6	
		Interquartile Range		2	
		Skewness		-1.210	.050
		Kurtosis		2.176	.100
	2	Mean		5.47	.011
	Non	95% Confidence Interval for Mean	Lower Bound	5.44	
	Mil		Upper Bound	5.49	
		5% Trimmed Mean		5.53	
		Median		6.00	
		Variance		1.182	
		Standard Deviation		1.087	
		Minimum		1	
		Maximum		7	
		Range		6	
		Interquartile Range		1	
		Skewness		-.723	.024
		Kurtosis		1.121	.047
C10	1	Mean		1.75	.009
Retirement	Mil	95% Confidence Interval for Mean	Lower Bound	1.73	
Loan			Upper Bound	1.77	
		5% Trimmed Mean		1.78	
		Median		2.00	
		Variance		.188	
		Standard Deviation		.434	
		Minimum		1	
		Maximum		2	
		Range		1	
		Interquartile Range		1	
		Skewness		-1.148	.050
		Kurtosis		-.683	.100
	2	Mean		1.92	.003
	Non	95% Confidence Interval for Mean	Lower Bound	1.91	
	Mil		Upper Bound	1.92	
		5% Trimmed Mean		1.96	

Median	2.00	
Variance	.075	
Standard Deviation	.274	
Minimum	1	
Maximum	2	
Range	1	
Interquartile Range	0	
Skewness	-3.048	.024
Kurtosis	7.290	.047

Hypothesis Testing

Upon receiving approval from Liberty University's International Review Board (IRB #: IRB-FY21-22-17 dated 7-26-2021), datasets were organized into a database aligned using the Federal Information Processing System (FIPS) codes for the purpose of data analysis. The organized datasets were imported into SPSS to conduct Spearman's rho for research questions one and two. Each hypothesis, descriptive statistic, and brief description of findings for each of the research questions follow. Hypothesis testing was performed to ensure that the data was appropriate for the test conducted.

The methodology for this post-facto research tested the hypothesis of association by attempting to determine whether a correlation existed between variables. From the analysis of the data, it was determined that the results had a non-normal distribution. In addition, the data was skewed and kurtotic. Since it was ordinal data that was looking at the hypothesis of association, the decision tree led to a Spearman's rho (Mu et al., 2017). Looking for relationship, the research questions and hypotheses were studied.

Research question 1: How does having free, unlimited access to financial education impact U.S. military personnel's satisfaction with their personal financial condition as compared to the general population?

- H_0 : Having free, unlimited access to financial education has no impact on U.S. military personnel's satisfaction with their personal financial condition as compared to the general population.
- H_1 : Having free, unlimited access to financial education has a positive impact on U.S. military personnel's satisfaction with their personal financial condition as compared to the general population.

The first research question evaluates variables that review the relationship that unlimited access to financial education had on the financial satisfaction of military members. Given the relationship between variables, nature of the hypothesis, a Spearman Rho correlation was used. When using a Spearman Rho, the researcher had to evaluate a number of factors. First, the variables used in analysis should be linear in nature. Next, the data was found to lack normality. Therefore, the Spearman Rho does not make any assumptions regarding either the parameter mean or the parameter standard deviation.

The model used demographics, as measured by having served or currently serving in the U.S. military, as the predictor or independent variable. Financial capability was the continuous variable as it could represent an unlimited number of values between its highest and lowest value. Descriptive statistics for the dependent variable and independent variables can be found in Table 5. The dependent variables used in the model were financial knowledge, financial satisfaction, financial concern, and financial confidence. Results are reported in tables 6 through 9. As a result, Hypothesis 1 (H_1) for research question 1 (RQ1) was accepted.

Table 6

Financial Knowledge Correlation

		Non-Military Financial Knowledge	Military Financial Knowledge
Spearman's rho	Non-Military Financial Knowledge	Correlation Coefficient	1.000
		Sig. (2-tailed)	.001
		N	20786

Note. The correlation coefficient of $r_s = -.056$, which falls in the 0 and .20 correlation range, indicating a slight negative correlation (Sprinthall, 2011). The correlation is significant at the $p < 0.01$ demonstrating a negative relationship between military and non-military financial knowledge.

Table 7

Financial Satisfaction Correlation

		Non-Military Financial Satisfaction	Military Financial Satisfaction
Spearman's rho	Non-Military Financial Satisfaction	Correlation Coefficient	1.000
		Sig. (2-tailed)	.000
		N	20786

Note. The correlation coefficient of $r_s = -.206$, which falls in the .20 and .40 correlation range, indicating a low negative correlation (Sprinthall, 2011). The correlation is significant at the $p < 0.01$ demonstrating a negative relationship between military and non-military financial satisfaction.

Table 8

Financial Concern Correlation

		Non-Military Financial Concern	Military Financial Concern
Spearman's rho	Non-Military Financial Concern	Correlation Coefficient	1.000
		Sig. (2-tailed)	.000
		N	20786

Note. The correlation coefficient of $r_s = -.250$, which falls in the .20 and .40 correlation range, indicating a low negative correlation (Sprinthall, 2011). The correlation is significant at the $p < 0.01$ demonstrating a negative relationship between military and non-military financial concern.

Table 9

Financial Confidence Correlation

		Non-Military Financial Confidence	Military Financial Confidence
Spearman's rho	Non-Military Financial Confidence	Correlation Coefficient	1.000
		Sig. (2-tailed)	0.0
		N	20786

Note. The correlation coefficient of $r_s = 0.0$, indicating no correlation (Sprinthall, 2011). The correlation is not significant at $p > 0.05$ level.

Research question 2: How does having free, unlimited access to financial education impact U.S. military personnel in financial decision-making as compared to the general population?

- H_0 : Having free, unlimited access to financial education has no impact on U.S. military personnel in financial decision making as compared to the general population.

- H_1 : Having free, unlimited access to financial education has a positive impact on U.S. military personnel in financial decision-making as compared to the general population.

The second research question evaluated variables that reviewed the relationship that unlimited access to financial education had on the financial decision-making of individuals associated with the military. To quantify the strength of the association between unlimited access to financial education and financial decision-making in U.S. military personnel, the researcher conducted a Chi-square and an Odds Ratio. Given the “yes/no” nature of the variables to determine the hypothesis (military service, loan taken, hardship withdraw), it was determined that these two tests were the most appropriate. The Spearman Rho was not appropriate due to the overly large data set and how similar the data was for non-military. Essentially, the Spearman Rho thought the data was one group with no variance. The Chi-square test is designed to compare the observed values in the data to the expected values that would be seen if the null hypothesis was true (Gaunt et al., 2017). When using an Odds Ratio, the researcher must evaluate the odds of one event being the same if another event is present or absent of the other.

The model used demographics, as measured by having served or currently serving in the U.S. military, as the predictor or independent variable. Financial decision-making was the continuous or dependent variable. Descriptive statistics for the dependent variable and independent variables can be found in Table 5. The dependent variables used in the model were 401k Loans and 401k Hardship Withdrawals. Results are reported in Tables 10 through 15. As a result, Hypothesis (H_1) for the second research question (RQ2) was rejected.

Table 10

Chi-square for Loan Status

	Mil	Non-Mil	
Loan	603	874	1477
No Loan	1797	9786	11583
	2400	10660	13060
Chi-square:	559.532		
Degrees of Freedom:	1		
<i>p</i> -value:	< 0.0001		
Yates' chi-square:	557.846		
Yates' <i>p</i> -value:	< 0.0001		

Note. Military families take out loans against their retirement at a significantly higher frequency.

Table 11

Odds Ratio for Loan Status

Odds Ratio:	3.7552
95%CI:	3.3480 to 4.2164
<i>z</i> Statistic:	22.499
Significance Level:	< 0.0001

Table 12

Chi-square for Hardship

	Mil	Non-Mil	
Loan	560	522	1082
No Loan	1840	10138	11978
	2400	10660	13060
Chi-square:	876.311		
Degrees of Freedom:	1		
<i>p</i> -value:	< 0.0001		
Yates' chi-square:	873.886		
Yates' <i>p</i> -value:	< 0.0001		

Note: Military family claim hardship at a significantly higher frequency when compared to the total number of potential individuals who could take a loan out.

Table 13

Odds Ratio for Hardship

Odds Ratio:	6.2152
95% CI:	5.4625 to 7.0717
<i>z</i> Statistic:	27.737
Significance Level:	< 0.0001

Table 14

Chi-square for Loan to Hardship Status

	Mil	Non-Mil	
Loan	560	522	1082
No Loan	603	874	1477
	1163	1396	2559
Chi-square:	30.092		
Degrees of Freedom:	1		
<i>p</i> -value:	< 0.0001		
Yates' chi-square:	29.653		
Yates' <i>p</i> -value:	< 0.0001		

Note. When compared only to the number of loans taken out by each group against their retirement, military family claim hardship at a significantly higher frequency.

Table 15

Odds Ratio for Loan to Hardship Status

Odds Ratio:	1.5549
95% CI:	1.3276 to 1.82125.474
<i>z</i> Statistic:	22.499
Significance Level:	< 0.0001

The research revealed that military members had more financial knowledge, less financial satisfaction, more financial concern, and more financial confidence. During the research, it was discovered that individuals who are currently serving or those who previously served in the military take out more 401k loans and more hardship withdraws. Meanwhile, civilians (non-military) have less knowledge, more financial satisfaction, less financial concern, and less financial confidence. Those with no association with the military took out less loans against their 401k and they also had less hardship withdraws. The research questions were broken down based on the correlation. As a result, the hypothesis for RQ1 was accepted and the hypothesis of RQ2 was rejected.

Relationship of the Findings

This section of the research focused on how the findings addressed each of the research questions. The correlation demonstrated the relationship between variables (e.g., financial education and financial satisfaction); however, this does not necessarily mean that there was a cause and effect. If analysis revealed that two variables were correlated, this meant that as one variable changes, the other variable changed as well. The researcher was able to measure correlation by calculating a statistic analysis through what is called a correlation coefficient. A correlation coefficient would range from -1 to +1, which would indicate the strength or weakness of the correlation and which direction of the relationship the variables would have on each other. The correlation coefficient was represented by the letter r .

The strength or weakness of the relationship was identified by the numerical part of the correlation coefficient. If the number is closer to 1 (regardless if it is negative or positive), then the variables are more strongly related, which would predict that the change in one variable is more likely to change the other variable as well. Whereas, the closer the numerical part of the

correlation coefficient is to zero, the relationship is considered weaker, and therefore the relationships between the variables would be less predictable. An example of this would be if the correlation coefficient was 0.8, this would suggest a much stronger relationship than if the correlation coefficient was 0.2. If there is no relation between the variables at all, then the correlation coefficient would be zero. With the variables, financial education and financial satisfaction, there was a low negative relationship to each other (Table 7).

Meanwhile, the chi-square test was designed to look at two variables to determine if they were independent or not. For this research, the study looked to determine if the two factors of financial education and financial decision-making were related. If the research could rule out whether or not financial education and decision-making were independent, the chi-square would be able to determine if the two variables were dependent or independent. Specifically, it would determine if financial decision-making was not correlated with or independent of access to financial education. With the variables financial education and financial decision-making, those associated with the military made worst financial decisions at a significantly higher frequency when compared to the total number of potential individuals who could take a loan out (see tables 10 through 15).

The following two research questions were approved for the study:

RQ1. How does having free, unlimited access to financial education impact U.S. military personnel's satisfaction with their personal financial condition as compared to the general population?

RQ2. How does having free, unlimited access to financial education impact U.S. military personnel in financial decision-making as compared to the general population?

Theoretical framework. According to Creswell (2014), the theoretical framework was designed to create a foundation to support the study, which was to investigate a particular research problem. The theoretical framework was the theoretical model that assisted in laying out the path forward and was designed to direct the overall research. The framework provided the background that reinforced both the research and the investigation while offering explanation for the study of a specific problem (see figure 1). It included the variables that were designed to be evaluated and what impact they had. Fundamentally, the purpose was that the theory would be laid out and a process would be put in place to look into that theory. The theoretical framework defined the problem.

There were two theories laid out in the theoretical framework. The first was that U.S. military members have unlimited access to free financial education and are therefore personally satisfied with their personal financial condition. The second was that unlimited access to financial education had a direct impact on U.S. military personnel in financial decision-making when compared to the general population. The common variable was the area in which the two misunderstood variables (financial education and seeking financial advice) overlapped. The results of this research revealed the outcome of that common variable.

The Literature. The outcome of this research is not supported by a majority of the research currently in place. Lusardi (2019) wrote that the level of financial knowledge was in direct correlation to financial decision-making. Additionally, Hastings et al. (2013) compared financial education as an antidote to improving financial capability. While there has been substantial research that has shown the need for understanding the relationship of how financial education impacts the decision for seeking financial advice (Gentile et al., 2016; Kramer, 2012; Lim et al., 2014; Lusardi & Mitchell, 2010; Lusardi & Mitchell, 2014; Porto & Xiao, 2016; Porto

& Xiao, 2019; Xiao & O'Neill, 2016; Xiao & Porto, 2017), this research has revealed that having unlimited access to financial education does not equate to seeking financial advice from a professional advisor. The unfortunate aspect of not seeking out guidance is that a relationship with a financial advisor has shown extremely beneficial in the decision-making process (Cruciani, 2017). However, there is recent literature that does agree with the findings of this research that access to financial education does not necessarily lead to better financial decision-making (Ambuehl et al., 2014).

The Problem. The problem that this study focused on, was the possible failure that unlimited access to financial education would not be enough to provide adequate financial capability for military service members to make informed financial decisions. Since U.S. military members have unlimited access to free financial education on every military installation, research would suggest that service members would then be more likely to seek professional financial advice, which in turn would result in making more sound financial decisions (Gentile et al., 2016; Lusardi & Mitchell, 2014; Porto & Xiao, 2016; Xiao & Porto, 2017). However, after researching the study conducted by the FINRA IEF (2019), the researcher found that those affiliated with military were more satisfied with their personal financial condition than their civilian counterparts; however, the research also revealed that they are making worst financial decisions, which was seen by the amount of loans and hardship withdraws they were taking from their 401k accounts. This analysis is backed by research by Lu et al. (2017), which explained why an increase in loans and hardship withdraws from a 401k is not recommended and would likely cause service members to experience significant penalties, taxes, and not to mention a major impact to future balances caused by lost opportunity. The unfortunate reality is that 401k accounts are providing military members with liquidity in order to meet current financial needs

prior to being retirement eligible. What makes this unfortunate is that, without guidance from a financial advisor, service members would have negatively impacted the primary design of their retirement plans—to provide financial security later in life.

Summary of the Findings

The researcher utilized the quantitative research method in order to understand how members of the U.S. military compared to the general population when it came to the amount of access they had to financial education. Through the research it was determined that a significant portion of the American population are required to make financial decisions that, over time, are becoming more and more complicated. If that was not bad enough, research revealed that families are becoming more unsure of their ability to make sound financial decisions when faced with challenging financial encounters.

The results of the research findings were quite revealing. Individuals who have served or are currently serving in the military and are provided free, unlimited access to financial education were more satisfied with their personal finances when compared to the general population. However, the findings also showed that having free, unlimited access to financial education did not lead military personnel to make better financial decisions as compared to the general population.

Application to Professional Practice

Financial advisors who are actively working in the securities industry should not assume that financial education alone is adequate enough on its own in helping investors make wise financial decisions. While research does argue that financial education is a key component of financial capability, there is still a need for professional financial advice (Gentile et al., 2016; Hastings et al., 2013; Lusardi, 2019; Lusardi & Mitchell, 2014; Porto & Xiao, 2019; Xiao &

Porto, 2017). The goal of this section is to offer recommendations that can improve the general business practice of the industry and to provide suggestions of potential application strategies that the financial services sector and military organizations can utilize in order to leverage the findings of this research.

Improving General Business Practice

The researcher of this study devoted over 25 years to the financial sector where he spent over 20 years in the United States Air Force as a senior financial analyst. After retiring from military service, the researcher became a financial advisor with a Fortune 100 financial investment firm. Using that experience, the researcher was able to focus in on the general business practices and acumen to improve on. There were two routes for improvement that were revealed during this study. The first route was that of the military services and the second route was for professional financial investment firms.

The military services that fall under the umbrella of the Department of Defense (DoD) include the Department of the Air Force (USAF), Department of the Army (USA), and Department of the Navy (USN, which includes the Marines). While the U.S. Coast Guard (USCG) technically falls under the Department of Homeland Security (DHS), there would still be room here for them to improve as well. It is important for the DoD to use the findings of this study to improve the ways in which they provide financial education to service members. The DoD may offer, and even at times mandate, financial education; however, there is no way for the DoD to force veterans to learn the material provided, much less apply it. The military services need to apply a strategy that creates ‘buy-in’ and in turn benefits both the military members and the military service. By having soldiers, sailors, airmen, and marines making better financial decisions, they should spend less time concerned with their personal finances and be more

focused on the mission at hand, resulting in combat-ready troops. A troop that is secure financially can focus more on the mission, which could potentially protect both themselves and their brothers and sisters-in-arms in the combat zone. Additionally, financial instability can also lead to a service member losing their security clearance, which could prevent them from doing their jobs (Maxwell, 2003).

The second route would be from the financial investment firm side. This research should be shared with advisors and firms to provide better options for the military men and women of this country. Financial firms need to understand that while the military services are providing financial education, this research has revealed that it was not enough on its own. Financial advisors should be prepared and expect to be proactive in reaching out to service members to offer their expertise as another option, assuming the military is not willing or able to do so. By focusing geographically on military training bases that are designed for service members going through initial training (or returning for continuing training), financial firms should be setting up branches to cater to those individuals. It is recommended that these financial institutions focus on offering specialized financial training to our military to improve performance when it comes to making financial decisions. Investment firms need to realize that this does not necessarily mean that the service members would become clients; however, the financial advisory firms should act in a way that is considered socially appropriate and provide this training at no charge. Because if Lusardi (2019) was correct, then by providing them worthwhile financial education when the members are ready to learn, they should see those same trainees come back to seek professional financial advice. This process could potentially create long-lasting relationship with clients that financial advisors could walk along with for years to come.

Overall, the preferred outcome would be that the two routes would merge where the military services worked alongside with financial investment firms to create a partnership. Through this partnership, the desired outcome would be military service members have a choice on how they want to invest for the future and which route would be most advantageous to them. Many military members often join with the goal of only serving one tour and then separate from the military. Those individuals would not qualify for military retirement and would then enter the civilian sector starting behind their peers. Likewise, even after a successful career that resulted in a lifetime pension, some individuals may have been better off (or preferred) to have invested their funds their own way with a personal financial advisor.

Potential Application Strategies

The potential application strategies portion of this study was designed to make recommendations that organizations could implement to leverage the findings of this research. This research has revealed issues that directly impact both military members and investors alike. By applying these recommended strategies, the desire of this research was that organizations could make an effort to change the course for the future, and greatly reduce the chances of this happening for the next generation as well as hopefully improve the poor habits of those in the armed forces today.

A potential strategy that could be beneficial to both the Department of Defense and financial advisors would be to create a partnership. The recommendation would be to have an outside, non-military, financial firm provide professional, personalized, financial advice and education. Doing so, military members would be able to have candid dialog about their finances with a professional that could help them realize how the decisions made today would follow

them well beyond their service in the military. Additionally, they would be able to be open and honest without fear of reprisal from their military leaders.

At the beginning of an individual's military service (i.e., the start of basic military training, enrollment at a military academy, during officer training school, etc.) everyone should be educated and offered one of two routes. The first route would be that they go the traditional military route and plan on a military pension after 20 years or more of service or the government's sponsored Thrift Savings Plan. The second route that this research suggest should be offered, would allow a service member to select an outside third party financial firm to partner with to manage their retirement outside of the military. By offering choices, it is likely to get the individual to feel like they have ownership and would likely have more buy-in (Brazeal & Couch, 2017).

If the military member chooses the "third party" route, the investor should sit down with a financial advisor and establish a financial roadmap that identified objectives to reach specific goals. Two of the most common goals in the researcher's own practice are establishing an emergency fund (for unexpected expenses) and a retirement goal. By establishing these two separate (yet complimentary) goals, military members would be prepared not only for expenses that come up today, but also be prepared for expenses that arise in retirement. While military members appear to have financial confidence and satisfaction, the research revealed that they are making financial decisions that takes away from assets designed for future goals in order to meet immediate short-term needs.

Lastly, since this research revealed that military members made financial decisions that were ill-advised more than their civilian counterparts, this is an area that should be targeted with laser focus to address. This extra level of education could be through the use of mass educational

briefings or one-on-one meetings that concentrate on the impacts of 401k loans and hardship withdrawals. Members should be fully aware of not only the direct costs involved with tampering with retirement accounts, but also be taught the lost opportunity costs. Direct costs can include both federal and state tax on the amount withdrawn (based on the individual tax bracket of the investor), and for those under the age 59.5, a 10% early withdraw penalty assessed by the IRS when filing taxes. The lost opportunity costs can be even more staggering. The Rule of 72 explains that if an investment is getting an average of 7.2% rate of return, then that investment would double every 10 years (Lusardi & Tufano, 2015). That means that a 25-year-old that withdraws \$10,000 from their retirement account, that equates to \$160,000 by age 65. This education should prove to be enlightening to investors and stop actions that have been proven to be counterproductive.

Summary of Application to Professional Practice

Overall, by the DoD and full service financial investment firms working hand-in-hand, the two are able to apply recommendations to improve the decision-making abilities of service members. These recommendations are designed to be laser-focused, which could assist service members in making smarter financial decisions. The two organizations working together would benefit the military agencies by having service men and women who are more prepared, financially, for retirement. The financial firms could benefit by having a long-lasting relationship with service members well into retirement. The main focus would be to ensure that individuals are getting the best education at the most appropriate time.

Recommendations for Further Study

One area that can be further reviewed is the quality of education that the U.S. military is providing military members. This research revealed that even though financial education was

being provided, military members were not making sound decisions when it came to their finances. A deeper look into the training provided could potentially reveal that having less knowledge might result in investors not knowing that they are able to take out 401k loan or hardship withdraw, and ultimately being more beneficial to the individual. It could be due to the quality of the education in that the financial training was not adequate to meet the needs of the military members.

Additionally, future research could look at the inconsistent pay of both military members and their spouses. Military members get a significant pay boost when they deploy to combat zones through hazardous duty pay, hostile fire pay, family separation pay, combat zone tax exclusion, daily per diem, and travel allowances. This increase in pay can range from an extra \$700-\$1800 a month, depending on location (Military OneSource, n.d.). However, the next year they could get military orders that reassign them to another permanent duty location stateside where the cost of living might go down but they could leave behind a home (and mortgage), which would result in having to maintain two households, and not to mention the spouse might have to give up their high paying jobs to follow their service member; basically, bills could double and income could get cut in half. Future research could evaluate to see if this is the true cause of loans and hardship withdraws and not the financial education.

Another potential for future study would be to look at any potential differences between the different military affiliations. While this study looked at anyone that is serving or has previously served, future research could break down those that are serving, from those that have previously served, and their military status (i.e., active duty, guard, reserve, etc.). By diving deeper into these areas, a researcher would be able to see if current active duty members (who

are inundated with current, up-to-date training on a daily basis) responded any differently than those who are no longer serving, or only serve one weekend a month.

Reflections

Education is important for the decision-making ability of individuals and for continued growth. This research has shown that, at least for military individuals, financial education does provide financial satisfaction, financial knowledge, and financial capability. However, even with being financially capable, investors still need help in making decisions relating to their finances. Overall, it comes down to separating knowledge from emotion. Through this self-reflection I have been able to improve and grow both personally and professionally. This research has given guidance and direction on how to improve my own financial practice and I have also learned how to apply these financial principles using a biblical lens.

Personal & Professional Growth

Ultimately, professional growth comes from everyday routines, interactions, and random incidents (Armstrong, 2021). Since I have been focusing on this research for the past five years, it is safe to say that this study has become an everyday routine. While conducting this research project, I have grown both personally and professionally. I have realized that even though people may have access to financial education, this alone did not solve the problem; if an individual is going to invest by seeking financial advice, I will have to provide additional education. This would require me to go out and provide additional educational events to the military within the vicinity of my community.

During my 20 years of service to the USAF as a senior financial analyst, I saw a lot of service members investing during their time in the military. I saw first-hand, colleagues that never knew the reason behind investing. They had no clue what they was investing in or what the

true purpose of those investments were for. Through this research, I have designed a business plan for my practice to implement some of these strategies and find a way to partner with the various military organizations to help make sure that the military in my community are not neglected.

However, this research was not just for the military. The other aspect of this research has revealed that financial education has a place in the civilian community as well. With the right amount of financial education focused on the right things, I will be able to improve the financial knowledge, satisfaction, and capability of those in my current book of business, as well as teach the importance on financial decision-making. By improving the decisions made, the goal would be to reduce the amount of 401k loans and hardship withdrawals across the board. Even during this research project, I have already started to implement more education during my conversations with clients. The outcome has been very positive. I have consistently heard from many investors that they have learned more from me in that one hour than they have ever learned. This makes me both happy and sad—happy that people are learning more about how to invest, but sad that many investors are just now hearing it. I have now started sharing what I have learned with my colleagues within the firm. Bottomline, I feel that I am a better financial advisor today than I was at the beginning of this project.

Biblical Perspective

The worldview on finances can vary greatly; however, the Christian world view is pretty clear on the matter. Man is not able to serve two different masters, he will hate the one and love the other, or be focused on one and neglect the other (Matthew 6:24). What Jesus was saying was that individuals are not mentally and emotionally capable of being in love with Him and at the same time being in love with money.

Financial matters are discussed in great detail all throughout the Bible (1 Timothy 6:17-19; Psalm 62:10; Proverbs 10:4; Proverbs 13:16). At times the Bible is misquoted and incorrectly interpreted to suggest that money is the basis of all things evil. The truth of the matter is that it is the love of money. The scripture makes it clear that it is a heart issue and not a financial issue (1 Timothy 6:10). Truth be known, anything that takes a higher position in the life of a Christian and distracts them from a deeper relationship with Christ is a god in the life of that person (Matthew 6:24; 1 John 2:15-17).

A deeper dive into God's Word will actually reveal that proper management of finances is discussed in great detail (1 Timothy 6:17-19; Psalm 62:10; Proverbs 10:4; Proverbs 13:16; Luke 14:28-30; Proverbs 6:6-8; Proverbs 21:20; Proverbs 21:5; 1 Corinthians 16:2). While the aforementioned is just a small sample of scripture references, it gives a good understanding the importance that God places on managing finances. Scripture goes even as far as saying that if a person does not work, then he will not eat (II Thessalonians 3:10).

Jesus talked in parables to make his teachings more understandable to the common man. Matthew gave a recount of the time when Jesus explained proper stewardship by using the parable about the master who entrusted three of his servants with his wealth while he left on a journey. While two of the servants invested their portion wisely and doubled their amount, the third servant, being afraid, buried the money in the ground. When the master returned, he was happy to see the two who doubled his wealth; however, when the third servant explained that he protected the wealth for his owner by burying it in the ground, the owner rebuked him and cast him out of his household for not at least investing the money in the bank to earn interest (Matthew 25:14-30).

The scripture offers pretty clear guidance when it comes to making wise decisions when managing financial resources. Luke gives an account in the New Testament describing how someone planning for the future fails to prepare the financial aspect of that plan. That failure would lead to others mocking the individual for neglecting to properly plan (Luke 14:28-30). Likewise, the Old Testament also warned individuals who failed to make sound financial decisions. The Proverbs discussed that investors who make sound financial decisions will realize a return on their investment; whereas, those who rush in and make poor financial decisions will lose (Proverbs 21:5). While financial capability and decision-making are both important, in the end, investors need to realize that they are in a special position to be able to advance His Kingdom. Likewise, Christian financial advisors are in a special place to use their talents as an opportunity to help heal and restore investors (Van Duzer, 2010). Financial advisors are especially good at doing a lot with very little and are able to organize and put into place strategies with “remarkable efficiency” (Van Duzer, p. 200). Financial advisors are able to be used as tool for the glory of God when they use His gifts in the service of others (1 Peter 4:10-11).

Financial advisors to some extent will always be influenced by secular worldviews and the idols that accompany. Advisors will need to take for account the value these idols hold and consider “our sin or God’s grace” (Keller & Alsdorf, 2012, p. 165). Without understanding the grace given, it would be easy for advisors to get distracted and instead of making sure that the needs of clients are the focus that they start focusing on things of this world—power and money. This is why Keller pointed out the importance of being “intentional in applying the counter-narrative of the gospel to business” (Keller & Alsdorf, p. 167). Those that walk in the faith

should always keep focus on the ultimate goal and look for ways that will help one another bring glory to God.

Keller (2012) would say that the role of the financial advisor is to be “an extension of God’s providential work” and find out where education and capability is lacking so that advisors can learn from the successes and failures of others, which in turn can allow individuals to better themselves. Ultimately, the end goal is that this research will reveal a redemptive need for all involved and allow for investors to grow wealth and in turn use that wealth to further God’s kingdom here in this broken world. There will be many distractions that will try to take the place of priority in life, which can be a longing to be successful, the sweet aroma of lust, but the worst idol of all will be the desire of money (Matthew 6:24). None are exempt from these temptations and could easily fall victim—but by grace.

Summary of Reflections

The military members that serve (or have served) to protect these United States need to be taken care of and should not have to make financial decisions that negatively impact their futures. As a financial advisor, this researcher will need to work with his firm to provide options to service members to give advice that can hopefully protect military retirement accounts from early withdrawals. This advice should utilize a biblical perspective that focuses on the need to be good stewards of the resources that God has so generously provided. Ultimately, the goal would be to educate service members how to establish emergency goals to deal with unexpected expenses, protect their retirement accounts, and in turn give back to building His kingdom here on Earth.

Summary of Section 3

This section of this research offered a presentation of the findings, application to professional practice, recommendation for further study, and reflection. Through this quantitative research, the researcher was able to compare how military members and their civilian counterparts responded to the amount of access they had to financial education. The study revealed that those who are serving or have previously served are provided free, unlimited access to financial education. Using the NFCS and SPSS, the research found that the military were more satisfied with their personal finances, found themselves more financially capable, and had more financial knowledge (as compared to those who have never served). However, the research also revealed that this level of access to financial education did not equate to military personnel making better financial decisions. Using the outcomes of this study, the DoD and financial firms will be able to apply strategies to focus the attention of training where it is needed the most. However, additional research could be conducted to see how current active duty members compare to those who have previously served, or those who are guard and reservists. Ultimately, regardless of military affiliation and access to education, the Bible is very clear on the importance of making wise financial decisions. Through this and all things, do for the glory of God.

References

- Allen, M. (2017). *The SAGE encyclopedia of communication research methods: 4*. SAGE Publications, Inc.
- Almeida, F. (2018). Strategies to perform a mixed methods study. *European Journal of Education Studies*.
- Apuke, O. D. (2017). Quantitative research methods: A synopsis approach. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 33(5471), 1-8.
- Arrfelt, M., Wiseman, R. M., McNamara, G., & Hult, G. T. M. (2015). Examining a key corporate role: The influence of capital allocation competency on business unit performance. *Strategic Management Journal*, 36(7), 1017-1034.
- Atuel, H.R., & Castro, C.A. (2018). Military cultural competence. *Clinical Social Work Journal*, 46, 74–82.
- Birkenmaier, J., Birkenmaier, J., Fu, Q., & Fu, Q. (2016). The association of alternative financial services usage and financial access: Evidence from the national financial capability study. *Journal of Family and Economic Issues*, 37(3), 450-460. <https://doi.org/10.1007/s10834-015-9463-2>
- Bogdan, R., & Biklen, S. K. (2003). *Qualitative research for education: An introduction to theory and methods*. Boston: Allyn and Bacon.
- Bonett, D. G. (2020;2019). Point-biserial correlation: Interval estimation, hypothesis testing, meta-analysis, and sample size determination. *British Journal of Mathematical & Statistical Psychology*, 73(S1), 113-144. <https://doi.org/10.1111/bmsp.12189>
- Bucher-Koenen, T., & Ziegelmeyer, M. (2014). Once burned, twice shy? Financial literacy and wealth losses during the financial crisis. *Review of Finance*, 18(6), 2215-2246.

- Calcagno, R., & Monticone, C. (2015). Financial literacy and the demand for financial advice. *Journal of Banking & Finance*, 50(C), 363-380.
- Collins, M. 2012. Financial advice: A substitute for financial literacy? *Financial Services Review* 21(4), 307–322.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications, Inc.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications, Inc.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications, Inc.
- Danes, S. M., & Yang, Y. (2014). Assessment of the use of theories within the Journal of Financial Counseling and Planning and the contribution of the family financial socialization conceptual model. *Journal of Financial Counseling and Planning*, 25(1).
- Debbich, M. (2015). Why financial advice cannot substitute for financial literacy? *Banque de France Working Paper No. 534*.
- Elnitsky, C. A., Fisher, M. P., & Blevins, C. L. (2017). Military service member and veteran reintegration: A conceptual analysis, unified definition, and key domains. *Frontiers in Psychology*, 8, 369.
- Fan, L., & Chatterjee, S. (2020). The utilization of robo-advisors by individual investors: An analysis using diffusion of innovation and information search frameworks. *Financial Counseling and Planning*, 31(1), 130-145. <https://doi.org/10.1891/JFCP-18-00078>
- Fernandes, D., Lynch, J., & Netemeyer, R. (2014). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, 60(8), 1861-1883.

Financial Literacy Training: Financial Services. (2016). 10 U.S. Code § 992.

<https://www.govinfo.gov/content/pkg/USCODE-2015-title10/pdf/USCODE-2015-title10-subtitleA-partII-chap50-sec992.pdf>

FINRA IEF. (2019). Financial capability in the United States: Report of findings from the 2018 National Finance Capability Study. Washington, DC: FINRA Investor Education Foundation. Retrieved from

http://www.usfinancialcapability.org/downloads/NFCS_2018_Report_Natl_Findings.pdf

Fox, J. F., & Bartholomae, S. (2008). Financial education and program evaluation. In J. J. Xiao (Ed.), *Handbook of consumer finance research*. New York: Springer.

Frey, B. B. (2018). *The SAGE encyclopedia of educational research, measurement, and evaluation: 4*. SAGE Publications, Inc.

Garson, D. G. (2012). *Testing statistical assumptions*. Asheboro, NC: Statistical Publishing Associates.

Gaudecker, H.-M.V. (2015), How does household portfolio diversification vary with financial literacy and financial advice? *The Journal of Finance*, 70, 489-507.

Gentile, M., Linciano, N., & Soccorso, P. (2016). Financial advice seeking, financial knowledge, and overconfidence. *Evidence from Italy, Consob Research Papers*, 83.

George, D., & Mallery, P. (2016). *IBM SPSS statistics 23 step by step: A simple guide and reference*. Routledge.

Goertzen, M. J. (2017). Introduction to quantitative research and data. *Library Technology Reports*, 53(4), 12-18.

- Grable, J., & Chatterjee, S. (2014). Zeta estimates of wealth volatility and financial planning horizon. *Econometric Modeling: Microeconomic Models of Household Behavior eJournal*.
- Hayton, J. C., Allen, D. G., & Scarpello, V. (2011;2004;). *Factor retention decisions in exploratory factor analysis: A tutorial on parallel analysis*. In W. Vogt (Ed.), (pp. 191-205). SAGE Publications, Inc.
- Henager, R., & Wilmarth, M. J. (2018). The relationship between student loan debt and financial wellness. *Family and Consumer Sciences Research Journal*, 46(4), 381-395.
<https://doi.org/10.1111/fcsr.12263>
- Huhmann, B. (2014). Social and psychological influences on financial literacy. In Harrison, T. and Estelami, H. (eds.). *Routledge companion to financial services marketing*. Routledge: London.
- Kaiser, T., & Menkhoff, L. (2017). Does financial education impact financial literacy and financial behavior, and if so, when? *The World Bank Economic Review*, 31(3), 611–630.
- Karch, J. D. (2021). Psychologists should use Brunner-Munzel’s instead of Mann-Whitney’s U test as the default nonparametric procedure. *Advances in Methods and Practices in Psychological Science*. <https://doi.org/10.1177/2515245921999602>
- Keller, T., & Alsdorf, K. L. (2012). *Every good endeavor: Connecting your work to God's work*. New York, NY: Dutton.
- Kim, K. T., & Xiao, J. J. (2021). Racial/ethnic differences in consumer financial capability: The role of financial education. *International Journal of Consumer Studies*, 45(3), 379-395.
<https://doi.org/10.1111/ijcs.12628>

- Kramer, M. M. (2016). Financial literacy, confidence and financial advice seeking. *Journal of Economic Behavior and Organization*, 131(Part A), 198-217.
<https://doi.org/10.1016/j.jebo.2016.08.016>
- Kühberger, A., Fritz, A., & Scherndl, T. (2014). Publication bias in psychology: A diagnosis based on the correlation between effect size and sample size. *PloS One*, 9(9), e105825-e105825. <https://doi.org/10.1371/journal.pone.0105825>
- Lai, K. P. Y. (2016). Financial advisors, financial ecologies and the variegated financialisation of everyday investors. *Transactions of the Institute of British Geographers*, 41, 27-40.
- Lavrakas, P. J. (2008). *Encyclopedia of survey research methods* (Vols. 1-0). Thousand Oaks, CA: Sage Publications, Inc.
- Lee, J. M., Park, N., & Heo, W. (2019). Importance of subjective financial knowledge and perceived credit score in payday loan use. *International Journal of Financial Studies*, 7(3), 53. <https://doi.org/10.3390/ijfs7030053>
- Liebowitz, J. (Ed.). (2016). *Financial Literacy Education*. New York: Auerbach Publications.
- Lim, H., Heckman, S. J., Letkiewicz, J. C., & Montalto, C. P. (2014). Financial stress, self-efficacy, and financial help-seeking behavior of college students. *Journal of Financial Counseling and Planning*, 25(2), 148-160.
- Lopez-Fernandez, O., & Molina-Azorin, J. F. (2011). The use of mixed methods research in the field of behavioural sciences. *Quality & Quantity*, 45(6), 1459-1472.
- Lu, T. J., Mitchell, O. S., Utkus, S. P., & Young, J. A. (2017). Borrowing from the future? 401(k) plan loans and loan defaults. *National Tax Journal*, 70(1), 77-109.
<https://doi.org/10.17310/ntj.2017.1.03>

- Lusardi, A., & Mitchell, O. S. (2010). How ordinary consumers make complex economic decisions: Financial literacy and retirement readiness. *National Bureau of Economic Research*.
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5-44.
<https://doi.org/10.1257/jel.52.1.5>
- Martin, A. J., Collie, R. J., Durksen, T. L., Burns, E. C., Bostwick, K. C., & Tarbetsky, A. L. (2019). Growth goals and growth mindset from a methodological-synergistic perspective: lessons learned from a quantitative correlational research program. *International Journal of Research & Method in Education*, 42(2), 204-219.
- Mathieu, J. E., Luciano, M. M., D’Innocenzo, L., Klock, E. A., & LePine, J. A. (2020). The development and construct validity of a team processes survey measure. *Organizational Research Methods*, 23(3), 399-431.
- Military OneSource. (n.d.). Retrieved from <https://www.militaryonesource.mil>
- Miller, M., Reichelstein, J., Salas, C., & Zia, B. (2015). Can you help someone become financially capable? A meta-analysis of the literature. *World Bank Research Observer*, 30(2), 220–246.
- Moreland, K. A. (2018). Seeking financial advice and other desirable financial behaviors. *Journal of Financial Counseling and Planning*, 29(2), 198-207.
- Morgan, G., Leech, N., Gloeckner, G., & Barrett, K. (2013). *IBM SPSS for introductory statistics*. Routledge.
- Mottola, G. R. (2013). In our best interest: Women, financial literacy, and credit card behavior. *Numeracy*, 6(2), Article 4.

- Mottola, G. R., & Kieffer, C. N. (2017). Understanding and using data from the national financial capability study. *Family and Consumer Sciences Research Journal*, 46(1), 31-39.
- Mottola, G., & Skimmyhorn, W. (2019). How are veterans faring financially? Retrieved from https://www.usfinancialcapability.org/downloads/How-Are-Veterans-Faring-Financially_Issue-Brief.pdf
- Neuman, W. L. (2011). *Social research methods: Qualitative and quantitative approaches* (7th ed.). Pearson.
- Ock, J. (2016). Construct validity evidence for multisource performance ratings: Is interrater reliability enough? *Industrial and Organizational Psychology*, 9(2), 329-333.
- O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: debates and practical guidelines. *International Journal of Qualitative Methods*, 19, 1609406919899220.
- O'Dwyer, L. M., & Bernauer, J. A. (2016). *Quantitative research for the qualitative researcher*. SAGE Publications, Inc.
- Office of Financial Readiness. (n.d.). Retrieved from <https://finred.usalearning.gov>
- PACFC (2013). Final report: President's Advisory Council on Financial Capability. Washington, DC: President's Advisory Council on Financial Capability.
- Patten, M. L., & Newhart, M. (2017). *Understanding research methods: An overview of the essentials*. Routledge.
- Peel, B. (2008). Not ownership but responsibility (Leadership is Stewardship: Part 2). The High Calling. Retrieved from https://www.theologyofwork.org/the-high-calling/blog/not-ownership-responsibility-leadership-stewardship-part-2#.VP9dv4HF_33

Porto, N., & Xiao, J. J. (2016). Financial literacy overconfidence and financial advice seeking.

Journal of Financial Service Professionals, 70(4), 78-88.

Porto, N., & Xiao, J. J. (2019). Financial education and demand for debt counseling advice.

Journal of Personal Finance, 18(2), 25-38.

Proeger, T., & Meub, L. (2014). Overconfidence as a social bias: Experimental evidence.

Economics Letters, 122(2), 203-207.

Rahi, S. (2017). Research design and methods: A systematic review of research paradigms,

sampling issues and instruments development. *International Journal of Economics &*

Management Sciences, 6(2), 1-5.

Robb, C. A., Babiartz, P., & Woodyard, A. (2012). The demand for financial professionals'

advice: The role of financial knowledge, satisfaction, and confidence. *Financial Services*

Review, 21(4), 291.

Robb, C. A., & Woodyard, A. S. (2011). Financial knowledge and best practice behavior.

Journal of Financial Counseling and Planning, 22(1), 60–70.

Rosenthal, J. A. (2012). *Statistics and Data Interpretation for Social Work*. Ukraine: Springer

Publishing Company.

Rust, N. A., Abrams, A., Challender, D. W., Chapron, G., Ghoddousi, A., Glikman, J. A., ... &

Hill, C. M. (2017). Quantity does not always mean quality: The importance of qualitative social science in conservation research. *Society & Natural Resources*, 30(10), 1304-1310.

Sahin, M. D., & Öztürk, G. (2019). Mixed Method Research: Theoretical Foundations, Designs

and Its Use in Educational Research. *International Journal of Contemporary Educational*

Research, 6(2), 301-310.

- Salkind, N. J. (2014). *Statistics for people who (think they) hate statistics* (5th ed.). SAGE Publications, Inc.
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., ... & Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & quantity*, 52(4), 1893-1907.
- Sayinzoga, A., Bulte, E. H., & Lensink, R. (2016). Financial Literacy and Financial Behaviour: Experimental Evidence from Rural Rwanda. *Economic Journal*, 126(594), 1571–1599.
- Schuchardt, J., Hanna, S. D., Hira, T. K., Lyons, A. C., Palmer, L., & Xiao, J. J. (2009). Financial literacy and education research priorities. *Journal of Financial Counseling and Planning*, 20(1).
- Sherraden, M. S., & Morrow-Howell, N. (2015). *Financial capability and asset holding in later life: A life course perspective*. Oxford University Press.
- Shipman, S. (2007). Public program evaluation: A statistical guide by Laura Langbein with Claire L. Felbinger. *The American Journal of Evaluation*, 28(4), 577-578.
<https://doi.org/10.1177/1098214007307678>
- Sims, C. S., Trail, T. E., Chen, E. K., & Miller, L. L. (2017). *Today's soldier: Assessing the needs of soldiers and their families*. Santa Monica, CA: Rand Corporation.
- Skagerlund, K., Lind, T., Strömbäck, C., Tinghög, G., & Västfjäll, D. (2018). Financial literacy and the role of numeracy–How individuals' attitude and affinity with numbers influence financial literacy. *Journal of Behavioral and Experimental Economics*, 74, 18-25.
- Sovacool, B. K., Axsen, J., & Sorrell, S. (2018). Promoting novelty, rigor, and style in energy social science: towards codes of practice for appropriate methods and research design. *Energy Research & Social Science*, 45, 12-42.

- Sprinthall, R. C. (2012). *Basic statistical analysis* (Ninth ed.). Pearson Allyn & Bacon.
- Stolper, O. A., & Walter, A. (2017). Financial literacy, financial advice, and financial behavior. *Zeitschrift Für Betriebswirtschaft*, 87(5), 581-643.
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48, 1273-1296.
<https://doi.org/10.1007/s11165-016-9602-2>
- Thaler, R., & Benartzi, S. (2004). Save more tomorrow: Using behavioral economics to increase employee saving. *Journal of Political Economy*, 112(S1), S164-S187.
<https://doi.org/10.1086/380085>
- Thiele, T., Pope, D., Singleton, A., & Stanistreet, D. (2018). Exploring the use of mixed methods in research and evaluation of widening participation interventions: guidance for practitioners. *Widening Participation and Lifelong Learning*, 20(4), 7-38.
- Thomann, E., & Maggetti, M. (2020). Designing research with qualitative comparative analysis (QCA): Approaches, challenges, and tools. *Sociological Methods & Research*, 49(2), 356-386.
- U.S. Securities and Exchange Commission. (2016, November 22). Retrieved from <https://www.sec.gov>
- Van Rooij, M. C., Lusardi, A., & Alessie, R. J. (2012). Financial literacy, retirement planning and household wealth. *The Economic Journal*, 122(560), 449-478.
- Whitley, B. E., Kite, M. E., & Adams, H. L. (Collaborator). (2013). *Principles of research in behavioral science* (3rd ed.). Routledge/Taylor & Francis Group.
- Xia, T., Wang, Z., & Li, K. (2014). *Financial literacy overconfidence and stock market participation*. Social Indicators Research.

- Xiao, J. J., Chen, C., & Chen, F. (2014). Consumer financial capability and financial satisfaction. *Social Indicators Research*, 118(1), 415-432. <https://doi.org/10.1007/s11205-013-0414-8>
- Xiao, J. J., & O'Neill, B. (2016). Consumer financial education and financial capability. *International Journal of Consumer Studies*, 40(6), 712-721. <https://doi.org/10.1111/ijcs.12285>
- Xiao, J. J., & Porto, N. (2017). Financial education and financial satisfaction: Financial literacy, behavior, and capability as mediators. *International Journal of Bank Marketing*, 35(5), 805-817. <https://doi.org/10.1108/IJBM-01-2016-0009>
- Xiao, J. J., & Porto, N. (2019). Financial education and insurance advice seeking. *Geneva Papers on Risk and Insurance. Issues and Practice*, 44(1), 20-35. <https://doi.org/10.1057/s41288-018-0108-1>
- Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education*, 48(2), 311-325.
- Young, J. H., Hudson, C. R., & Davis, E. L. (2017). A survey of retirement readiness among african-americans. *Journal of African American Studies (New Brunswick, N.J.)*, 21(4), 551-566. <https://doi.org/10.1007/s12111-017-9381-5>
- Zinman, J. (2015). Household Debt: Facts, Puzzles, Theories, and Policies. *Annual Review of Economics*, 7(1), 251-276.
- Zyphur, M. J., & Pierides, D. C. (2019). Making quantitative research work: From positivist dogma to actual social scientific inquiry. *Journal of Business Ethics*, 1-14

Appendix A



2018 National Financial Capability Study State-by-State Survey Instrument

Note:

- Changes to the NFCS State-by-State survey are footnoted in this document. Footnotes are labeled with the year that the change was implemented (2018, 2015 or 2012).

Sample Characteristics:

- N \approx 500 respondents per state (plus D.C.)
 - Oversamples in Oregon and Washington (total N \approx 1,250 in each of these two states)¹
- Quotas within each state by:
 - Age
 - Gender
 - Income
 - Ethnicity
 - Education

Coding Notes:

- For all questions in the survey except A3a:
 - Code 98 = Don't know
 - Code 99 = Prefer not to say
- For A3a:
 - Code 999 = Prefer not to say
- For questions that have been modified, 2018, 2015, 2012 and 2009 codes may differ from each other.

¹ 2018: Added oversamples of two states.

2018 NFCS State-by-State Survey Instrument - 2

Z) Thank you very much for participating in this research.

- Please be assured that **all of your answers will be completely ANONYMOUS and CONFIDENTIAL**. Therefore, please try to answer these questions as openly and honestly as possible.

A1a) [SECTION A: DEMOGRAPHICS & CLASSIFICATION QUESTIONS]

A2) Please enter your 5 digit home zip code.

[_____]
[EDIT: 00001-99998]

[LOAD ALL GEO INFORMATION TO DATA]

[CHECK TOTAL STATE QUOTA, IF FULL, TERMINATE & SKIP TO QTERM]

A3) What is your gender?

Male1
Female.....2

A3a)² What is your age?

[DROP DOWN MENU; PUNCH MATCHES AGE]

[1313
1414
1515
1616
1717
1818
1919
2020
...etc.etc.
9797
9898
9999
100100
101 or older.....101
Prefer not to say 999]

[IF Q.A3a = 13-17, 999 (REF), TERMINATE & SKIP TO QTERM]

² 2012: Changed from age ranges in 2009 to continuous years in 2012. Tracking comparisons can be made by coding individual years into the age ranges used in 2009.

A3b) [BUILDER: CREATE GENDER/AGE NET FROM Q's A3 & A3a:

Male 18-24.....	1
Male 25-34.....	2
Male 35-44.....	3
Male 45-54.....	4
Male 55-64.....	5
Male 65+.....	6
Female 18-24.....	7
Female 25-34.....	8
Female 35-44.....	9
Female 45-54.....	10
Female 55-64.....	11
Female 65+.....	12

CHECK GENDER/AGE QUOTA BY STATE, IF FULL, TERMINATE & SKIP TO QTERM]

A4)³ Which of the following best describes your race or ethnicity?

Select **all** that apply.

	[M]
White or Caucasian.....	1
Black or African-American.....	2
Hispanic or Latino/a.....	3
Asian.....	4
Native Hawaiian or other Pacific Islander.....	7
American Indian or Alaska Native.....	5
Other.....	6
Prefer not to say.....	99
[IF Q.A4 = 99 (REF), TERMINATE & SKIP TO QTERM][CODE 99 EXCLUSIVE]	

³ 2015: Changed “Asian/Pacific Islander” into two separate categories. Tracking comparisons can be made by coding into 2012 categories. Minor wording changes (from “Native American” in 2012 to “American Indian” in 2015).

A4a)⁴ [BUILDER: PUNCH ETHNICITY

IF SINGLE RESPONSE:

IF Q.A4 = 1, PUNCH 1
 IF Q.A4 = 2, PUNCH 2
 IF Q.A4 = 3, PUNCH 3
 IF Q.A4 = 4, PUNCH 4
 IF Q.A4 = 7, PUNCH 4
 IF Q.A4 = 5 or 6, PUNCH 5

IF MULTIPLE RESPONSES:

IF Q.A4 = 3, PUNCH 3
 IF Q.A4 = 4 AND 7 ONLY, PUNCH 4
 IF Q.A4 NE 3 OR (NE 4 AND 7 ONLY), PUNCH 5

White non-Hispanic1
 Black non-Hispanic.....2
 Hispanic (any race)3
 Asian non-Hispanic.....4
 Other non-Hispanic (American Indian, Other, 2+ ethnicities)5

CHECK ETHNICITY QUOTA BY STATE, IF FULL, TERMINATE & SKIP TO QTERM]

A5)^{5,6} What was the highest level of education that you completed?

Did not complete high school1
 High school graduate – regular high school diploma2
 High school graduate – GED or alternative credential3
 Some college, no degree4
 Associate's degree.....5
 Bachelor's degree.....6
 Post graduate degree7
 Prefer not to say99

[IF Q.A5 = 99 (REF), TERMINATE & SKIP TO QTERM]

[CHECK EDUCATION QUOTA BY STATE, IF FULL, TERMINATE & SKIP TO QTERM]

⁴ 2015: Programming logic updated to correspond to changes to A4 (ethnicity).⁵ 2012: Changed “high school graduate” into two separate categories (regular diploma and GED). Tracking comparisons between 2012 and 2009 can be made by coding into 2009 categories.⁶ 2015: Changed “some college” and “college graduate” into three separate categories (“some college, no degree,” “associate’s degree,” and “bachelor’s degree”). Minor wording changes (from “last year of education” and “post graduate education” in 2012 to “highest level of education” and “post graduate degree” in 2015).

- # A6) What is your marital status?
- | | |
|-------------------------|----|
| Married..... | 1 |
| Single | 2 |
| Separated..... | 3 |
| Divorced..... | 4 |
| Widowed/widower | 5 |
| Prefer not to say | 99 |
- [IF Q.A6 = 99 (REF), TERMINATE & SKIP TO QTERM]
- # A7) Which of the following describes your current living arrangements?
- | | |
|--|----|
| I am the only adult in the household..... | 1 |
| I live with my spouse/partner/significant other..... | 2 |
| I live in my parents' home | 3 |
| I live with other family, friends, or roommates..... | 4 |
| Prefer not to say | 99 |
- [IF Q.A7 = 99 (REF), TERMINATE & SKIP TO QTERM]
- # A7a) [BUILDER: PUNCH MARITAL STATUS VARIABLE:
- If Q.A6 = 1, PUNCH MARRIED
 If Q.A6 = 2 – 5 AND Q.A7 = 2, PUNCH LIVING WITH PARTNER
 If Q.A6 = 2 – 5 AND Q.A7 = 1, 3, or 4, PUNCH SINGLE
- | | |
|---------------------------|---|
| Married..... | 1 |
| Living with partner | 2 |
| Single | 3 |
- If Q.A7a = 1, CVAR “spouse”
 If Q.A7a = 2, CVAR “partner”
- IF Q.A7a = 1 OR 2, CVAR “Does your household”
 IF Q.A7a = 3, CVAR “Do you”]
- # A11)⁷ How many children do you have who are financially dependent on you [IF Q.A7a = 1 OR 2 INSERT: or your [spouse/partner]]? Please include children not living at home, and step-children as well.
- | | |
|---|----|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 or more | 4 |
| No financially dependent children | 5 |
| Do not have any children | 6 |
| Prefer not to say | 99 |
- [IF Q.A11 = 99, TERMINATE & SKIP TO QTERM]

⁷ 2012: Changed question order (appears earlier in the survey than in 2009).

- # A8) What is your [IF Q.A7a = 1 OR 2) INSERT: household's] approximate annual income, including wages, tips, investment income, public assistance, income from retirement plans, etc.? Would you say it is...

Less than \$15,000	1
At least \$15,000 but less than \$25,000	2
At least \$25,000 but less than \$35,000	3
At least \$35,000 but less than \$50,000	4
At least \$50,000 but less than \$75,000	5
At least \$75,000 but less than \$100,000	6
At least \$100,000 but less than \$150,000	7
\$150,000 or more.....	8
Don't know	98
Prefer not to say	99

[IF Q.A8 = 98 (DK) OR 99 (REF), TERMINATE & SKIP TO QTERM]

[CHECK INCOME QUOTA BY STATE, IF FULL, TERMINATE & SKIP TO QTERM]

- # AM21)⁸ Have you ever been a member of the U.S. Armed Services, either in the active or reserve component?

Currently a member of the U.S. Armed Services.....	1
Previously a member of the U.S. Armed Services.....	2
Never a member of the U.S. Armed Services	3
Prefer not to say	99

[IF Q.AM21 = 2 (PREVIOUSLY), ASK; OTHERWISE SKIP TO Q.AM22]

- # AM30)⁹ When did you complete your service in the military?

Within the past year	1
1 to 3 years ago	2
4 to 10 years ago	3
More than 10 years ago.....	4
Prefer not to say	99

- # AM31)¹⁰ Did you retire from the military?

Yes.....	1
No	2
Don't know	98
Prefer not to say	99

⁸ 2012: Military question added to State-by-State survey. See note that follows question X3.

⁹ 2015: New question.

¹⁰ 2015: New question.

AM32)¹¹What was your most recent military service branch and component?

[DISPLAY WITH BREAKS ON THE LIST]

Army	1
Army National Guard (full-time, activated, or non-activated)	2
Army Reserve (full-time, activated, or non-activated)	3
Navy	4
Navy Reserve (full-time, activated, or non-activated)	5
Air Force	6
Air National Guard (full-time, activated, or non-activated)	7
Air Force Reserve (full-time, activated, or non-activated)	8
Marine Corps	9
Marine Corps Reserve (full-time, activated, or non-activated)	10
Coast Guard	11
Coast Guard Reserve (full-time, activated, or non-activated)	12
Don't know	98
Prefer not to say	99

[IF Q.A6 = 1 (MARRIED), ASK; OTHERWISE SKIP TO Q.X3]

AM22)¹²Has your spouse ever been a member of the U.S. Armed Services, either in the active or reserve component?

Currently a member of the U.S. Armed Services	1
Previously a member of the U.S. Armed Services	2
Never a member of the U.S. Armed Services	3
Prefer not to say	99

X3) [BUILDER: PUNCH QUESTIONNAIRE VERSION:

IF Q.AM21 = 1 OR Q.AM22 = 1, PUNCH 2 (MILITARY)
ALL OTHERS, PUNCH 1 (CORE)

Core questions	1
Military	2]

Note on Military Questions:

- Depending on their military status, respondents were also shown military-specific wording for several questions, as indicated in the programming instructions in this document.

¹¹ 2015: New question.

¹² 2012: Military question added to State-by-State survey.

- # X4) [IF Q.X3 = 2 (MILITARY), ASK; OTHERWISE SKIP TO Q.A9]
[BUILDER: PUNCH MILITARY STATUS VARIABLE:
- If Q.AM21 = 1 (CURRENT MEMBER), PUNCH RESPONDENT IN SERVICE
If Q.AM21 = 2, 3, 99 (PREV, NEVER, REF) AND Q.AM22 = 1 (SPOUSE CURRENT MEMBER), PUNCH SPOUSE IN SERVICE
- Respondent in service 1
Spouse in service 2]
- # A9) Which of the following best describes your current employment or work status?
- Self-employed 1
Work full-time for an employer [IF Q.AM21 = 1 INSERT: or the military] 2
Work part-time for an employer [IF Q.AM21 = 1 INSERT: or the military] 3
Homemaker 4
Full-time student 5
Permanently sick, disabled, or unable to work 6
Unemployed or temporarily laid off 7
Retired 8
Prefer not to say 99
- [IF Q.A9 = 99, TERMINATE & SKIP TO QTERM]
- # A40)¹³ [IF Q.A9 = 1-3 (EMPLOYED), INSERT: In addition to your main employment, did you also do other work for pay in the past 12 months?]
- [IF Q.A9 = 4-8 (NOT EMPLOYED), INSERT: Did you do any work for pay in the past 12 months?]
- Yes 1
No 2
Don't know 98
Prefer not to say 99
- # A10) [IF Q.A7a = 1 OR 2, ASK; OTHERWISE SKIP TO Q.A10a]
Which of the following best describes your [spouse/partner]'s current employment or work status?
- Self-employed 1
Work full-time for an employer [IF Q.AM22 = 1 INSERT: or the military] 2
Work part-time for an employer [IF Q.AM22 = 1 INSERT: or the military] 3
Homemaker 4
Full-time student 5
Permanently sick, disabled, or unable to work 6
Unemployed or temporarily laid off 7
Retired 8
Prefer not to say 99
- [IF Q.A10 = 99, TERMINATE & SKIP TO QTERM]

¹³ 2018: New question.

- # A10a) [BUILDER: HOUSEHOLD RETIREMENT STATUS:
- IF Q.A9 = 1 – 3, PUNCH NON-RETIRED HOUSEHOLD
 IF ((Q.A7a = 3 AND Q.A9 = 4 – 7) OR (Q.A7a = 1, 2 AND Q.A9 = 4 – 7 AND Q.A10 = 1 – 7)),
 PUNCH NON-RETIRED HOUSEHOLD
 IF Q.A9 = 8, PUNCH RETIRED-HOUSEHOLD – RESPONDENT RETIRED
 IF Q.A7a = 1, 2 AND Q.A9 = 4 – 7 AND Q.A10 = 8, PUNCH RETIRED HOUSEHOLD –
 RESPONDENT NOT WORKING AND SPOUSE RETIRED
- Non-retired household 1
 Retired household--Respondent retired 2
 Retired household--Respondent not working and spouse retired 3]
- # AM7) [IF Q.X3 = 2 (MILITARY), ASK; OTHERWISE SKIP TO Q.A21]
 What is your [IF Q.X4 = 2 INSERT: spouse's] military service branch and component?
- [DISPLAY WITH BREAKS ON THE LIST]
- Army 1
 Army National Guard (full-time, activated, or non-activated) 2
 Army Reserve (full-time, activated, or non-activated) 3
- Navy 4
 Navy Reserve (full-time, activated, or non-activated) 5
- Air Force 6
 Air National Guard (full-time, activated, or non-activated) 7
 Air Force Reserve (full-time, activated, or non-activated) 8
- Marine Corps 9
 Marine Corps Reserve (full-time, activated, or non-activated) 10
- Coast Guard 11
 Coast Guard Reserve (full-time, activated, or non-activated) 12
- Don't know 98
 Prefer not to say 99

- [IF Q.A5 = 2, 3, 4, 5 (HS GRAD, SOME COLLEGE, ASSOCIATE'S DEGREE) AND Q.A9 NE 5
(NOT FT STUDENT), ASK; OTHERWISE SKIP TO Q.A22]
- # A21)^{14,15} Are you a part-time student taking courses for credit?
- | | |
|-------------------------|----|
| Yes..... | 1 |
| No | 2 |
| Don't know | 98 |
| Prefer not to say | 99 |
- [IF Q.A5 = 2, 3, 4, 5 (HS GRAD, SOME COLLEGE, ASSOCIATE'S DEGREE) AND ((Q.A9 = 5
OR Q.A21 = 1) (FT OR PT STUDENT)), ASK; OTHERWISE SKIP TO Q.A14]
- # A22)^{16,17} Which of the following best describes the school you are attending?
- | | |
|--|----|
| Four-year college or university | 1 |
| Two-year community college | 2 |
| Vocational, technical, or trade school | 3 |
| Other | 4 |
| Don't know | 98 |
| Prefer not to say | 99 |
- [IF Q.A7a = 1, 2, ASK; OTHERWISE SKIP TO Q.A41]
- # A14) Who in the household is most knowledgeable about saving, investing and debt?
- | | |
|--|----|
| You..... | 1 |
| Someone else | 2 |
| You and someone else are equally knowledgeable | 3 |
| Don't know | 98 |
| Prefer not to say | 99 |
- # A41)¹⁸ What was the highest level of education completed by the person or any of the people who raised you?
- | | |
|------------------------------------|----|
| Did not complete high school | 1 |
| High school graduate/GED | 2 |
| Some college, no degree | 3 |
| Associate's degree..... | 4 |
| Bachelor's degree..... | 5 |
| Post graduate degree | 6 |
| Don't know | 98 |
| Prefer not to say | 99 |
- # A16) [END OF SCREENER]

¹⁴ 2012: New question.¹⁵ 2015: Question base updated to correspond to changes to A5 (education).¹⁶ 2012: New question.¹⁷ 2015: Question base updated to correspond to changes to A5 (education).¹⁸ 2018: New question.

J) [SECTION J: FINANCIAL ATTITUDES & BEHAVIORS]

Ja) These days, a lot of people are thinking about financial issues. We are interested in your opinions on some of these issues.

J1) Overall, thinking of your assets, debts and savings, how satisfied are you with your current personal financial condition?

Please use a 10-point scale, where 1 means “Not At All Satisfied” and 10 means “Extremely Satisfied.”

Not At All Satisfied 1	2	3	4	5	6	7	8	9	Extremely Satisfied 10	Don't know	Prefer not to say
1	2	3	4	5	6	7	8	9	10	98	99

J2) When thinking of your financial investments, how willing are you to take risks?

Please use a 10-point scale, where 1 means “Not At All Willing” and 10 means “Very Willing.”

Not At All Willing 1	2	3	4	5	6	7	8	9	Very Willing 10	Don't know	Prefer not to say
1	2	3	4	5	6	7	8	9	10	98	99

J3) Over the past year, would you say your [IF Q.A7a = 1 OR 2 INSERT: household's] spending was less than, more than, or about equal to your [IF Q.A7a = 1 OR 2 INSERT: household's] income? Please do not include the purchase of a new house or car, or other big investments you may have made.

Spending **less** than income..... 1
 Spending **more** than income..... 2
 Spending about **equal** to income 3
 Don't know 98
 Prefer not to say 99

J4) In a typical month, how difficult is it for you to cover your expenses and pay all your bills?

Very difficult 1
 Somewhat difficult..... 2
 Not at all difficult..... 3
 Don't know 98
 Prefer not to say 99

2018 NFCS State-by-State Survey Instrument - 12

- # J40)¹⁹ In the past 12 months, which one of the following best describes your [IF Q.A7a = 1 OR 2 INSERT: and your [spouse/partner]'s] income?
- Roughly the same amount each month 1
Occasionally varies from month to month 2
Varies quite often from month to month 3
Don't know 98
Prefer not to say 99
- # J5) Have you set aside emergency or rainy day funds that would cover your expenses for 3 months, in case of sickness, job loss, economic downturn, or other emergencies?
- Yes 1
No 2
Don't know 98
Prefer not to say 99
- # J6) [IF Q.A11 = 1, 2, 3, 4 (FINANCIALLY DEPENDENT CHILD), ASK; OTHERWISE SKIP TO Q.J8]
Are you setting aside any money for your children's college education?
- Yes 1
No 2
Don't know 98
Prefer not to say 99
- # J8) [IF Q.A10a = 1 (NOT RETIRED), ASK; OTHERWISE SKIP TO Q.J9]
Have you ever tried to figure out how much you need to save for retirement?
- Yes 1
No 2
Don't know 98
Prefer not to say 99
- # J9) [IF Q.A10a = 2, 3 (RETIRED), ASK; OTHERWISE SKIP TO Q.J10]
[IF Q.A10a = 2 INSERT: Before you retired, did you try to figure out how much you needed to save for retirement?]
- [IF Q.A10a = 3 INSERT: Before your [spouse/partner] retired, did you try to figure out how much you needed to save for retirement?]
- Yes 1
No 2
Don't know 98
Prefer not to say 99

¹⁹ 2018: New question.

2018 NFCS State-by-State Survey Instrument - 13

- # J10) In the past 12 months, [IF Q.A7a = 3 INSERT: have you/ IF Q.A7a = 1 OR 2 INSERT: has your household] experienced a large drop in income which you did not expect?
- Yes.....1
 No2
 Don't know98
 Prefer not to say99
- # J20)²⁰ How confident are you that you could come up with \$2,000 if an unexpected need arose within the next month?
- I am certain I could come up with the full \$2,0001
 I could probably come up with \$2,0002
 I could probably not come up with \$2,0003
 I am certain I could not come up with \$2,0004
 Don't know98
 Prefer not to say99
- # J32)²¹ How would you rate your current credit record?
- Very bad1
 Bad2
 About average3
 Good4
 Very good.....5
 Don't know98
 Prefer not to say99

²⁰ 2012: New question.²¹ 2015: New question.

2018 NFCS State-by-State Survey Instrument - 14

J33)²² How strongly do you agree or disagree with the following statements?

Please give your answer on a scale of 1 to 7, where 1 = “Strongly Disagree,” 7 = “Strongly Agree,” and 4 = “Neither Agree Nor Disagree”. You can use any number from 1 to 7. (Select an answer for each)

[RANDOMIZE]

		Strongly Disagree 1	2	3	Neither Agree nor Disagree 4	5	6	Strongly Agree 7	Don't Know	Prefer not to Say
J33_1)	I worry about running out of money in retirement	1	2	3	4	5	6	7	98	99
J33_40) ²³	Thinking about my personal finances can make me feel anxious	1	2	3	4	5	6	7	98	99
J33_41) ²⁴	Discussing my finances can make my heart race or make me feel stressed	1	2	3	4	5	6	7	98	99

J41)²⁵ How well do these statements describe you or your situation?

[RANDOMIZE]

		Does not describe me at all	Describes me very little	Describes me somewhat	Describes me very well	Describes me completely	Don't know	Prefer not to say
J41_1)	Because of my money situation, I feel like I will never have the things I want in life	1	2	3	4	5	98	99
J41_2)	I am just getting by financially	1	2	3	4	5	98	99
J41_3)	I am concerned that the money I have or will save won't last	1	2	3	4	5	98	99

J42)²⁶ How often do these statements apply to you?

[RANDOMIZE]

		Never	Rarely	Sometimes	Often	Always	Don't know	Prefer not to say
J42_1)	I have money left over at the end of the month	1	2	3	4	5	98	99
J42_2)	My finances control my life	1	2	3	4	5	98	99

²² 2015: New question.

²³ 2018: New question.

²⁴ 2018: New question.

²⁵ 2018: New questions.

²⁶ 2018: New questions.

2018 NFCS State-by-State Survey Instrument - 15

- # J43)²⁷ If you were to set a financial goal for yourself today, how confident are you in your ability to achieve it?
- | | |
|----------------------------|----|
| Not at all confident | 1 |
| Not very confident | 2 |
| Somewhat confident | 3 |
| Very confident..... | 4 |
| Don't know | 98 |
| Prefer not to say | 99 |
- # J14) [END OF SECTION J]

²⁷ 2018: New question.

B) [SECTION B: BANKING]

[DISPLAY Q'S B1 AND B2 ON SAME SCREEN]

B1) [IF Q.A7a = 3 INSERT: Do you/ IF Q.A7a = 1 OR 2 INSERT: Does your household] have a checking account?

Yes.....1
 No2
 Don't know98
 Prefer not to say99

B2) [IF Q.A7a = 3 INSERT: Do you/ IF Q.A7a = 1 OR 2 INSERT: Does your household] have a savings account, money market account, or CDs?

Yes.....1
 No2
 Don't know98
 Prefer not to say99

B4) [IF Q.B1 = 1 (YES), ASK; OTHERWISE SKIP TO Q.B40]
Do you [IF Q.A7a = 1 OR 2 INSERT: or your [spouse/partner]] overdraw your checking account occasionally?

Yes.....1
 No2
 Don't know98
 Prefer not to say99

B40)²⁸ How strongly do you agree or disagree with the following statement?

Please give your answer on a scale of 1 to 7, where 1 = "Strongly Disagree," 7 = "Strongly Agree," and 4 = "Neither Agree Nor Disagree". You can use any number from 1 to 7.

	Strongly Disagree 1	2	3	Neither Agree nor Disagree 4	5	6	Strongly Agree 7	Don't know	Prefer not to say
I would feel comfortable going to a bank or credit union branch to ask a question about a product or service	1	2	3	4	5	6	7	98	99

²⁸ 2018: New question.

- # B41)²⁹ [IF Q.B1 OR Q.B2 = 1 (YES), ASK; OTHERWISE SKIP TO Q.B31]
How often do you access your checking or savings account in the following ways?

		Never	Sometimes	Frequently	Don't know	Prefer not to say
B41_1)	Online banking with a laptop or desktop computer	1	2	3	98	99
B41_2)	Mobile banking with text messaging, mobile app, or Internet browser or email on a mobile phone	1	2	3	98	99

- # B14) [MOVED TO END OF SECTION C]

- # B31)³⁰ How often do you use your mobile phone to pay for a product or service in person at a store, gas station, or restaurant (e.g., by waving/tapping your mobile phone over a sensor at checkout, scanning a barcode or QR code using your mobile phone, or using some other mobile app at checkout)?

Frequently 1
 Sometimes 2
 Never 3
 Don't know 98
 Prefer not to say 99

- # B42)³¹ How often do you use your mobile phone to transfer money to another person?

Frequently 1
 Sometimes 2
 Never 3
 Don't know 98
 Prefer not to say 99

- # B43)³² How often do you use websites or apps to help with financial tasks such as budgeting, saving, or credit management (e.g., GoodBudget, Mint, Credit Karma, etc.)? Please do not include websites or apps for making payments or money transfers.

Frequently 1
 Sometimes 2
 Never 3
 Don't know 98
 Prefer not to say 99

²⁹ 2018: New questions.

³⁰ 2015: New question. Replaces B22_8 from 2012.

³¹ 2018: New question.

³² 2018: New question.

2018 NFCS State-by-State Survey Instrument - 18

- # B44)³³ In the past 12 months, how often have you taken on a work assignment through a website or mobile app, such as Uber, Task Rabbit, Care.com, etc.?
- | | |
|-------------------------|----|
| Frequently | 1 |
| Sometimes..... | 2 |
| Never..... | 3 |
| Don't know | 98 |
| Prefer not to say | 99 |
- # B16) [END OF SECTION B]

³³ 2018: New question.

- # C) [SECTION C: RETIREMENT ACCOUNTS]
- # Ca) The following are questions about retirement accounts and pensions. Please answer to the best of your knowledge. If you really do not know the answer, please select "don't know."
- # C1)³⁴ Do you [IF Q.A7a = 1 OR 2 INSERT: or your [spouse/partner]] have any retirement plans through a current or previous employer, like a pension plan [IF Q.X3 = 2 INSERT: , a Thrift Savings Plan (TSP),] or a 401(k)?
- Yes.....1
No2
Don't know98
Prefer not to say99
- # C2) [IF Q.C1 = 1 (YES) AND Q.A7a = 1 OR 2, ASK; OTHERWISE SKIP TO Q.C3]
Were these plans provided by your employer or your [spouse/partner]'s employer, or both?
- Your employer.....1
Your [spouse's/partner's] employer2
Both your employer and your [spouse's/partner's] employer.....3
Don't know98
Prefer not to say99
- # C3) [IF Q.C1 = 1 (YES), ASK; OTHERWISE SKIP TO Q.C4]
Are any of these retirement plans the kind where you [IF Q.A7a = 1 OR 2 INSERT: or your [spouse/partner]] get to choose how the money is invested?
- Yes.....1
No2
Don't know98
Prefer not to say99
- # C4)^{35,36} Do you [IF Q.A7a = 1 OR 2 INSERT: or your [spouse/partner]] have any other retirement accounts NOT through an employer, like an IRA, Keogh, SEP, or any other type of retirement account that you have set up yourself?
- Yes.....1
No2
Don't know98
Prefer not to say99

³⁴ 2012: The base for all questions in this section (C1 through C11) changed from *non-retired households* in 2009 to *all respondents* in 2012. Tracking comparisons to 2009 can be made by looking at the responses of only non-retired households (A10a = 1) in 2012 and 2015.

³⁵ 2015: Minor wording changes (added "myRA" to list of examples).

³⁶ 2018: Minor wording changes (removed "myRA" from list of examples).

- # C5) [IF Q.C3 = 1 OR Q.C4 = 1 (YES), ASK; OTHERWISE, SKIP TO Q.B14]
Do you [IF Q.A7a = 1 OR 2 INSERT: or your [spouse/partner]] regularly contribute to a retirement account like a [IF Q.X3 = 2 INSERT: Thrift Savings Plan (TSP),] 401(k) or IRA?
- Yes..... 1
No 2
Don't know 98
Prefer not to say 99
- # C10) [DISPLAY Q'S C10 & C11 ON SAME SCREEN]
In the last 12 months, have you [IF Q.A7a = 1 OR 2 INSERT: or your [spouse/partner]] taken a loan from your retirement account(s)?
- Yes..... 1
No 2
Don't know 98
Prefer not to say 99
- # C11) In the last 12 months, have you [IF Q.A7a = 1 OR 2 INSERT: or your [spouse/partner]] taken a hardship withdrawal from your retirement account(s)?
- Yes..... 1
No 2
Don't know 98
Prefer not to say 99
- # B14)³⁷ [IF Q.B1 OR B2 = 1, 98, 99 (YES, DK, REF), ASK; OTHERWISE SKIP TO Q.C40]
Not including retirement accounts, [IF Q.A7a = 1 OR 2 INSERT: does your household/IF Q.7a = 3 INSERT: do you] have any investments in stocks, bonds, mutual funds, or other securities?
- Yes..... 1
No 2
Don't know 98
Prefer not to say 99
- # C40)³⁸ Over the past 12 months, approximately how often did you buy a lottery ticket?
- Almost every day 1
A few times a week 2
About once a week 3
About once a month 4
Less than once a month 5
Never 6
Don't know 98
Prefer not to say 99

³⁷ 2015: Changed question order (appears later in the survey than in 2012).

³⁸ 2018: New question.

2018 NFCS State-by-State Survey Instrument - 21

#	C41) ³⁹	Do you currently have a will?	
		Yes.....	1
		No	2
		Don't know	98
		Prefer not to say	99
#	C16)	[END OF SECTION C]	

³⁹ 2018: New question.

2018 NFCS State-by-State Survey Instrument - 22

#	D)	[SECTION D: GOVERNMENT BENEFITS]	
#	D40) ⁴⁰	Do you receive either Medicaid benefits or food stamps/SNAP?	
		Yes.....	1
		No	2
		Don't know	98
		Prefer not to say	99
#	D17)	[END OF SECTION D]	

⁴⁰ 2018: New question.

- # E) [SECTION E: HOME & MORTGAGES]
- # Ea_1)⁴¹ Do you [IF Q.A7a = 1 OR 2 INSERT: or your [spouse/partner]] currently own your home?
- Yes.....1
No2
Don't know98
Prefer not to say99
- # E3a) [IF Q.Ea_1 = 1 (YES OWN HOME), ASK; OTHERWISE SKIP TO Q.E17]
Following are some questions about your home. If you own more than one home, please refer to your primary residence.
- # E7)⁴² [DISPLAY Q'S E7 & E8 ON SAME SCREEN]
Do you currently have any mortgages on your home?
- Yes.....1
No2
Don't know98
Prefer not to say99
- # E8)⁴³ Do you have any home equity loans?
- Yes.....1
No2
Don't know98
Prefer not to say99
- # E20)⁴⁴ [IF Q.E7 = 1 OR Q.E8 = 1 (YES), ASK; OTHERWISE SKIP TO Q.E15]
Do you currently owe more on your home than you think you could sell it for today?
- Yes, owe more.....1
No2
Don't know98
Prefer not to say99

⁴¹ 2015: Changed format of question from a grid ("Do you currently own any of the following? – Your home") in 2012 to a single question in 2015. Minor wording changes to accommodate new question format.

⁴² 2012: Minor wording changes (from "a mortgage" in 2009 to "any mortgages" in 2012).

⁴³ 2012: Minor wording changes (from "a home equity loan" in 2009 to "any home equity loans" in 2012).

⁴⁴ 2012: New question.

- # E15)⁴⁵ [IF Q.E7 = 1 (YES), ASK; OTHERWISE SKIP TO Q.E17]
 How many times have you been late with your mortgage payments in the past 12 months? (If you have more than one mortgage on your home(s), please consider them all.)
- | | |
|-------------------------|----|
| Never..... | 1 |
| Once..... | 2 |
| More than once | 3 |
| Don't know | 98 |
| Prefer not to say | 99 |
- # E17) [END OF SECTION E]

⁴⁵ 2015: Changed time frame of question (from *2 years* in 2012 to *12 months* in 2015). Tracking comparisons are not possible.

F) [SECTION F: CREDIT CARDS]

F1) How many credit cards do you have? Please include store and gas station credit cards but NOT debit cards.

11
 2-32
 4-83
 9-124
 13-205
 More than 206
 No credit cards7
 Don't know98
 Prefer not to say99

[IF Q.F1 = 7 (None), 98 (DK), 99 (REF), SKIP TO F12]

F2) In the past 12 months, which of the following describes your experience with credit cards? (Select an answer for each)

[DO NOT RANDOMIZE]

		Yes	No	Don't Know	Prefer not to Say
F2_1)	I always paid my credit cards in full	1	2	98	99
F2_2)	In some months, I carried over a balance and was charged interest	1	2	98	99
F2_3)	In some months, I paid the minimum payment only	1	2	98	99
F2_4)	In some months, I was charged a late fee for late payment	1	2	98	99
F2_5)	In some months, I was charged an over the limit fee for exceeding my credit line	1	2	98	99
F2_6)	In some months, I used the cards for a cash advance	1	2	98	99

F10) Thinking about when you obtained your most recent credit card, did you collect information about different cards from more than one company in order to compare them?

Yes1
 No2
 Don't know98
 Prefer not to say99

F12) [END OF SECTION F]

- # G) [SECTION G: OTHER DEBT]
- # G1) [IF Q.A7a = 3 INSERT: Do you/ IF Q.A7a = 1 OR 2 INSERT: Does your household] currently have an auto loan? (This does not refer to an auto lease).
- Yes.....1
No2
Don't know98
Prefer not to say99
- # G20)⁴⁶ Do you currently have any unpaid bills from a health care or medical service provider (e.g., a hospital, a doctor's office, or a testing lab) that are past due?
- Yes.....1
No2
Don't know98
Prefer not to say99
- # G30)⁴⁷ Do you currently have any student loans? If so, for whose education was this/were these loan(s) taken out?
- Select **all** that apply.
[CODES 97, 98, 99 EXCLUSIVE]
[DISPLAY WITH BREAK ON THE LIST]
- [M]
- Yes, have student loan(s) for:
- Yourself.....1
Your spouse/partner2
Your child(ren).....3
Your grandchild(ren).....4
Other person.....5
- No, do not currently have any student loans.....97
Don't know98
Prefer not to say99
- # G33)⁴⁸ [IF Q.G30 = 1-5 (HAVE STUDENT LOAN), ASK; OTHERWISE SKIP TO Q.G40]
Before you got your most recent student loan, did you try to figure out how much your monthly payments would be?
- Yes.....1
No2
Don't know98
Prefer not to say99

⁴⁶ 2012: New question.⁴⁷ 2015: New question. Replaces G21 from 2012.⁴⁸ 2015: New question.

G35)⁴⁹ How many times have you been late with a student loan payment in the past 12 months? (If you have more than one student loan, please consider them all.)

Never, payments are not due on my loans at this time..... 1
 Never, I have been repaying on time each month..... 2
 Once 3
 More than once 4
 Don't know 98
 Prefer not to say 99

G22)^{50,51} Are you concerned that you might not be able to pay off your student loans?

Yes..... 1
 No 2
 Don't know 98
 Prefer not to say 99

G40)⁵² [[IF Q.A5 = 4, 5, 6, 7 (SOME COLLEGE OR MORE), ASK; OTHERWISE SKIP TO Q.G25]
 Do you wish you had chosen to go to a less expensive college?

Yes..... 1
 No 2
 Don't know 98
 Prefer not to say 99

⁴⁹ 2015: New question.

⁵⁰ 2012: New question.

⁵¹ 2015: Question base changed to correspond to G30 (new student loan question).

⁵² 2018: New question.

2018 NFCS State-by-State Survey Instrument - 28

G25)⁵³ In the past 5 years, how many times have you... (Select an answer for each)

[RANDOMIZE]

		Never	1 time	2 times	3 times	4 or more times	Don't Know	Prefer not to Say
G25_1) ⁵⁴	Taken out an auto title loan? Auto title loans are loans where a car title is used to borrow money for a short period of time. They are NOT loans used to purchase an automobile.	1	2	3	4	5	98	99
G25_2)	Taken out a short term "payday" loan?	1	2	3	4	5	98	99
G25_3) ⁵⁵ , ⁵⁶	Gotten an advance on your tax refund? This is sometimes called a "refund anticipation check" or "Rapid Refund" (Not the same as e-filing)	1	2	3	4	5	98	99
G25_4)	Used a pawn shop?	1	2	3	4	5	98	99
G25_5)	Used a rent-to-own store?	1	2	3	4	5	98	99

G38)⁵⁷ Have you been contacted by a debt collection agency in the past 12 months?

Yes..... 1
 No 2
 Don't know 98
 Prefer not to say 99

G23)⁵⁸ How strongly do you agree or disagree with the following statement?

Please give your answer on a scale of 1 to 7, where 1 = "Strongly Disagree," 7 = "Strongly Agree," and 4 = "Neither Agree Nor Disagree". You can use any number from 1 to 7.

	Strongly Disagree 1	2	3	Neither Agree nor Disagree 4	5	6	Strongly Agree 7	Don't Know	Prefer not to Say
I have too much debt right now	1	2	3	4	5	6	7	98	99

G10) [END OF SECTION G]

⁵³ 2012: New questions. The "Yes/No" scale in 2009 was replaced by a frequency scale ("How many times") in 2012, therefore tracking comparisons to 2009 are not possible. Minor wording changes to individual items (not documented here) to accommodate the new scale.

⁵⁴ 2012: Description of auto title loans added in 2012.

⁵⁵ 2012: Minor wording changes (from refund anticipation "loan" in 2009 to refund anticipation "check" in 2012).

⁵⁶ 2018: Question was removed in 2015 and reinstated in 2018.

⁵⁷ 2015: New question.

⁵⁸ 2012: New question.

H) [SECTION H: INSURANCE]

H1) Are you covered by health insurance?

Yes.....1
 No2
 Don't know98
 Prefer not to say99

H30)⁵⁹ In the last 12 months, was there any time when you...

[RANDOMIZE]

		Yes	No	Don't Know	Prefer not to Say
H30_1)	Did NOT fill a prescription for medicine because of the cost	1	2	98	99
H30_2)	SKIPPED a medical test, treatment or follow-up recommended by a doctor because of the cost	1	2	98	99
H30_3)	Had a medical problem but DID NOT go to a doctor or clinic because of the cost	1	2	98	99

H8) [END OF SECTION H]

⁵⁹ 2015: New questions.

M) [SECTION M: SELF-ASSESSMENT & LITERACY]

M1) How strongly do you agree or disagree with the following statements?

Please give your answer on a scale of 1 to 7, where 1 = “Strongly Disagree,” 7 = “Strongly Agree,” and 4 = “Neither Agree Nor Disagree”. You can use any number from 1 to 7. (Select an answer for each)

[RANDOMIZE]

		Strongly Disagree 1	2	3	Neither Agree nor Disagree 4	5	6	Strongly Agree 7	Don't Know	Prefer not to Say
M1_1)	I am good at dealing with day-to-day financial matters, such as checking accounts, credit and debit cards, and tracking expenses	1	2	3	4	5	6	7	98	99
M1_2)	I am pretty good at math	1	2	3	4	5	6	7	98	99

M4) On a scale from 1 to 7, where 1 means very low and 7 means very high, how would you assess your overall financial knowledge?

Very Low 1	2	3	4	5	6	Very High 7	Don't know	Prefer not to say
1	2	3	4	5	6	7	98	99

M40)⁶⁰ Were you ever required to take financial education?

Yes..... 1
 No 2
 Don't know 98
 Prefer not to say 99

M20)⁶¹ Was financial education offered by a school or college you attended, or a workplace where you were employed?

Yes, but I did not participate in the financial education offered 1
 Yes, and I did participate in the financial education 2
 No 3
 Don't know 98
 Prefer not to say 99

⁶⁰ 2018: New question.⁶¹ 2012: New question.

M21)⁶² [IF Q.M20 = 2 (PARTICIPATED), ASK, OTHERWISE SKIP TO Q.M5a]
When did you receive that financial education?

[DO NOT RANDOMIZE]

		Yes	No	Don't Know	Prefer not to Say
M21_1)	In high school	1	2	98	99
M21_2) ⁶³	[IF Q.A5 = 4, 5, 6, 7] In college	1	2	98	99
M21_3)	From an employer	1	2	98	99
M21_4)	[IF Q.AM21 = 1 or 2] From the military	1	2	98	99

M41)⁶⁴ In total, about how many hours of financial education did you receive?

1-2 hours	1
3-10 hours	2
More than 10 hours	3
Don't know	98
Prefer not to say	99

M42)⁶⁵ Overall, how would you rate the quality of the financial education you received?

Please give your answer on a scale of 1 to 7, where 1 means "very low" and 7 means "very high."

Very Low 1	2	3	4	5	6	Very High 7	Don't know	Prefer not to say
1	2	3	4	5	6	7	98	99

M5a) Following are some multiple choice questions. If you don't know the answer, just select "don't know."

M6) Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

More than \$102	1
Exactly \$102	2
Less than \$102	3
Don't know	98
Prefer not to say	99

⁶² 2012: New questions.

⁶³ 2015: Question base updated to correspond to changes to A5 (education).

⁶⁴ 2018: New question.

⁶⁵ 2018: New question.

2018 NFCS State-by-State Survey Instrument - 32

- # M7) Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?
- More than today 1
 Exactly the same 2
 Less than today 3
 Don't know 98
 Prefer not to say 99
- # M8) If interest rates rise, what will typically happen to bond prices?
- They will rise 1
 They will fall..... 2
 They will stay the same 3
 There is no relationship between bond prices and the interest rate..... 4
 Don't know 98
 Prefer not to say 99
- # M31)⁶⁶ 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
 At least 2 years but less than 5 years 2
 At least 5 years but less than 10 years 3
 At least 10 years..... 4
 Don't know 98
 Prefer not to say 99
- # M9a)⁶⁷ There are a few questions left, and the survey will be complete.
- Following are two statements. Please indicate whether each statement is true or false. If you don't know, just select "don't know."
- [RANDOMIZE Q.M9 AND Q.M10]
- # M9) A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage, but the total interest paid over the life of the loan will be less.
- True 1
 False 2
 Don't know 98
 Prefer not to say 99

⁶⁶ 2015: New question.⁶⁷ 2015: Minor wording changes (from "two questions" in 2012 to "a few questions" in 2015).

2018 NFCS State-by-State Survey Instrument - 33

- # M10) Buying a single company's stock usually provides a safer return than a stock mutual fund.
- | | |
|-------------------------|----|
| True | 1 |
| False..... | 2 |
| Don't know | 98 |
| Prefer not to say | 99 |
- # M11) [END OF SECTION M]
- # 999) [POINT OF COMPLETE]

Appendix B



March 24, 2021

Philip Chapman
[REDACTED]

Dear Philip,

We have received your request to use data from our 2012 and 2018 National Financial Capability Study findings in your doctoral dissertation to look at financial capability, specifically to examine the impact that financial education has on U.S. military members. You expect to publish it in the Doctoral Dissertation at Liberty University on December 2021. There will be no sales or commercial use.

FINRA hereby grants you permission to use data from the following information for the above-stated use:
<https://www.usfinancialcapability.org/>

This permission is contingent upon you:

- using this material as published by FINRA;
- directing users to the appropriate FINRA website for more information; and
- arranging for the work to contain the following notice, changing the year reference as applicable: **©2021 FINRA. All rights reserved. FINRA is a registered trademark of the Financial Industry Regulatory Authority, Inc. Reprinted with permission from FINRA.**

If you have any questions or need additional information, please contact me at customersupport@finra.org.

Sincerely,

Douglas Gomez
Manager
FINRA