

**FROM RAGS TO RICHES: EXAMINING TEACHER PERCEPTIONS OF THE
INFLUENCE OF FINANCIAL LITERACY ON THE PSYCHOLOGICAL
WELL-BEING OF MILITARY-CONNECTED STUDENTS IN
KINDERGARTEN THROUGH GRADE TWELVE**

by

Cynthia Fletcher Davis

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

School of Behavioral Sciences

Liberty University

2023

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Approved by:

Mary Ann Hollingsworth, PhD., Committee Chair

Aubrey Statti, PhD., Committee Member

Abstract

The purpose of this quantitative study was to examine teacher perceptions as related to the influence of financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve. Financial literacy among students serves a vital function in the development of financially literate adults. A lack of financial resources has been linked to depressive symptoms, marital discourse, and suicide. Financial literacy includes the knowledge and skills required to make enlightened and effective decisions with money. The theory guiding this study was Constructivism as formulated by Jean Piaget. Constructivism provides for the incorporation of new information within existing constructs to enhance the educational process. The study utilized a non-probability convenience sampling procedure. The participants for this quantitative study were drawn from a sample of military-connected teachers residing in the United States or connected to United States military bases abroad. An online, self-administered survey was evaluated utilizing an independent samples t-test. There were 107 respondents who completed the survey. Data was collected, analyzed, and chronicled using descriptive statistics. Results indicated that survey participants affirmed the teaching financial literacy was important and likely to positively affect students' psychological well-being. Future research may incorporate student perceptions on the influence of financial literacy on their psychological well-being. The significance of the study is prodigious as its impact may prompt the development and implementation of an enhanced financial literacy curriculum for elementary, middle, and high school students.

Keywords: money, psychological well-being, depression, financial literacy, education, savings

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Dedication

I would like to thank my husband, Minister Winfred Davis, for his unwavering encouragement. I wish to thank my parents, Pastor and First Lady Artis and Carolyn Fletcher for their prayers and guidance. I express my gratitude to my sisters, Aimee Fletcher Myrick and Janice Fletcher, for their support and love. I challenge my children Jacob, Christian, Jayden, and Mekhi to follow in my footsteps and obtain an advanced degree.

Acknowledgments

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List of Abbreviations

Council for Economic Education (CEE)

Dependent of Defense Dependent School System (DoDDS)

Department of Defense Education Activity (DoDEA)

Federal Deposit Insurance Corporation (FDIC)

Family Educational Rights and Privacy Act (FERPA)

Financial Literacy (FL)

Individual Retirement Account (IRA)

National Financial Educator's Council (NFEC)

New International Version (NIV)

Next Gen Personal Finance (NGPF)

Programme for International Student Assessment (PISA)

Chapter One: Introduction

Overview

The development and organization of financial literacy skills are necessary in many everyday activities for children and adults (Marta-Christina & Liana, 2013). The demand for financial literacy instruction stems from the current lack of financial literacy knowledge among many United States citizens today. With the onset of advancements in financial literacy curriculum and multimedia, an educational curriculum without a financial literacy component is lacking the depth needed to create fiscally responsible citizens. The focus of this study was to examine the gap in the literature related to financial literacy instruction among military-connected students.

Background

Perceptions about money influence decisions. According to Abdullah et al. (2019), the study's results exhibited a positive correlation between financial literacy, debt management, attitudes regarding money, and financial well-being. The study participants' attitudes toward money yielded a unique correlation with financial well-being. Understanding millennials' financial literacy level is fundamental to creating a financial literacy curriculum (Dewi et al., 2020). There is a correlation between financial behavior and financial knowledge, attitude, and skills. A significant relationship exists between financial attitude and financial management behavior. The relationship between financial skills and financial management behavior has also been found to be significant (Dewi et al., 2020). Financial literacy is indispensable to students who are expected to make valuable financial decisions in the future.

Financial stress is correlated with psychological distress. A study by Cadaret and Bennett (2019), found higher levels of financial stress were associated with greater family distress,

academic distress, overall distress, and lower grade point average. According to Wheeler et al. (2019), there was a relationship between spouses' financial distress and their perceptions of relational aggression. Financial distress is correlated to relational anger and marital discourse (Wheeler et al., 2019). A remedy for psychological stress connected to financial stress may be an increased emphasis on financial literacy.

Financial education may be a necessary building block for obtaining a utilitarian education. Focusing on financial education programs with students may develop their money management skills. In research conducted by Kalwij et al. (2019), financial education programs at primary schools were most effective when they directed children's attention to conceptual topics such as money management. Students provided with guidance in managing finances may develop skills to successfully manage a family budget or even future corporations. According to Yates (2019), exposure to financial education led to increased financial literacy, and the absence of financial education had a more severe negative impact than a financial education's positive impact.

The teacher perceptions examined in this study were analyzed through the lens of the Common Core Standards utilized by many states and the Department of Defense Education Activity (DoDEA). DoDEA offers military-connected students a plethora of databases for educational purposes. The Rosen Digital Financial Literacy database is a content-driven, online personal finance resource designed for students. The financial literacy database is a subscription-based website. The subscription is funded by DoDEA and incorporated with several other databases available to DoDEA students. The Rosen Digital Financial Literacy database integrates financial literacy content articles and videos with financial computation practice and interactive calculators. The core subjects of the Rosen Digital Financial Literacy database include

economics and personal finance and are correlated to the Common Core State Standards Initiative. The Rosen Digital Financial Literacy database may be an instrument utilized in the financial education of military-connected students.

Problem Statement

Numerous students have not been equipped with the foundational principles of financial literacy (Qianwen et al., 2020). Students may emerge from elementary, middle, and high school with limited financial literacy knowledge provided by the school system. Students may transition to college or the workforce with insufficient financial literacy skills. A lack of financial literacy may lead to stress, a reduction in psychological well-being, marital strain, depression, divorce, or suicide. Most of the research on financial stress was community-based, from a sociological or financial framework, and with populations outside the United States (Cadaret & Bennett, 2019). Financial literacy, when applied to financial endeavors, could provide the necessary resources for students to become proficient in financial areas. Students need basic financial knowledge in savings, spending, banking, paying taxes, and business development. These basic skills may be a catalyst for business creation and development.

The current study addressed the gap in the literature by subjecting the existing protocol to empirical scrutiny. Previous related studies focused on the increase in financial literacy scores based on financial education (Kaiser & Menkhoff, 2017; Mohelska & Zubr, 2019). This study focused on teacher perceptions of the influence of financial literacy on the psychological well-being of military-connected students. The study was of significant interest because the lack of financial literacy education could negatively impact psychological well-being. According to Grable and Rabbani (2020), financial literacy was thought to be the precursor to better financial behavior, including avoiding costly debt and increasing levels of saving and investing. The

problem addressed in this study centers around the need for increased financial literacy education for elementary, middle, and high school military-connected students. A connection exists between financial literacy and the psychological well-being of children (Frisancho, 2018). Effective financial literacy education for a student may minimize financial distress. Excluding financial literacy education from students' standardized curriculum may cause financial distress in the future. Financial distress may compound stress in other areas of one's life, exacerbating other issues.

Purpose Statement

The purpose of this quantitative study was to examine teacher perceptions as related to the influence of financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve. This study analyzed the potential impact of financial literacy education on the psychological well-being of military-connected students. The study employed a non-probability convenience sampling procedure. In line with Jackson (2016), non-probability sampling denotes that individual members of the population do not have an equal likelihood of being selected as sample members. This quantitative study was conducted using a survey method. According to Knight and Tetrault (2017), one of the strengths of the survey method is the potential to reach a sizeable population of potential participants. The survey was administered to current and retired teachers and staff across DoDEA. As Warner (2013) noted, researchers should preferably obtain samples from diverse populations, particularly when the outcome variable of interest is likely to differ across age and cultural backgrounds.

Significance of the Study

This study may impact the curriculum development for elementary, middle, and high school students and positively influence the science, technology, engineering, and mathematics

(STEM) community. The study aimed to provide insight into financial literacy education in multitudinous educational facilities domestically and globally. Financial literacy instruction is limited to high school elective courses in many schools across the United States and the Department of Defense Education Activity. According to DoDEA Communications (2021), the DoDEA's Curriculum Guide for School Year 2021 outlines the following courses related to financial education: Financial Literacy, Business and Personal Finance, Financial Algebra A, Financial Algebra B, Marketing and Entrepreneurship, and Management Foundations. These courses are offered as electives exclusively to freshmen, sophomores, juniors, and seniors. Business Enterprise is offered on a limited basis as an elective to some sixth, seventh, and eighth DoDEA students. According to DoDEA Communications (2021), the 2021 graduation requirement to receive a standard diploma requires no financial literacy. The curriculum for all students should include financial education.

Findings from this study aimed to show that elementary, middle, and high school students benefit from financial literacy instruction, and school systems should incorporate direct financial literacy instruction into the school curriculum. Introducing students to financial education in elementary school may improve their concepts of savings and spending. Students may develop basic competence in financial literacy by managing their allowance or earnings in elementary school. This competence could translate into a more immediate understanding in subsequent grades. If students' financial literacy concepts ameliorate each year, learners may be more apt to succeed in functional math classes. In the long term, an educated society may better avoid crippling debt and plan for college tuition expenses.

Research Questions

By incorporating direct financial literacy instruction into the student curriculum, students may be more likely to save for the future, invest wisely, and prepare for their later years. Direct financial literacy instruction may nurture positive psychological well-being.

The research questions for this study were the following:

RQ1: What are teacher perceptions of the importance of teaching financial literacy in the kindergarten through grade twelve (12) educational curricula of military-connected students?

RQ2: What are teacher perceptions regarding the benefits of teaching financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve (12)?

Definitions

Terminology within the financial realm can be misunderstood by individuals who may not have extensive prior knowledge. Some terms are used interchangeably, which can lead to uncertainty or confusion. This section outlines descriptions of the utilized terms to ensure adequate interpretation.

Compound Interest. Compound interest is the interest on the amount of money deposited or borrowed (Wojcik, 2017).

Mutual Fund. A mutual fund is a pooled portfolio that allows investors to buy shares in a fund, and a portfolio manager invests the money. Mutual fund orders are executed based on the final calculated value for the trading day once the markets are closed (Kennon, 2021).

Exchange-Traded Funds. Exchange-Traded Funds operate as mutual funds that trade throughout the day (Kennon, 2021).

Capital Gains. Capital gains are calculated based on the difference between how much a purchase is worth at present and the original purchase price (Wojcik, 2017).

Hedge Fund. A hedge fund is an investment partnership where investors pool money for investing. Hedge fund managers may engage in risky activity using borrowed money to amplify returns and may still make money even if the investments perform poorly (Kennon, 2021).

Real Estate Investment Trust. Real Estate Investment Trusts (REITs) trade as stocks with special tax treatment and specialize in various real estate types, such as hotel properties or condominiums. This investment vehicle allows investors to invest in real estate without maintaining the property (Kennon, 2021).

Short Selling. Short selling occurs when an investor borrows an asset or shares of stock not owned and sells with the promise to replace the asset in the future. If the asset declines in price and is repurchased at a lower cost, the profit is retained by the investor (Kennon, 2021)

Defined-Contribution Plans. Defined-Contribution Plans are retirement plans that a company may offer as a benefit, and the employee can make contributions regularly, as with a 401(K) or a 403(B) (Wojcik, 2017).

Roth Individual Retirement Account. Investors can buy stocks, bonds, real estate, certificates of deposit, Etc., within a Roth IRA (Kennon, 2021). Roth IRA contributions are made with after-tax dollars, but withdrawals are tax-free (Royal, 2021).

401(K). A 401(K) is a retirement plan offered by employers to employees that allows contributors to receive a tax deduction for contributions. Taxes are not owed until the contributions are withdrawn (Kennon, 2021).

Traditional Individual Retirement Account. Traditional IRA contributions are made with pre-tax dollars, which reduces taxable income (Royal, 2021).

403 (B). A 403 (B) is a retirement plan offered in the non-profit sector (Kennon, 2021).

Bond. A bond is an agreement to lend money to a government or company, and the bond issuer agrees to repay the principal loan and interest on the maturity date. Types of bonds include treasury, municipal, corporate, savings, and investment-grade (Kennon, 2021).

Common Stock. Common stock is sold in shares and represents ownership in a corporation (Kennon, 2021).

Stock Exchanges. The major common stock exchanges are the New York Stock Exchange (NYSE), the National Association of Securities Dealers Automated Quotations (Nasdaq), Euronext, the London Stock Exchange (LSE), Coinbase, Binance, the Tokyo Stock Exchange (TSE), and the Shanghai Stock Exchange (SSE) (Harper, 2021).

Stock Options. Stock options allow an employee to buy the employer's stock at a pre-set price within a specified period and may be offered by companies as management incentives (Wojcik, 2017).

Index Fund. An Index Fund is a type of mutual fund designed to reflect the returns of an index by allowing investments in an index such as the S&P 500. Index funds have low expense ratios, which is considered cost-effective (Kennon, 2021).

Margin. Margin occurs when brokers lend money against the value of a stock or bond, and the investor pledges the account balance as collateral (Kennon, 2021).

Dividend Yield. A dividend yield is a payout of a stock at its present dividend rate based on its trading price per share (Kennon, 2021).

Initial Public Offering. An initial public offering allows companies to sell stocks to an initial set of public shareholders, known as a primary market, before the shares can be sold and purchased on a secondary market such as the New York Stock Exchange (Harper, 2021).

Summary

In this quantitative study, teacher perceptions of the influence of financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve were examined. The problem addressed in this study was that financial literacy education is often excluded from the standardized curriculum, which may cause some students a measure of future financial distress. The study employed a non-probability convenience sampling procedure. An online survey was administered to current and retired teachers and staff across DoDEA. This study scrutinized the prospective ramifications of financial literacy education on the psychological well-being of military-connected students.

Chapter 2: Literature Review

Overview

The study's goal was to examine teacher perceptions of the influence of financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve. According to Aggarwal and Gupta (2020), a financially literate consumer will save for the future, retirement, and unforeseen circumstances and emergencies. Financial literacy is often the precursor to financial independence. Ozkale and Erdogan (2020) pose that financial literacy should be integrated into the mathematics curriculum in educational settings. Mathematical knowledge and skills are needed in many financial situations, such as interest transactions, budgeting, exchanging money, rental options, evaluating investments, estimating prices, pension processes, and conscious shopping (Ozkale & Erdogan, 2020). Financial literacy education may improve students' psychological well-being and promote future success.

Theoretical Framework

Constructivism is the study of a learner's own constructions of knowledge (Clark, 2018). Constructivism is considered by some educational theorists to be a branch of cognitivism, as both constructivism and cognitivism emphasize connecting new information with existing information (Ertmer & Newby, 2017). The constructivist approach incorporates the learners' experiences in the process (Clark, 2018). Constructivists believe that individuals learn best when they construct their own meaning of new content presented and link new information to prior knowledge (Badie, 2016). Learners then process information by relating it to their beliefs and experiences. Individual learning is shaped by each learner's experiences and perceptions (Clark, 2018).

The theoretical framework that drives this study is constructivism. Constructivism provides truth-orientation perception information transformed by the individual to benefit the learner (Thorne, 2013). “The discerning heart seeks knowledge” (New International Version (NIV), 2011, Proverbs 15:14a). By exploring shared resources, contributing to shared interests, learning from others, and collaborating with peers, partakers negotiate ideas through design-oriented participation (Marone, 2016). Students actively participate and take responsibility for the learning by making connections and asking related questions (Gash, 2020). Teachers are asked to plan more meaningful and imaginative learning opportunities that offer new insights and competencies (Sharma, 2014). Constructivism shifts the focus to knowledge as a process rather than a simple product to be obtained (Ultanir, 2012). Students who actively participate in incorporating financial concepts into their existing schema may benefit more from a financial literacy curriculum.

Constructivism theory is based on the idea that people construct their own knowledge through their personal experiences (Al-Huneifi & Schreurs, 2012). Utilizing constructivist theory could prepare students to solve problems in differing environments. In constructivism theory, students are more active in creating and building knowledge individually and socially (Al-Huneifi & Schreurs, 2012). Students engaged in learning using the constructivist model operate in a learner-centered environment in which the instructors facilitate learning by providing feedback and asking guiding questions. Constructivism requires the learner to actively engage in making meaning in the acquisition of knowledge (Ultanir, 2012).

The foundation of the constructivist theory in teaching philosophy goes back to the idea that “the only way of ‘knowing’ a thing is to have made it” by philosopher Giambattista Vico in the 18th century (Ultanir, 2012). Vico was a scholar and faculty member at the University of

Naples in Italy from 1699-1707 (Peterson, 2012). Jean Piaget was one of the formulators of the precise theory of constructivism (Ultanir, 2012). Piaget believed that knowledge was not to be construed as preexisting in reality but by formulations in response to specific observations and experiences (Peterson, 2012). Piaget believed that qualitative understanding would be reached and retained if students were allowed the freedom to craft their own discoveries (DioGuardi, 2017). Piaget encouraged learners to pose and assess new hypotheses in response to changing situations rather than be passive observers (Peterson, 2012). Piaget's underlying premise was that the learning process is accomplished through the active construction of knowledge (DioGuardi, 2017). Piaget's theories promote life-long cognitive development (Hauff et al., 2020).

John Dewey, a contemporary of Jean Piaget, who also one of the devisors of modern constructivism theory (Ultanir, 2012). Dewey contended that knowledge is tentative; issues must be solved at unique moments (Xyst, 2016). Making inferences from experiences allows for the construction of knowledge (Ultanir, 2012). Dewey acknowledged the inevitability of change from generation to generation and welcomed the concept into his conceptualization of education (Beckett, 2019). Dewey regarded the student as inseparable from his or her environment (Xyst, 2016). Dewey envisioned teachers and students participating together in activities while observing and listening to each other (Beckett, 2019). Experiences could provide the basis for education. The principle of continual experiences is that every experience should connect to previous experiences and promote the possibility of richer experiences in the future (Ultanir, 2012). According to Reich et al. (2016), for John Dewey, the aim of education is growth. Experiences and education can be directly linked when experiences provide positive opportunities for connection and growth (Ultanir, 2012).

Instructors versed in constructionist theory may utilize real-world scenarios to promote inquiry and discovery (Leś & Moroz, 2021). Constructivists are observers as reality is formed in daily life (Ultanir, 2012). Constructivist theories include Bruner's discovery learning. Discovery learning allows the learner to discover concepts rather than be given facts to assimilate (Clark, 2018). The constructivist paradigm, advocated by Piaget and Bruner, emphasizes construction through knowledge discovery (Sharma, 2014). Proponents of discovery learning believe it promotes student motivation and provides the student with autonomy and responsibility (Clark, 2018).

Teaching activities reflective of constructivism include case studies, research projects, flipped classrooms, modeling and coaching, and problem-based learning (Clark, 2018). Teachers are designers that support students in organizing memories and experiences to craft meaning (Ertmer & Newby, 2017). One-way communication is replaced by multiple-way communication in a constructivist classroom (Sharma, 2014). Concept formation and concept reformation are the noteworthy, salient processes occurring during constructivist activities (Badie, 2016). Learning occurs in realistic settings through tasks relevant to students' lived experiences (Ertmer & Newby, 2017). Constructive educational settings promote high levels of engagement, motivation, and performance (Clark, 2018). Freedom of expression, movement, and thought, the student's ability to affect pacing and flow, are prominent features of a constructivist educational setting (Sharma, 2014). The financial affairs of persons in the United States may be positively affected by applying a constructivist approach to financial literacy education among military-connected students. Applying constructivist principles to financial literacy concepts may benefit other students. The constructivist learning theory is the optimal framework to foster a climate for growth in the financial literacy arena.

The State of the Financial Union

Monetary resources are often connected to survival in the modern world. In consonance with Knyazeva et al. (2016), the semantic meaning of money is characterized by life attributes, including success, power, and general well-being. Perceptions toward money may differ based on life experiences and the respondent's age. According to Senejko et al. (2019), the relationship between the attitudes toward globalization and material resources appears in the late-life stages of adulthood when the wishful thinking of youth is replaced by actual experience. Younger students may be hopeful that success and financial gain lie in their future. Persons more advanced in age may realize that they do not have the financial knowledge and resources to sustain themselves and their families when emergencies or unexpected conditions occur.

Characterizing financial literacy promotes the requisite implementation of financial education. Commensurate with the characterization provided by Estelami and Florendo (2021), financial literacy is defined as an individual's competency in managing money. According to Remund (2010), financial literacy includes knowledge of financial matters, aptitude in managing personal finances, skills in making appropriate financial decisions, confidence in planning effectively for future financial needs, and the ability to communicate about financial concepts. Ozkale and Erdogan (2020) interpret financial literacy as the ability of individuals to exhibit knowledge and skills in real-life situations. Sari et al. (2017) stated that financial literacy is the ability to use one's knowledge and skills to manage financial resources electively to achieve financial well-being. As noted by Qianwen et al. (2020), financial literacy significantly impacts economic and financial stability. Moreira Costa et al. (2021) postulated that financial literacy is a paramount skill providing consumers with the knowledge and confidence required for financial decisions.

The components of financial literacy include the following:

Monetary literacy – related to the competencies necessary for managing cash and non-cash money and transactions and managing instruments intended for that purpose (e.g., current account, payment instruments, Etc.).

Price literacy – represents the competencies necessary for understanding price mechanisms and inflation.

Budget literacy – provides the competencies necessary for managing a personal or family budget, including the ability to set financial objectives and decide on allocating financial resources (Mohelska & Zubr, 2019).

An analysis of current financial literacy offerings could provide a framework for developing financial literacy tools. According to Lankford (2019), Americans should take stock of the current financial situation, set financial priorities, look for an additional income stream, and automate savings. Many Americans in the Gen X demographic—those born between 1965 and 1980—lack savings, in part from helping their children financially at the same time their parents have begun needing help (Lankford, 2019). In consonance with Caldwell (2020), an important step in taking a financial assessment includes calculating net worth by subtracting liabilities from the value of assets. As displayed in Figure 1, Vultaggio and Richter (2019) state that 69% of Americans have less than \$1,000 in savings for an unforeseen emergency. As Caldwell (2020) noted, expenses include credit card debt and loans, while assets include bank accounts, mutual funds, stocks, real estate, and retirement accounts. This detailed account of expenses could formulate the basis of the amount of savings one would need in the event of an emergency. A lack of emergency savings could be detrimental to one's overall financial health during a crisis.

An analysis of assets versus liabilities for the typical American consumer yields significant data. Research conducted by Caldwell (2020), underscored that many Americans have a zero or negative net worth, signifying that their liabilities meet or exceed their assets. Student loan debt is a concern to many Americans. As presented in Figure 2, the Board of Governors of the Federal Reserve System (2021) declared that the amount of student loans stood at \$480 billion in 2006, and by 2018, student loan debt had risen to 1.53 trillion. As exhibited in Figure 3, Richter (2018) explains that college education for many Americans has become a debt sentence as Americans now hold trillions of dollars in student loan debt. Student loan debt may seem insurmountable as some repayment plans may be stretched out over several years. On the authority of the research conducted by Caldwell (2020), it is noted that the longer the loan term, the more a student will pay in interest and total loan costs.

The debt ratio among American consumers is alarming. Arrearage may transpire from reoccurring debt. Based on the authority of research compiled by Ramsey Solutions (2021), 72% of Americans report being burdened by debt, and 66% of Americans report consumer debt, with an average \$34,055 debt load per person. As shown in Figure 4, Ali (2021) highlighted that in 2020, Americans born between 1946 and 1964, referred to as the Baby Boomers, aged 57-75, averaged 97.3 thousand dollars of debt. That same year, Americans born between 1965 and 1980, generation X, aged 41-56, averaged 140.6 thousand dollars of debt (Ali, 2021). Americans born between 1981 and 1996, the millennials, aged 25-40, averaged 87.4 thousand dollars of debt during 2020 (Ali, 2021). According to Caldwell (2020), to improve one's financial situation, the consumer must be able to pay off debt as quickly as possible. The debt load in the typical American household should be reduced to allow families to save for unexpected expenses.

Figure 1

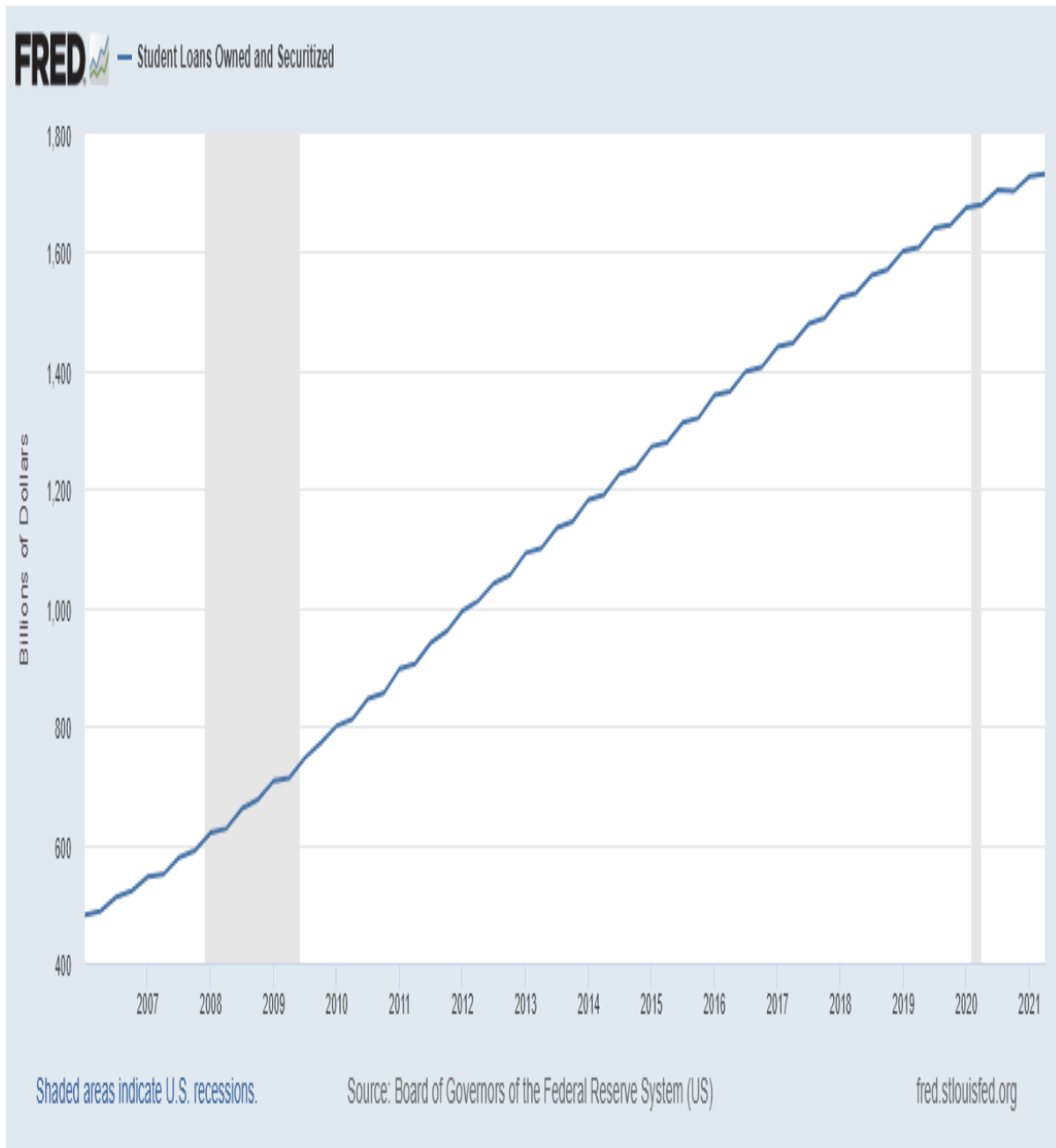
2019 Savings Percentages in America



Vultaggio, M., & Richter, F. (2019, December 18).

Figure 2

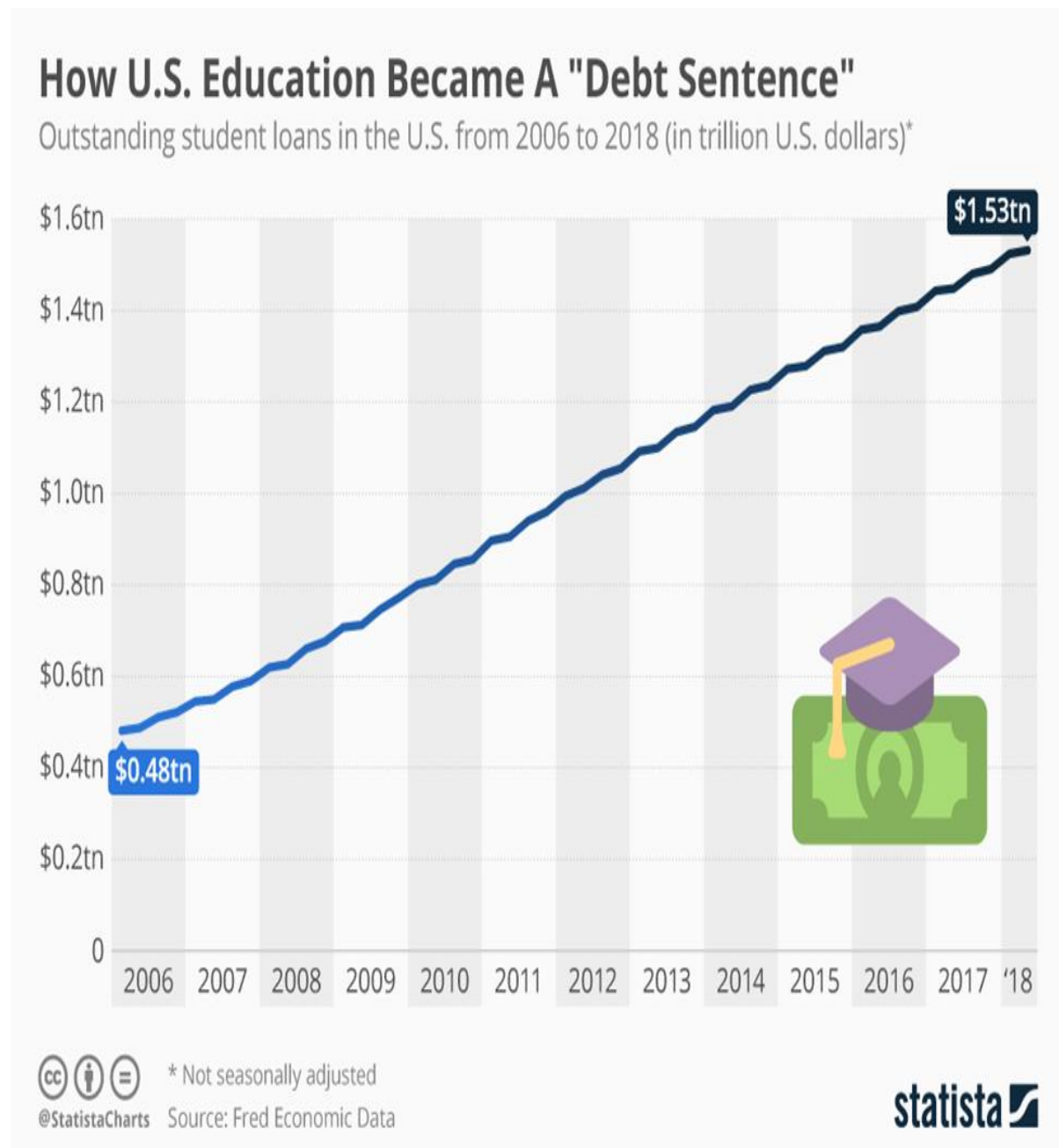
United States Federal Reserve System Student Loan Debt Records



Board of Governors of the Federal Reserve System. (2021, August 6).

Figure 3

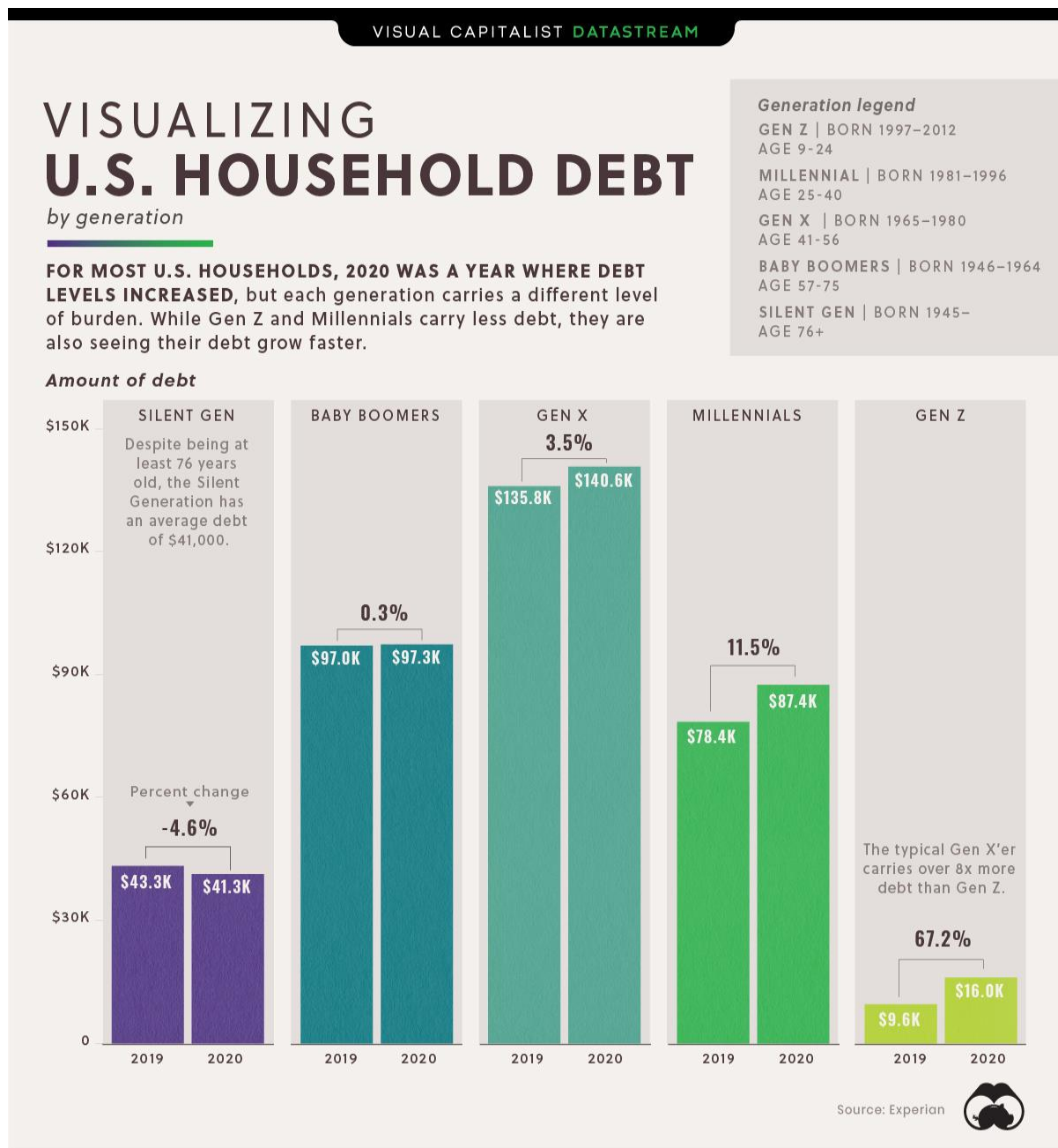
Rise in Outstanding Student Loans in the United States from 2006 to 2018



Richter, F. (2018, August 28).

Figure 4

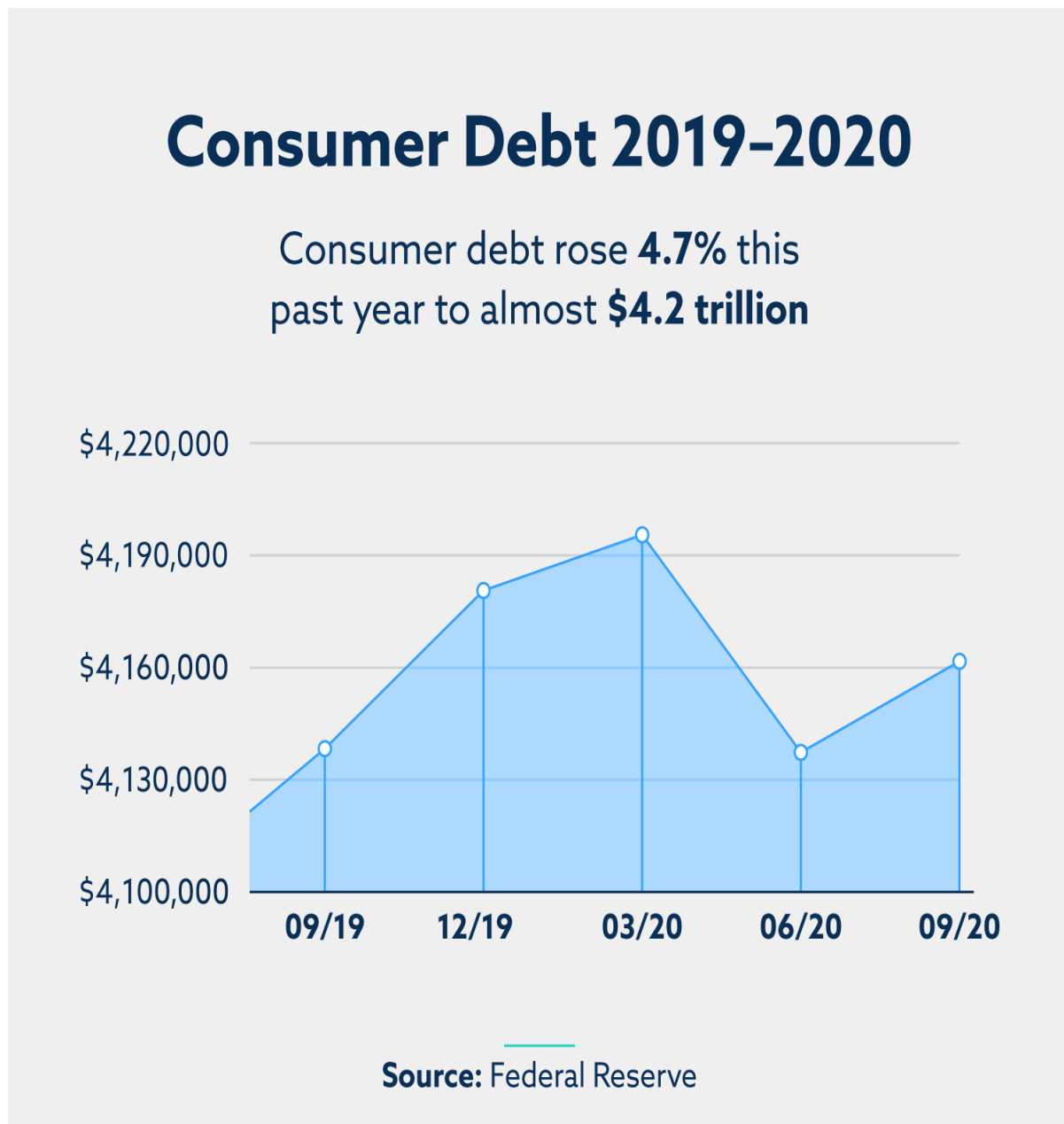
United States Household Debt by Generation in 2020



Ali, A. (2021, July 16)

Figure 5

United States Consumer Debt from 2019 to 2020



Board of Governors of the Federal Reserve System. (2021, September 8).

Indebtedness could produce financial limitations for family members within a household.

In consonance with the Organisation for Economic Co-operation and Development (2021),

household debt is defined as all liabilities of households that require payments of interest or principal by households to the creditors at a fixed date in the future. Excessive debt may reduce one's economic opportunities. Debt is calculated as the sum of loans and other accounts payable, and the indicator is measured as a percentage of net household disposable income (Organisation for Economic Co-operation and Development, 2021). One focus of an effective financial literacy curriculum should center around debt reduction.

The differing types of debt become relevant by examining the extent of the debt crisis. In keeping with the definition provided by the Corporate Finance Institute (2020), revolving debt does not feature fixed monthly payments, but payments are based on the interest rate and balance and may be computed daily. Credit cards, signature loans, and home equity lines of credit are examples of revolving debt (Corporate Finance Institute, 2020). Based on the research amassed by the Statista Research Department (2021), credit card debt in the United States totaled approximately 770 billion dollars.

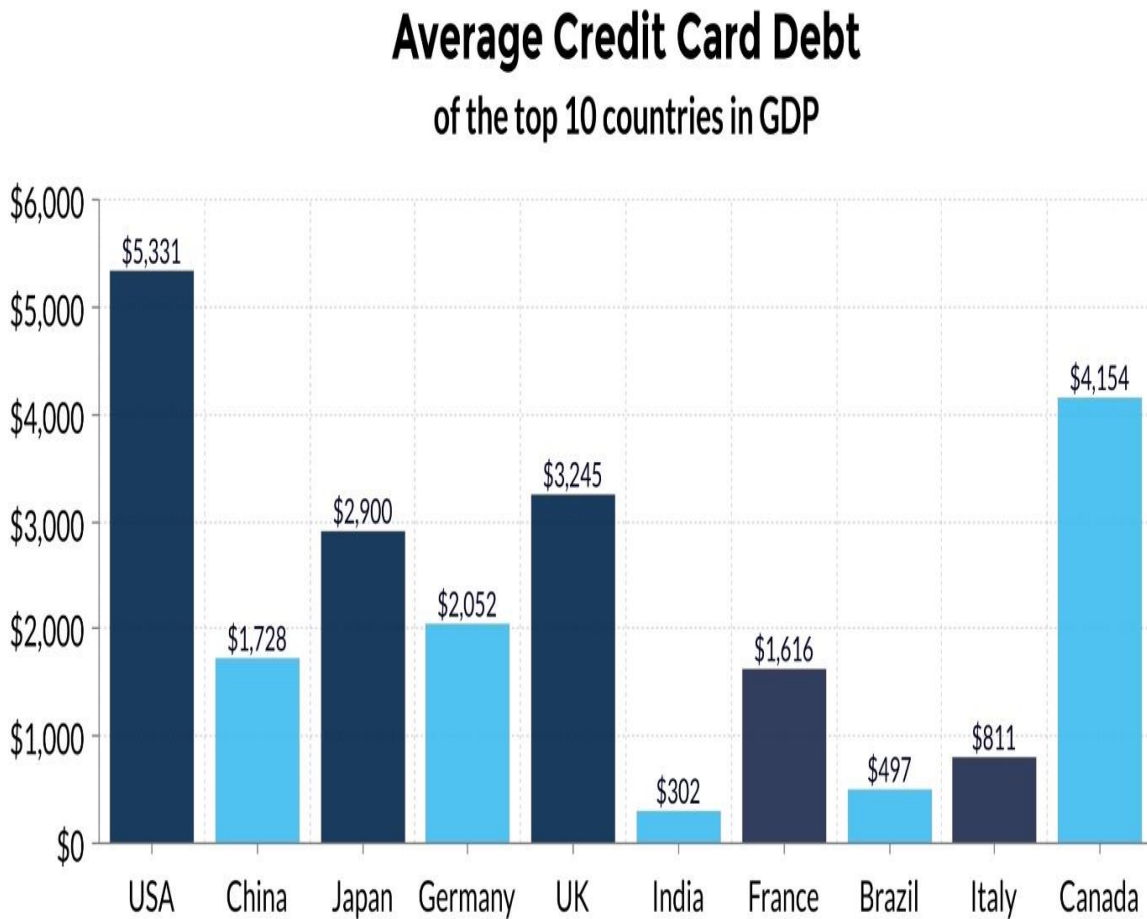
As characterized by Manuel (2021), non-revolving credit is extended via a fixed repayment plan. Student loans, car loans, home mortgage loans, personal loans, business loans, and home equity loans are examples of non-revolving credit (O'Connell, 2020). As outlined in Figure 5 and formulated by the Board of Governors of the Federal Reserve System (2021), total consumer debt totaled \$4.161 trillion in September 2020. Total revolving consumer debt was \$989 billion in September 2020 (Board of Governors of the Federal Reserve System, 2021). Total non-revolving consumer debt was \$3.173 trillion, and auto loans totaled 1.223 trillion in September 2020 (Board of Governors of the Federal Reserve System, 2021). A debt evaluation could highlight trends that may position a family in a reoccurring monthly deficit.

Spotlight on credit card usage in the average American household could reveal the scope of the debt quandary. Of the top ten countries ranked by gross domestic product, Americans have the highest average credit card debt, as represented in Figure 6 (Shift Processing, 2021). On average, Americans have 2.7 credit cards and spend an average of \$753.80 on credit card interest per year, as the average credit card interest rate is 14.14% (Shift Processing, 2021). As of 2019, the average American carried \$5,331 in credit card debt, \$148,060 in mortgage debt, \$33,654 in student loan debt, and \$18,588 in auto loan debt (Shift Processing, 2021). Those figures show a staggering \$205,633 in debt for the average American (Shift Processing, 2021).

Annotating the source of one's monthly bills may offer a vivid illustration of the dilemma. A robust savings plan is essential to securing a debt-free financial future, while a lack of savings during an adult's working years may lead to a predicament in retirement. As highlighted in Figure 7 by the Board of Governors of the Federal Reserve System (2020), 38% of people aged 18 to 29 have no retirement savings or pension, along with 27% of people aged between 30 and 44. 17% of people aged between 45-59 lack retirement savings, and 12% of people 60 years and over (Board of Governors of the Federal Reserve System, 2020). 49% of people aged 60 and over report inadequate retirement savings (Board of Governors of the Federal Reserve System, 2020).

Figure 6

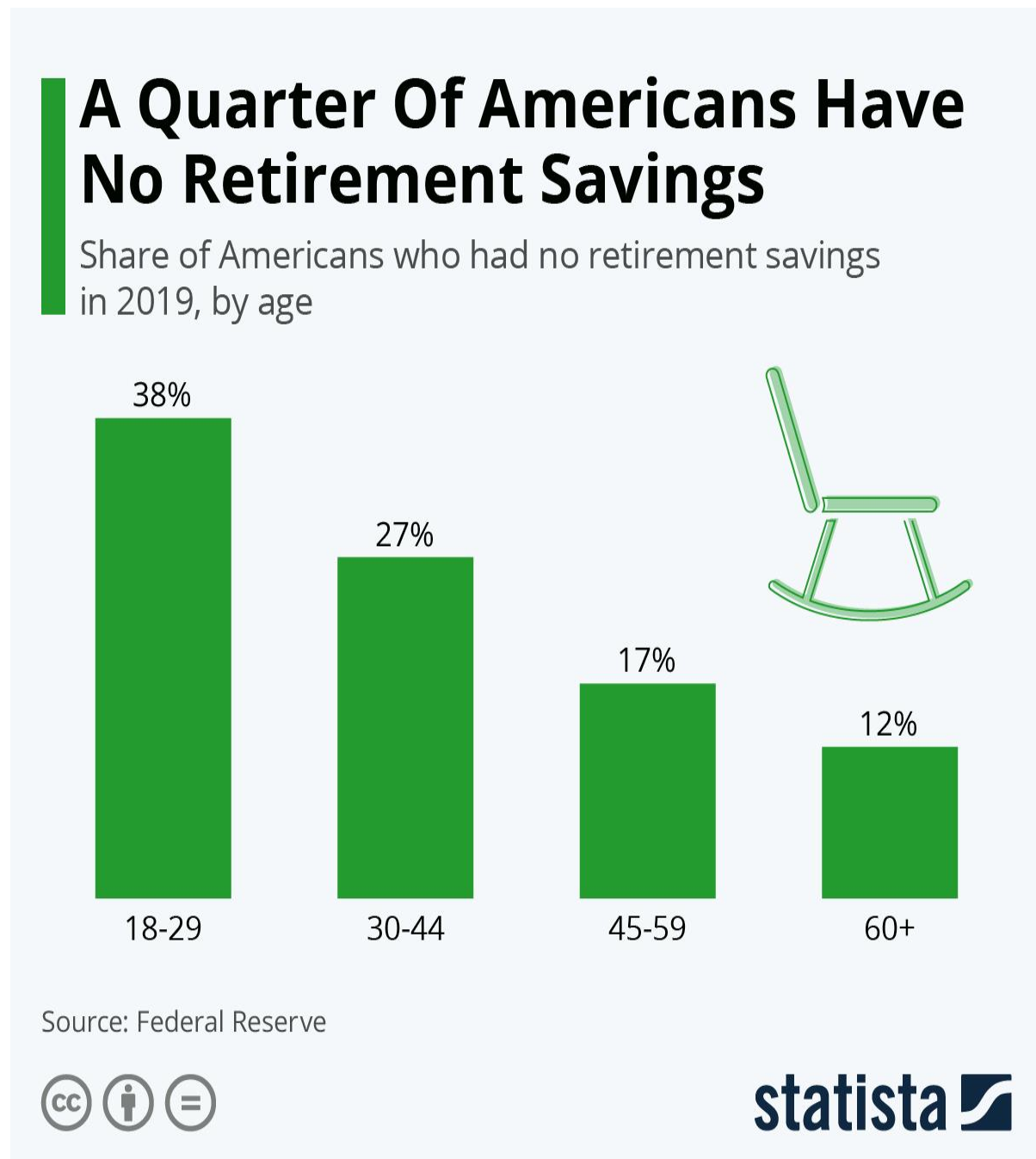
Average Credit Card Debt of 10 Countries in 2021



Shift Processing (2021)

Figure 7

Retirement Savings in the United States in 2019



Richter, F. (2020, June 16).

Psychological Effects of Financial Instability

The psychological effects of financial instability are vast and may cause challenges in many areas of daily life. Financial instability may be demonstrated by unpredictable behavior and erratic mood changes. Uncertainty regarding one's ability to meet his or her physical needs may produce a myriad of concerns coupled with apprehension, distress, and agitation. According to Maslow (1954), there is a hierarchy of basic needs. These basic categories of needs include physiological, safety, love, esteem, and self-actualization; the needs at the higher levels begin to emerge when the needs at the lower levels are sufficiently satisfied (Hopper, 2020).

Physiological needs, the pyramid's base, include air, water, food, shelter, sleep, clothing, and safety needs (Hopper, 2020). The next level above physiological needs includes personal security, employment, resources, health, and property (Hopper, 2020). Meeting these basic needs requires a level of financial funding. Being without the financial means to sustain oneself could generate complicated dilemmas.

Poverty and Depression

Depression is correlated with poverty. Commensurate to a study conducted by Lee et al. (2013), living in a disadvantaged neighborhood predicted depressive symptoms among youth. The symptoms may be due to stress induced by exposure to neighborhood issues such as unemployment, violence, and crime. The study's elementary school students of families in poverty had a higher mean depression score than reported by other community-based studies (Lee et al., 2013). The mean depression score indicated higher levels of depression in low-income elementary school students. According to a study by Starnes et al. (2021), depression and poverty are associated in a dose-response relationship, with increasing odds of depressive symptoms in the participant as their household's poverty increased in severity. Research by Paat

(2011), revealed that financial hardship could create turmoil in families by increasing discord between parents. Discord and disharmony potentially have a negative impact on family unity.

Financial distress is persistent in some families throughout their adult lives. On the authority of research conducted by Shapiro et al. (2013), extreme wealth inequality hurts family well-being and hampers economic growth in communities across the United States. Financial distress is defined as any account being at least 120 days past due. At least 35% of Americans have debt in severe delinquency during some point in their life cycle (Athreya et al., 2019). According to O'Neill and Gillen (2021), survey respondents with the lowest financial literacy levels had more difficulty meeting financial obligations in a typical month, paying loan and credit card payments in full and on time, and no retirement savings. Commensurate with a study by Campbell-Grossman et al. (2016), depressive symptoms are associated with perceived stress. Stress, depression, and poverty may have extended effects.

Study results reported by Peltzer and Pengpid (2020), convey that low income and lack of basic amenities were among the determinants associated with depression. Outcomes of a study by Huang et al. (2020) indicate that both subjectively and objectively-measured financial stress is positively associated with depression. According to Sun et al. (2012), elevated levels of strain were significantly associated with low levels of income, and this association was mediated by depression and fair to poor levels of health status. Oppression, lack of financial resources, and poor health contribute to depression (Burnette et al., 2019). Low income coupled with depression can even be fatal. Low income and lack of self-compassion may contribute to some suicide attempts (Zhang et al., 2019).

Poverty and Childhood

Children living in poverty-stricken households may suffer adverse effects. Children's well-being is affected by their caregivers' economic circumstances (Federal Interagency Forum on Child and Family Statistics, 2019). Economic resources include the poverty status of the family as dictated by the family's income. In research conducted by Schenck-Fontaine and Panico (2019), income poverty, material deprivation, and subjective stress are distinct dimensions of economic hardship. Failure of families to obtain adequate food is affected by their financial resources. Lack of financial literacy by a child's caregivers could translate into food insecurity. Children living in poverty are susceptible to educational, environmental, safety, and health risks. Economic hardship is associated with children's behavior problems between the ages of three and seven (Schenck-Fontaine & Panico, 2019). According to McLaughlin and Rank (2018), the economic cost of childhood poverty includes increased healthcare costs, reduced earnings later in life, increased victimization costs of street crime, increased corrections and crime deterrence costs, increased social costs of incarceration, increased child maltreatment, and increased child homelessness.

Tracking children from poverty-stricken households may spotlight the trajectory some children feel they are born into based on their environment. From research by Bjerk (2007), children in the bottom quintile of income are significantly more likely to commit a crime as adults. The combination of material deprivation, subjective financial stress, and economic hardship are associated with the highest levels of behavior problems (Schenck-Fontaine & Panico, 2019). According to McLaughlin and Rank (2018), poverty is also associated with increased spending on crime deterrence and correction costs. Childhood poverty increases crime (Bjerk, 2007). Children who experience poverty during childhood earn less money when they

become adults than their non-poor counterparts (McLaughlin & Rank, 2018). Young adults living in impoverished neighborhoods are also likely to become crime victims. As evidenced in the research statistics of Gramlich (2020), younger people and those with lower incomes are far more likely to report being victimized than those who are older and reach higher-income status. Becoming a crime victim may also cause children to seek revenge in illicit ways.

Children living in poverty may display their distress with varying peculiarity. Compared to children in the same age range, impoverished children are more likely to display behavioral, socio-emotional, and behavior issues (Federal Interagency Forum on Child and Family Statistics, 2019). Children raised in financial poverty are less likely to strive for higher educational attainment. These children also suffer from more years of unemployment. There is a relationship between parental depression and low socio-economic status (Vreeland, 2019). The official poverty measure for the United States is defined by the United States Office of Management and Budget Statistical Policy Directive (Federal Interagency Forum on Child and Family Statistics, 2019). Children from families suffering from financial hardship are at an elevated risk of developing more behavioral problems, partly because the induced stress on family financial circumstances can interfere with the dyadic relationships among parents and between parents and their children (Paat, 2011). Considering a child's home environment may provide educational professionals with more strategies for better support.

Poverty and Substance Abuse

Poverty is connected with substance abuse. Poverty increases the risk factors associated with addiction. Dana Henders of the Saint Joseph Institute for Addiction (2018) proclaimed that financial struggles increase the risk of a person developing a substance abuse disorder as poverty increases struggles and feelings of hopelessness while decreasing self-esteem, social support, and

access to healthcare. That cause-and-effect relation points to the tie between substance abuse and one's economic status. According to Lesser (2021), the indirect relationship between economic status and addiction is typically spread through many underlying risk factors, including poverty, level of education, abuse, and neglect.

The socioeconomic determinants of opioid overdose are analyzed in a comparative study. On the authority of research statistics compiled by Pear et al. (2019), it was found that across 17 states from 2002 to 2014, opioid overdoses were concentrated in more economically disadvantaged zip codes, indicated by higher rates of unemployment, poverty, lower median household income, and education. Poverty not only contributes to rates of substance abuse but can also make addiction more deadly. According to Dr. Grinspoon of Harvard Health (2021), poverty is a risk factor for opioid overdoses, unemployment is a risk factor for fatal heroin overdoses, and a low education level is a risk factor for prescription overdoses.

Low income is a contributing factor to alcohol abuse and hazardous drinking. Babiarz and Robb (2013) noted that a lack of financial knowledge hinders accumulating personal savings. Depressive symptoms, perceived financial distress, and the lack of employment satisfaction were recognized as significant mediating factors linked to hazardous drinking (Foran et al., 2011). According to Jones and Sumnall (2016), people experiencing economic and social disadvantages in early life or adulthood are at greater risk of adopting problem drinking behaviors in later life. Marta-Christina and Liana (2013) reported that the European Union acknowledged poor financial education as one of the reasons for a decreased standard of living. According to Shapiro et al. (2013), wealth inequality is toxic and has a historical underpinning perpetuated by United States government policies and tax preferences favoring the affluent. While alcohol abuse has economic and social consequences for some, people living in poverty

may be less able to defend against the consequences and are at a greater risk for marginalization from their drinking behaviors than those more affluent.

Poverty and Violence

Poverty can contribute to marital disputes, discord, and domestic violence. As highlighted in statistics presented by Aizer (2011), women with income below \$10,000 annually report rates of domestic violence five times greater than those with annual income above \$30,000. Income may be protective against violence. Financial stress could contribute to increased rates of violence among women with lower income rates. Poorer women are exposed to greater levels of intimate partner violence; as a woman's income increases, domestic violence against her declines (Aizer, 2011). Poverty may restrict some women's options in situations of domestic violence. Slabbert (2016) reported that poverty could become a fueling factor in domestic violence incidences by limiting choices and resources. Marital unions may also suffer in poverty-stricken homes. According to Kamp Dush (2013), stress from a lack of financial resources contributed to marital dissolution. Financial disputes can be a cause for breaking the ties that bind.

Financial literacy may be one of the key stumbling blocks to reducing domestic violence caused by financial strain. Providing financial literacy to those in low-income households may prove difficult due to time constraints, work schedules, and limited access to technology. Households with higher per-capita incomes were more likely to take advantage of money-saving strategies related to purchases, and persons in the lowest income brackets were least likely to employ strategies to save money on daily purchases (Carter, 2016). Persons with the most meager incomes may need the most significant infusion of financial literacy. Persons living with households surviving on meager incomes could be provided with money-saving tips that benefit the entire family (Carter, 2016).

Crime is associated with poverty. According to Gaitan-Rossi and Guadarrama (2021), in a systematic literature review of the mechanisms linking crime and poverty, crime is noted as a central aspect of the conditions and experience of poverty. Based on statistics garnered by Dong et al. (2020), poverty and low-income levels are positively related to homicide rates; the poverty-homicide association implies that deprivation is mainly responsible for violent crime. According to Bright and Jonson-Reid (2015), concentrated poverty in childhood is a key risk factor for later offending criminal behavior. Infusing students with financial literacy principles may positively affect their future.

According to John Gramlich of the Pew Research Center (2020), in 2019, aggravated assault was the most common violent crime, followed by robbery, rape, and murder. Property crime is even more common than violent crime, and the most common forms include larceny, burglary, and motor vehicle theft (Gramlich, 2020). Unfortunately, crime rates in the United States may be even more disturbing than the data suggests. In 2019, according to the Pew Research Center, only 40.9% of violent crimes and 32.5% of household property crimes were reported to the police (Gramlich, 2020). Attaching the rates of reported crime with the estimates of unreported crime underscores the dire situations that communities mired in poverty often face.

Poverty and Education

Financial health should be recognized and measured just as physical health is measured in society today. Supporting those households with limited access to financial literacy may foster emotional, physical, and psychological health. Economic hardship has an underlying lack of financial health (Weida et al., 2020) and is linked to a lack of financial literacy. According to Qianwen et al. (2020), most consumers lack the financial literacy and capability to navigate an

increasingly complicated financial environment. Supporting financial literacy education provides the necessary foundation for future post-high school success.

Financial strain is often a stressor for undergraduate students, and low-income students are at a higher risk of discontinuing their educational pursuits (Adams et al., 2016). Melanie Hanson of the Educational Data Initiative (2021) underscores this, noting that the overall dropout rate for undergraduate college students is 40%. 30% of college freshmen drop out before their sophomore year. Stress can also lead to other psychological complications. According to Adams et al. (2016), the financial strain may impact students' psychological symptoms and their academic and social integration. Amari and Jarboui (2015) found evidence of financial illiteracy among college students and believe mediating stress may be a helpful solution. University students could benefit from more direct financial literacy instruction (Amari & Jarboui, 2015). If offered early in one's academic career, direct financial literacy instruction may benefit students the most.

Some graduate students may feel the burden of time constraints paired with a financial burden. Based on statistics compiled by Barton and Bulmer (2017), 23.5% of graduate students screened positive for depression or anxiety. Financial stress is correlated with both anxiety and depression. This study shows that a lack of money management skills and limited family income contribute to depression and anxiety in graduate students (Barton & Bulmer, 2017). According to Corredor et al. (2020), the psychological outcome of students of low socio-economic income that received merit-based forgivable student loans is affected by debt. The study showed adverse psychological effects on the following: mood, feelings of guilt, failure, worthlessness, helplessness, loneliness and hopelessness, loss of appetite and sleep disturbance, and the feeling

of being unable to handle the current situation (Corredor et al., 2020). Reducing financial strain among graduate students could reduce student attrition rates.

Poverty and Discrimination

Throughout the history of the United States, obtaining wealth has not been equally accessible to all. Commensurate with the research of Al et al. (2019), there is a disparity in the racial wealth gap and its connection to ethnicity. Viewed through the lens of critical race theory in America, the origins of our wealth gap may be traced through the history of slavery, Jim Crow, relocation, Native American reservations, indentured servitude, and genocide. According to Shapiro et al. (2013), the recession of 2007-2009 erased family assets of the culturally diverse, low-wealth communities acquired through years of hard work, if not entire generations. Financial literacy for minorities may increase with participation in a financial literacy education program (Al et al., 2019). Building a solid middle and upper class in communities disadvantaged because of their ethnicity should become one of America's priorities.

The lower income status of indigenous people concurs with historical oppression (Shapiro et al., 2013). As outlined in the research of Burnette et al. (2019), regression analysis results supported the framework that historical oppression and daily stress from lower incomes were risk factors for depression. Oppression, lack of financial resources, and poor health contribute to depression in indigenous peoples (Burnette et al., 2019). According to Shapiro et al. (2013), historical wealth inequality in the United States has resulted in a wealth gap based on ethnicity. In 2009, a representative survey of American households revealed that the median wealth of Caucasian families was \$113,149 compared with \$6,325 for Latino families and \$5,677 for African-American families (Shapiro et al., 2013). Differences in educational approaches may be necessary when teaching financial literacy in diverse cultures.

The American educational system has a responsibility to educate all students. Some ethnic communities have lacked the resources to build financial capital at the same levels as their counterparts because of inequality in education. According to Fisher (2019), there is a significant economic divide between Caucasian and African American households, and wealth is an avenue to social and political power. As highlighted by Shapiro et al. (2013), there is compelling evidence that the large majority of the widening wealth gap is due to government policy. This racial wealth gap has far-reaching effects, including quality housing, health care, education, and community development (Fisher, 2019). According to Lusardi et al. (2013), financial knowledge accumulation has the potential to account for a considerable proportion of wealth inequality. Government policies at the federal, state, and local levels should be examined for equity of access to resources that promote the creation of wealth in underdeveloped ethnic communities.

Poverty and Malady

As evidenced in the research statistics amassed by Ramsey Solutions (2021), 46% of Americans report that their debt level creates stress and makes them anxious. According to Kathleen Raven of Yale Medicine (2020), stress forces adrenal glands to release adrenaline and cortisol hormones. Among the generations, 64% of Americans between ages 25 and 40 reported the most stress and anxiety, followed by 52% between ages 41-56 and 27% between ages 57-75 (Ramsey Solutions, 2021). Constant exposure to stress can cause headaches, diarrhea, chest pain, and insomnia (Raven, 2020). Debt influences how often Americans express worry or concern related to finances. 53% of Americans report worrying about finances every day. Research indicates that the higher the amount of debt, the more anxiety people experience (Ramsey Solutions, 2021). Stress has been linked to a weakened immune system, increasing susceptibility to infections (Raven, 2020). Stress and a lack of financial resources are inextricably linked.

The psychological effects of financial instability can be exacerbated by the physical consequences associated with a lack of financial resources. According to Mitchell (2020), financial capability can be a determinant of health, as some study participants reported avoiding a doctor because of cost and medication non-adherence predicted by cost. According to Lusardi et al. (2011), Americans who have meager incomes are in a vulnerable position regarding healthcare utilization, and the lack of financial liquidity directly prohibits a household's ability to fund health-related concerns. Families may not have the financial resources to afford healthcare specialists that promote psychological well-being. The ability to pay for needed psychologists, counselors, and psychiatrists may be negatively associated with financial insecurity. The mental health of a loved one could be placed in jeopardy due to a lack of financial resources.

Psychological Benefits of Financial Education

Financial literacy education has a positive correlation with financial knowledge. Students that participated in financial literacy courses showed higher levels of financial literacy knowledge (Gok & Ozkale, 2019). Yates (2019) reported higher levels of financial literacy in those participants who received financial education. Participants with higher levels of financial literacy were shown to be more financially stable, and a lack of exposure to financial education negatively impacted financial literacy (Yates, 2019). In consonance with the research of Larracilla-Salazar et al. (2019), financial education is relevant because it provides people with tools to make decisions that improve their economic well-being. According to Lusardi et al. (2013), financial knowledge is positively related to household wealth. Financial education could be an equalizer in communities traditionally underserved throughout American history.

Financial education is touted to lead to an improvement in financial literacy. Financial education significantly impacts the financial literacy rates of children (Kalwij et al., 2019). A

strategy for long-term financial success includes teaching children salient financial principles at an early age. Summer employment programs could allow children to begin saving and investing (I.-Hsing Sun, 2017). Financial capability may be increased through financial education. High school financial education is shown to directly impact consumer financial capability (Xiao & O'Neill, 2016). High school students who take a class in money management and avoiding debt are more likely to avoid debt when the financial literacy information is interconnected with another course (Farinella, 2017). Limiting debt could give students one less hurdle to overcome in the journey to homeownership as adults.

Utilizing financial literacy strategies is shown to have a positive effect on one's well-being. Shim (2012) reported that productive financial behaviors, including financial savings and other future-oriented behaviors, were associated with increased well-being. According to O'Neill (2021), required high school financial education increased subjective financial well-being for adults who attended at least some college. Garasky et al. (2012) asserted that financial status is linked to overall health and well-being. The effects of financial education include noted impacts on socioemotional traits and behavior. As evidenced in a study by Frisanco (2018), school-based financial education positively impacts students' self-control and consumption habits. According to Sel and Sozer (2020), personal finance program-based activities strengthen children's potential for learning. Even teachers benefit from delivering financial literacy instruction. According to Frisanco (2018), teachers in the treatment group were more likely to save.

Studies have shown that robust financial education positively impacts particular future financial decisions. According to a study by Gutter et al. (2010), formal education and social learning are important determinants of financial behaviors; financial education is a key predictor

of financial knowledge. The study found that students that reside in states with financial education standards or financial literacy classes exhibited a lower tendency toward compulsive buying, a higher financial disposition toward future orientation, a higher financial disposition toward financial self-efficacy, and a higher rate of budgeting and saving (Gutter et al., 2010). As outlined in a meta-analysis of 76 randomized experiments by Kaiser et al. (2020), financial education programs positively affect financial knowledge and financial behaviors. According to Harvey (2019), over one-quarter of American adults used credit-based alternative financial services from 2014-2019, and the annual percentage rate averaged 300 percent. Young adults exposed to personal finance education in their school curriculum were less likely to utilize payday borrowing alternative financing options (Harvey, 2019). Reducing the tendency toward compulsive buying and increasing students' future financial disposition are lofty goals for any financial education curriculum.

Financial decisions have an impact on success. Parents and other key socializing agents should be employed in educational strategies to improve financial literacy (Gerrans et al., 2019). Family structure is related to financial resources. Students from two-parent families generally receive more financial support than children from a different family structure (Fomby & Kravitz-Wirtz, 2019). A 529 plan allows parents to save money for a child's college tuition and other related expenses. In 529 plans, the owner may make qualified withdrawals or change the beneficiary if necessary (Jones & Hamm, 2020). Having the capability to provide for a child's college education may alleviate a measure of stress during a child's transition from high school to college. Universities should then accept incoming freshmen and embed financial education into the curriculum of every degree program. According to Geddes and Steen (2016), universities should develop financial literacy programs that foster economic well-being. Gerrans et al. (2019)

report increased objective and subjective financial literacy when financial literacy is taught at the university level. Producing financially literate citizens is a joint venture.

Equipping students to better make long-term financial decisions is indeed possible. As recorded in a study by Wagner and Walstad (2019), financial education has an insignificant effect on short-term behaviors but has a more substantial effect on long-term financial behaviors. According to Marta-Christina and Liana (2013), financial education should familiarize people with the expected evolution of future events as the concept of money evolves and transforms. A personal finance curriculum can guide students through turbulent financial times. A financial literacy educational curriculum could provide greater comfort and assistance to those making financial decisions. Students who engage in a personal finance education class may avoid damaging decisions in their financial future (Wong, 2020). Commensurate with the findings of Porto and Xiao (2019), financial education provides the foundation to improve financial knowledge and behavior. An increased understanding of financial knowledge and behavior may prepare students to be more principled with their financial future.

A community-based research analysis assisted families in meeting their financial needs without additional government assistance. Developing both short and long-term goals align with best practices for process and positive results (Gnagey, 2020). Zerihun and Makgoo (2019) record a positive and significant relationship between financial literacy and financial management outcome. Policymakers are encouraged to develop programs based on the financial literacy needs of youth (Zerihun & Makgoo, 2019). According to Marta-Christina and Liana (2013), individual financial welfare is fundamental for financial stability at the national level. Neighborhood residents who own their homes in disadvantaged communities can play a vital role in reducing crime within their community. The study by Lindblad et al. (2013) denoted that

homeownership exerts a robust effect in reducing neighborhood crime and disorder. Some consider homeownership to be an integral building block of the American dream.

Making quality financial decisions for oneself can benefit an entire family or community. As postulated by Sel and Sözer (2020), financially literate consumers make better decisions for their families and increase their economic security and welfare. Financial education raises the level of literacy, and financial education also aids in developing financially literate decisions when creating a household budget (Istocescu, 2019). According to Marta-Christina and Liana (2013), to cope with contemporary financial issues, a paradigm concerning money should be introduced through financial education. Financial education significantly impacts financial behavior and literacy (Kaiser & Menkhoff, 2017). The benefits of financial education may extend to overall financial literacy, consumer behavior, and positive financial well-being.

In school systems that may not have the fiscal support to present sweeping changes to the financial education programs, small steps can still be effective. A study by Bhutoria and Vignoles (2018) shows that even a small degree of financial training increased financial literacy. Women from poor communities were given one day of financial literacy training in a non-classroom, action-oriented approach, and positive effects were realized (Bhutoria & Vignoles, 2018). Bodnar (2020) asserts that women should take an active role in understanding the family finances, and they should also have their names on key accounts. According to Sel and Sözer (2020), financial education is an important component of citizenship education in terms of government security, operation of financial institutions, having a voice in the financial system by making qualified decisions, and participation. Participants in financial literacy education can benefit from the knowledge obtained even if time and resources are limited.

Teaching financial literacy to students could provide an advantage well into their later years. Most centenarians do not feel they can manage their finances (Garasky et al., 2012). Seniors are predicted to have a longer life expectancy and may accept more financial risk to match (Bodnar, 2020). As people tend to live longer, financial planning becomes even more necessary. Potential lifestyle changes during retirement and a prediction of inflation rates are worth considering in retirement planning (Jenkins, 2020). Policies aimed at increasing financial literacy are important throughout the life cycle. Fact-based financial literacy positively impacts planning and saving for retirement and investment management (Hauff et al., 2020). Dispensing financial education to students could dramatically alter the course of their lives.

The Financial Literacy Curriculum

Financial literacy education provides benefits for students. Porto and Xiao (2019) defined financial education as the formal teaching of a curriculum of money management knowledge and skills to nonfinancial professionals. According to Fraczek (2014), financial education is the most important way to improve financial literacy. This study underscores the need to define the priorities when creating a financial literacy education program. As set forth by Tang and Peter (2015), financial knowledge can lead to better decision-making. Defining the priority areas increases the effectiveness of the financial literacy curriculum (Frączek, 2014). Students who learn financial computation alone still may not possess the knowledge needed to be financially literate in today's economy. Financial literacy and practical application are needed in school mathematics courses (Abylkassymova et al., 2020). According to Marta-Christina and Liana (2013), financial education should include problem-solving, critical thinking, creativity, communication, and team building. Financial education may then benefit the person in differing areas.

Embedding financial literacy principles throughout the educational curriculum of primary and secondary students could greatly benefit students. According to Mohelska and Zubr (2019), financial literacy is essential to lifelong education and should be taught as early as primary school. As accentuated in the research of Frisancho (2018), an analysis of the available evidence shows that interventions focused on adults had minimal effects on financial knowledge and behavior. Attempting to change the financial behaviors of adults who have suffered adverse consequences from financial decisions is not predictive of financial education's potential impact on children. Frisancho (2018) noted that children are more malleable regarding habits that are still in development; providing timely guidance in financial literacy could be crucial and have a lasting, significant impact on financial behavior during adulthood. Focusing on financial literacy with children may provide a pathway for students to make effective financial decisions before becoming mired in debt. Attempting to rectify incorrect or incomplete financial education in adults presents inherent challenges that may not have been necessary if adequate financial literacy had been provided during their formative educational years. The key challenge is striving to alter socioemotional skills and intrinsic preferences that will shape financial habits and choices during adulthood (Frisancho, 2018).

An effective financial literacy curriculum should be a consideration for all stakeholders. According to Qianwen et al. (2020), widespread financial illiteracy, including the lack of financial knowledge, solidifies the need for promoting financial literacy education. Financial literacy programs are touted to improve individual incomes, promote inclusion, and expand financial literacy. These programs should have an evaluative component that provides evidence that the program is achieving its objectives (Álvarez-Franco et al., 2017). Schools play a vital role in educating girls on financial literacy (Grohmann, 2016). Policymakers and educators have

promoted programs to increase low levels of financial knowledge among students. As highlighted in the research amassed by Tang and Peter (2013), 17 states required a personal finance course for high school graduation, and 22 states required an economics course. One of the core educational pillars in the United States should be financial literacy.

Financial education should be considered essential for financial success and promoted by government agencies and private industries. Tang and Peter (2015) reported that in 2010, under the Dodd-Frank Act (H.R. 4173), the United States Congress created the Consumer Financial Protection Bureau to further promote financial education through its consumer engagement and education group. Consumers may use online financial education tools to understand mortgages and purchase a home. Consumers with financial literacy skills were more likely to utilize online financial literacy tools (Chin & Williams, 2020). This use of available tools is consistent with enrichment theory. For people without financial literacy knowledge, providing online tools does not yield as positive results as providing training (Bi et al., 2020). Financial institutions are responsible to the public for their products. Their operations and practices should benefit society (Appleyard & Dibb, 2018). The authors of this study believe that Americans may be more financially literate than previously reported, and tests of financial literacy may need to be investigated (Grable & Rabbani, 2020). Although education is a function of the state and not the federal government, federal money could be directed toward local schools to initiate or expand local schools' financial literacy programs.

Students with limited financial literacy should obligate the local school boards and state agencies to adopt a curriculum that prepares them for the financial responsibilities of attending college or beginning a career. According to Stoddard and Urban (2018), financial education preceding high school graduation shifts students to low-cost financing from high-cost financing.

Financial education in kindergarten through high school better prepares students to make necessary financial decisions. Financial education graduation requirements increase financial aid applications while decreasing the occurrence of large credit card balances (Stoddard and Urban, 2018). Students with less affluent parents may need even more financial literacy support in their kindergarten through high school curriculum. As evidenced in the research of Stoddard and Urban (2018), financial education before college enrollment reduces the likelihood that students incur excessive financial debt while obtaining an education. Reducing the amount of debt post-secondary students accumulate should be a college and university priority.

The inherent need for financial literacy in student curriculum is evidenced in principles established by the European Union. According to Marta-Christina and Liana (2013), the European Union Commission established basic principles to help public authorities, suppliers of financial services, consumer organizations, employers, and other entities interested in conducting financial education programs at a local or national level. The European Union Commission's principles for high-quality financial education include the following:

Principle 1: Financial education has to be actively promoted as part of a lifelong learning process.

Principle 2: Financial education programs have to be clearly oriented to the people's needs.

Principle 3: Economic and financial education has to start as early as possible.

Principle 4: Financial education programs must create awareness to the need of financial information and financial risk understanding.

Principle 5: Financial education has to be balanced, transparent, and objective. Consumers' interests are always priorities.

Principle 6: There should be available resources for effective financial education programs, and trainers in this domain should be properly trained.

Principle 7: At a national level, all interested entities in financial education have to be involved.

Principle 8: Financial education providers periodically have to evaluate their programs and, if necessary, adapt them to the best practice identified.

(Marta-Christina & Liana, 2013).

The financial literacy curriculum correlated with the curriculum used in many states today could benefit students by integrating existing standards with financial literacy education. Research conducted by Qianwen et al. (2020) noted that mandatory financial education programs with carefully constructed content and assessments could produce better outcomes when required for kindergarten through 12th-grade levels. According to the Common Core Standards Initiative (2021), 41 states, the District of Columbia, four territories, and the Department of Defense Education Activity (DoDEA) have adopted the Common Core State Standards. The Common Core College and Career Readiness Anchor Standards (CCRS) are currently the academic standards utilized by the Department of Defense Dependent School System in elementary, middle, and high school classrooms worldwide. Connections to the CCRS standards are interwoven with the financial literacy curriculum.

According to EdGate Correlation Services (2012), the alignment of the CCRS standards for literacy with the Rosen Financial Literacy curriculum is as follows:

CCSS.ELA-LITERACY.CCRA.R.1

Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

Financial Literacy Topic Title: Budgeting and Money Management

CCSS.ELA-LITERACY.CCRA.R.2

Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

Financial Literacy Topic Title: How the Stock Market Works

CCSS.ELA-LITERACY.CCRA.R.3

Analyze how and why individuals, events, or ideas develop and interact over the course of a text.

Financial Literacy Topic Title: Smart Saving and Financial Planning

Craft and Structure

CCSS.ELA-LITERACY.CCRA.R.4

Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

Financial Literacy Topic Title: The Major Stock Indexes

Integration of Knowledge and Ideas

CCSS.ELA-LITERACY.CCRA.R.7

Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Financial Literacy Topic Title: Financial Literacy

Range of Reading and Level of Text Complexity

CCSS.ELA-LITERACY.CCRA.R.10

Read and comprehend complex literary and informational texts independently and proficiently.

Financial Literacy Topic Title: Entrepreneurial Smarts

The correlations for the CCRS standards for writing with the financial literacy curriculum are as follows:

Text Types and Purposes

CCSS.ELA-LITERACY.CCRA.W.1

Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.

Financial Literacy Topic Title: Networking Skills

CCSS.ELA-LITERACY.CCRA.W.2

Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

Financial Literacy Topic Title: Communication Skills

CCSS.ELA-LITERACY.CCRA.W.3

Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

Financial Literacy Topic Title: Young Entrepreneurs, Writing and Journalism

Production and Distribution of Writing

CCSS.ELA-LITERACY.CCRA.W.4

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Financial Literacy Topic Title: Networking Skills

CCSS.ELA-LITERACY.CCRA.W.5

Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

Financial Literacy Topic Title: Resume, Application, and Interview Skills

CCSS.ELA-LITERACY.CCRA.W.6

Use technology, including the Internet, to produce and publish writing and interact and collaborate with others.

Financial Literacy Topic Title: Lifelong Learning Skills

CCSS.ELA-LITERACY.CCRA.W.7

Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

Financial Literacy Topic Title: Producing Goods and Services

CCSS.ELA-LITERACY.CCRA.W.8

Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

Financial Literacy Topic Title: First Bank Account and First Investment Smarts

CCSS.ELA-LITERACY.CCRA.W.9

Draw evidence from literary or informational texts to support analysis, reflection, and research.

Financial Literacy Topic Title: Savings and Investments

Range of Writing

CCSS.ELA-LITERACY.CCRA.W.10

Write routinely over extended time frames (time for research, reflection, and revision) and

shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Financial Literacy Topic Title: Communication Skills

The correlations for the CCRS standards for speaking and listening with the financial literacy curriculum are as follows:

Comprehension and Collaboration

CCSS.ELA-LITERACY.CCRA.SL.1

Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

Financial Literacy Topic Title: Interpersonal Skills

CCSS.ELA-LITERACY.CCRA.SL.2

Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

Financial Literacy Topic Title: Distributing Goods and Services

CCSS.ELA-LITERACY.CCRA.SL.3

Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

Financial Literacy Topic Title: Digital Consumer Smarts

Presentation of Knowledge and Ideas

CCSS.ELA-LITERACY.CCRA.SL.4

Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

Financial Literacy Topic Title: Communication Skills

CCSS.ELA-LITERACY.CCRA.SL.6

Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

Financial Literacy Topic Title: Interpersonal Skills

The correlations for the CCRS standards for language with the financial literacy curriculum are as follows:

Conventions of Standard English

CCSS.ELA-LITERACY.CCRA.L.1

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

Financial Literacy Topic Title: Networking Skills

CCSS.ELA-LITERACY.CCRA.L.2

Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Financial Literacy Topic Title: Networking Skills

Knowledge of Language

CCSS.ELA-LITERACY.CCRA.L.3

Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

Financial Literacy Topic Title: Social Entrepreneurship

Vocabulary Acquisition and Use

CCSS.ELA-LITERACY.CCRA.L.4

Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials as appropriate.

Financial Literacy Topic Title: Money Management Skills

CCSS.ELA-LITERACY.CCRA.L.6

Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

Financial Literacy Topic Title: How Markets Work

The Cross-Curricular Approach

Financial literacy may be coupled with other disciplines for optimal outcomes. In agreement with the research of Cordero and Pedraja (2019), it is postulated that financial education programs positively impact financial literacy when the program is interwoven with other disciplines. According to Drake and Reid (2020), an integrated, interdisciplinary curriculum is a relevant, effective way to teach 21st-century competencies. Analyzing the relationship of financial education with math, science, and history could benefit students in many subject areas. Financial literacy education programs should be taught utilizing a cross-curricular approach (Cordero & Pedraja, 2019). Making learning fun and engaging may foster increased retention of ideas and concepts. According to Crawford (2018), financial education instruction interlaced with television comedy produces more significant effects in retaining financial literacy principles. Participants were more likely to be interested in financial literacy when combined

with a comedy show instead of only a slideshow presentation (Crawford, 2018). Creating fun, exciting learning opportunities may produce the most efficacious results.

How literacy is promoted can significantly impact its acceptance and utilization. Using financial software tools can promote financial literacy. According to Qianwen et al. (2020), educators, policymakers, and professionals who promote the appropriate use of financial software in financial literacy education programs may benefit consumers. Students may be inclined to be more participatory in related subjects when creative software is presented as a teaching tool. Noted in research conducted by Mancebon et al. (2019), children's developing financial abilities are mediated by their mathematical skills. Infusing the mathematical curriculum with financial literacy concepts may be an initial component in developing financially literate students. According to Qianwen et al. (2020), financial education programs need to emphasize credit card usage, self-perception on financial literacy, and financial advice resources. Emphasizing financial literacy concepts within the mathematics curriculum may elucidate the benefits of mathematics instruction.

Some educators have not been trained in financial literacy principles and may not be equipped to deliver instruction to students adequately. According to Henning and Lucy (2017), some teachers are ill-prepared to instruct students on financial education topics, and very few teachers had meaningful experiences with personal finance instruction at the high school or university level. Financial literacy concepts can be intertwined into teacher education preparation. Only 13% of teacher educators thought it was important to teach financial literacy at the elementary level (Henning & Lucey, 2017). Teachers trained in financial literacy may be better able to relay such concepts to students. According to Keller et al. (2015), the academic curriculum in higher education has not historically emphasized personal financial literacy.

Students with financial literacy knowledge could potentially improve their own personal finance prior to entering college and career fields. The Inceptia National Financial Capability Study (2013) data exhibited that 89% of college students scored below a C on a personal finance survey. Preparing educators to appropriately deliver financial education curricula not only benefits students but also educators.

Information specialists, educational technologists, business and comprehensive education specialists, counselors, math coaches, and librarians can assist with financial literacy. Teachers, information specialists, and other educators can provide an avenue to financial education (Gil, 2015). Money Smart Week is one example of a financial literacy event educators could promote (Federal Reserve Bank of Chicago, 2022). The Federal Reserve Bank of Chicago (2022) sponsors Money Smart week to highlight financial literacy resources for children. According to Keller et al. (2015), libraries are traditionally accepted sources of free, unbiased information and are ideal for meeting the demand for financial literacy education. Funding robust financial literacy modules within the Library Information Center empowers more educators to participate in educating all students in financial literacy.

Evaluating financial education could be critical to the success of the developed program. As stated by Massey et al. (2016), measuring the impact of a financial education program is important to assess whether the project achieves its objectives and can be used as justification for scaling up and for policy design. The family unit could also be engaged in financial literacy education using the cross-curricular approach. Robles (2014) states that when adult educators leverage fundamental elements of the learners' environment, a whole-family learning approach becomes captivating and understandable, especially for low-wealth, culturally diverse families

and communities. A cross-curricular financial literacy program should benefit not only the students but entire families.

Some states have already underscored the value of financial literacy within the educational arena. According to Barrington (2021), the following states require high school students to add a course in personal finance as a graduation requirement in 2020: Alabama, Arizona, Georgia, Idaho, Iowa, Kentucky, Michigan, Mississippi, Missouri, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, South Carolina, Tennessee, Texas, Utah, and Virginia. Financial education that offers hope to students for a stable, economic future may be more readily accepted when presented as an opportunity rather than a task. According to Kaiser and Menkhoff (2017), financial education intervention success depends on increasing education intensity and offering financial education as a teachable moment. On average, consumers in states with personal finance coursework requirements held less credit card debt than those in states with no personal finance graduation requirement (Barrington, 2021). In Alabama, financial literacy is taught as a one-semester required high school course, and teachers receive specialized training (Rose, 2021). In Arizona, financial literacy is coupled with economics and is a graduation requirement (Yee, 2019). Financial literacy is making connections to real-world scenarios.

Several states apply the cross-curricular strategy to the dissemination of financial literacy principles. According to the Georgia Department of Education (2013), financial literacy is the second course offered in the Business Accounting and Financial Services cluster and includes technology and internet research to expose students to the available resources when managing financial goals. In Idaho, a grant from banks and credit unions brought digital, accessible financial literacy education to high schools across Idaho (Idaho Central Credit Agency, 2020). In

Iowa, financial literacy is incorporated into the 21st Century Core Skills in the high school curriculum, and the standards include developing goals, creating a savings and spending plan, analyzing credit and debt levels, and evaluating savings investments (Iowa Department of Education, 2022). The Kentucky Department of Education (2020) assembled data demonstrating that financial literacy concepts are incorporated in the Academic Studies for Career Studies from the primary through the high school level. These states bestow a model incorporating financial literacy principles within the curriculum.

Mathematics and financial literacy are intimately intertwined. In Michigan, students can meet their high school math requirement with a personal finance course focusing on financial planning, literacy, and life skills (Michigan Department of Education, 2019). In Mississippi, the Mississippi Council on Economic Education partnered with banks to create the high school personal finance curriculum, which focuses on money management, saving, credit, decision-making, income, insurance, spending, and consumer protection (Federal Reserve Bank of St. Louis, 2021). According to the Missouri Department of Elementary and Secondary Education (2017), the high school personal finance course level expectations concentrate on financial decision-making, income, buying goods and services, saving, using credit, protecting and insuring, and financial investing. In New Hampshire, high school students must have 0.5 credits in economics—including personal finance—to graduate (Kitch, 2020). Financial literacy could conceivably be incorporated into mathematics instruction at every grade level.

Obtaining a robust 21st-century education includes financial literacy components. According to Drake and Reid (2020), the 21st-century competencies are recognized internationally as crucial skills for students. The New Jersey Core Curriculum Content Standards for 21st Century Life and Careers include 36 personal financial literacy standards that detail what

students should know by the end of Grade Four, Grade Eight, and upon high school graduation (Government of New Jersey, 2014). Frazier (2021) noted that financial literacy education is also mandated in the curriculum for sixth through eighth-grade public school students in New Jersey. According to the New York State Education Department (2018), the financial and consumer literacy high school module revolves around ways to help individuals achieve financial stability and reviews topics such as earning income, tracking spending, planning for the future, and borrowing and saving money. In North Carolina, 13 economic and personal finance standards support the development of financially responsible students who understand economic decisions, how to use money wisely, and career choices (Public Schools of North Carolina State Board of Education, 2022). Educating students for future success demands a measure of competency in financial literacy.

Teaching students to balance a budget and pursue entrepreneurial endeavors should extend across the curriculum. In North Dakota, high school business courses include wealth management, leadership, principles of business, economics, marketing, principles of finance, management, and business strategies (North Dakota Department of Public Instruction, 2017). According to the Ohio Department of Education (2018), financial literacy standards inform students of financial responsibility and decision-making, planning and money management, informed consumer purchasing decisions, investing, credit and debt, and risk management from grades three through high school. In South Carolina, financial literacy instruction is incorporated within current courses to increase students' knowledge of investments and personal finance (South Carolina Department of Education, 2022). In Tennessee, high school students must take an elective class in the finance career cluster class on personal financial education before graduation (Tennessee Department of Education, 2016). Promoting financial literacy through

elective classes is an introductory avenue to educate students in states with no established financial literacy curriculum.

Building financial literacy into the curriculum at every grade level may be a lofty goal, but attainable. According to the Texas Education Agency (2019), personal financial literacy is built into the kindergarten through eighth-grade mathematics curriculum. Each school district and open-enrollment charter school that offers a high school program must provide personal financial literacy as a 0.5 credit high school social studies elective course. Utah offers a 0.5 credit general financial literacy course for high school juniors and seniors that encompasses 13 standards. In Virginia, there are 18 economic and personal finance standards that are embedded in the high school Career and Technical Education framework and the history and social science framework. One unit of credit in Economics and Personal Finance is required for graduation (Virginia Department of Education, 2021). Table 1 offers a concise view of financial literacy educational offerings within state curriculums. Analysis of the current financial literacy standards and requirements provides a framework for expansion opportunities.

Table 1

Financial Literacy Educational Offerings Within State Curriculums

Alabama	Semester course on FL required for graduation; teacher training provided
Arizona	Paired with economics and a graduation requirement
Georgia	FL course offered in the finance career cluster
Idaho	Personal finance offered as a unit in economics courses

Iowa	FL incorporated into the high school 21 st Century core skills
Kentucky	FL assimilated into the curriculum from primary through high school grades
Michigan	Personal finance course offered as a math credit
Mississippi	FL offered as a high school course with seven units that address the National Standards for FL
Missouri	High personal finance courses with an emphasis on financial decision making
New Hampshire	0.5 credit of economics which includes personal finance required for high school graduation
New Jersey	Maintains 36 personal FL standards that students should know by the end of 12th grade
New York	FL is incorporated into career and technical education
North Carolina	13 FL standards in economics and personal finance
North Dakota	.5 high school credit for wealth management accelerated FL course
Ohio	FL standards from grades 3-6
South Carolina	FL standards infused in the Social Studies curriculum
Tennessee	0.5 high school credit in personal financial education required for graduation

Texas	Embedded in the K-8 Math curriculum and 0.5 credit required for high school graduation
Utah	0.5 units of credit available in general FL for high school juniors & seniors
Virginia	One credit in Economics/Personal Finance required for graduation

Students in the United States may continue to lack necessary skills without an integrated financial literacy curriculum. Even with financial literacy high school courses mandated by some states, high school students in the United States lack basic financial knowledge and skills (Contreras & Bendix, 2021). The Programme for International Student Assessment (PISA), a comprehensive assessment with a financial literacy component, was administered to 15-year-old students in 2018. The PISA is the world's most comprehensive and reliable indicator of students' capabilities, and a tool that countries should use to drive their education policies (Gurria, 2020). The PISA measures knowledge and understanding of basic financial areas and the cognitive processes related to a student's ability to apply financial concepts (Contreras & Bendix, 2021). Only 12% of students in the United States demonstrated the highest proficiency level of 5, while 16% demonstrated an explicitly low proficiency (The Organisation for Economic Co-operation and Development, 2020). The average score for students in the U.S. was 506, which shows low levels of financial literacy and stubborn resistance to progress related to financial concepts (Contreras & Bendix, 2021). Based on the PISA results of students in the United States, there should be an immediate push to incorporate a robust financial literacy curriculum at all educational levels.

States without any financial literacy education requirements for graduation may be limiting students' opportunities. According to Barrington (2021), as of 2020, the following states do not have personal finance coursework as a graduation requirement: Alaska, California, Colorado, Connecticut, Delaware, Florida, Hawaii, Illinois, Indiana, Kansas, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Montana, Nebraska, Nevada, New Mexico, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Vermont, Washington, Wisconsin, and Wyoming. Teachers may turn to non-profit sources, government resources, and popular financial literacy trainers in states without comprehensive financial education programs. Many diverse financial literacy programs are available, including several from Dave Ramsey. Foundations in Personal Finance: Middle School Edition for Self-Study engages students in topics such as debt, saving, investing, and budgeting (Ramsey, 2022). Ramsey also offers Finance Peace Jr., which details a plan to work, save, spend, and give; this bundle includes a parent guide, activity book, launch pad chart, chore chart, envelopes, and an e-book (Ramsey, 2022). Promoting fiscally responsible behaviors to every student is not only the job of the parents but also of the school system at large.

Wealth building is one of the potential topics for consideration within the financial literacy arena. Providing a student with multiple avenues to gain financial knowledge could be the key to a student's future financial stability. Through the *Cash Flow for Kids* resource, Robert Kiyosaki proposes teaching children the relationship between earning, saving, and spending (Kiyosaki, 2017). The National Financial Educator's Council (NFEC) (2022) offers a financial literacy education program with standards, teaching tips, a chore chart, and a family money talk guide. The NFEC's curriculum encompasses credit, debt, loans, risk management, making choices, income, careers, business, entrepreneurship, products and services, budgeting, and

financial psychology (NFEC, 2022). *Money Savvy Kids* touts a five-level personal finance curriculum for pre-K through 5th grade that was inducted in 26 states (Money Savvy Generation, 2022). The *Money Savvy Kids* curriculum is aligned with Common Core standards and renders interactive, hands-on materials and scripted lesson plans (Money Savvy Generation, 2022).

The federal government, non-profit agencies, and successful entrepreneurs offer advice and resources to promote financial literacy. The Council for Economic Education (CEE) (2022) produces Financial Fitness for Life, a kindergarten through 12th-grade financial literacy curriculum. The CEE curriculum is correlated to national standards in economics, mathematics, Language Arts, and personal finance and is accompanied by teacher guides, student storybooks, and parent guidebooks (CEE, 2022). The Federal Deposit Insurance Corporation (FDIC) provides a Money Smart financial education program with online games and podcasts. Money Smart touts four curriculums for kindergarten through 12th-grade students, eight modules formulated for young adults, a 14-module curriculum for adults in differing life stages, and a curriculum for small business owners and senior citizens (Federal Deposit Insurance Corporation, 2021). Sesame Street shares online activities, videos, and printable resources for kindergarten through 2nd-grade students. Sesame Street's *For Me For You For Later* financial education program is offered in English and Spanish and has an accompanying caregiver guide, educator guide, and finance booklet for children (Sesame Street Workshop, 2021). Additional resources are available through banks, credit unions, and other financial institutions.

Some teachers have integrated aspects of financial education within their classroom structure. Teachers created the *My Classroom Economy* financial education program to engage students in harnessing their purchase power during classroom activities (Vanguard Group, 2019). *My Classroom Economy* encourages students to earn and spend money in a simulated

microeconomy by engaging in such activities as desk rental, paying bills and taxes, investing, and purchasing insurance (Vanguard Group, 2019). The EverFI financial literacy digital experience is free for kindergarten through 12th-grade students. The EverFI online lessons promote personal finance management, understanding needs versus wants, applying for financial aid, basic investment strategies, entrepreneurial expeditions, and assisting others in a financial crisis (EverFI, 2021). These financial literacy programs may temporarily bridge the gap in financial literacy education until each state has adopted financial literacy standards and a robust financial education curriculum.

Business professionals have aided schools in providing students with knowledge. The Jumpstart Coalition for personal financial literacy is based in Washington, D.C., and connects more than 100 national organizations with a network of 51 state coalitions to bolster financial literacy education among students (JumpStart Coalition, 2022). The JumpStart Coalition promotes National Standards in K-12 personal finance education that may link states pursuing financial literacy education (JumpStart Coalition, 2022). Next Gen Personal Finance (NGPF) is a non-profit organization providing a free curriculum on financial literacy to teachers and students. According to Endlich and Ranzetta, the founders of Next Gen Personal Finance (2022), their mission by 2030 is for every U.S. high school student to graduate with at least one semester of personal finance. NGPF offers a free curriculum to teachers and middle school and high school students as a half-semester course, a semester course, or a full-year course; courses include financial algebra, math, and economics (Endlich & Ranzetta, 2022). Teachers should feel supported by the school system and the local community in instilling financial literacy principles in students.

Jack Kosakowski (2021), President and Chief Executive Officer of Junior Achievement, believes that education does not sufficiently cover some of the critical skills needed for employment. Junior Achievement's courses in financial literacy and entrepreneurship increase students' educational attainment and career satisfaction (Kosakowski, 2021). Adding business professionals to partner with teachers may mitigate the lack of teacher training on financial literacy topics until more rigorous university courses can be developed. The Junior Achievement model engages industry professionals from the local communities to partner with schools to deliver educational encounters to students while sharing their work and career experiences (Kosakowski, 2021).

Students and teachers need varied financial literacy programs to meet their needs best. Teachers can then use online resources to continue student education in financial literacy. Banzai (2022) is an interactive online platform that offers free courses to consumers and allows students to set goals, budget, assess their decision-making skills, and manage their money. The self-paced courses range from elementary through high school. Banzai's library of resources includes owning a home, using credit cards, planning for an emergency, and managing debt. Other topics on the Banzai platform incorporate navigating inflation, economic health, financial wellness, health insurance, and paying for health care.

Schools that partner with the business community and the government are essential to better educate students in financial literacy concepts. These partnerships could benefit the business community by allowing professionals to give back to their communities through teaching. A compendious synopsis of financial literacy education programs may illuminate possibilities that schools, districts, and states could incorporate into their curriculum. Table 2 provides a succinct overview of financial literacy educational programs.

Table 2*Financial Literacy Educational Programs*

Dave Ramsey	Foundations in Personal Finance
Dave Ramsey	Financial Peace Jr.
Robert Kiyosaki	Cash Flow for Kids
National Financial Educators Council	FL programs for ages three through adult
Money Savvy Kids	Pre-K through 5th-grade
Council for Economic Education	K-12 curriculum correlated to state standards
FDIC	FL modules for students, teens, adults, seniors, and small business owners
Sesame Street's For Me For You For Later	Kindergarten-2nd-grade FL resources
My Classroom Economy	K-12 FL program that overlays existing curriculum
EverFi	Free digital Kindergarten through 12th-grade lessons
Next Gen Personal Finance	9-week, semester, full year, financial algebra, math, and economic courses
Junior Achievement	Lessons from business professionals in FL, entrepreneurship, and work readiness

Banzai	Interactive online platform for elementary through high school students
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Budgeting

Budgeting is one of the elements that should be included in a financial literacy curriculum. Basic financial advice about home buying, savings, affording college, budgeting, and insurance could benefit consumers. According to Esswein (2019), one suggested principle for a family budget is to spend no more than 50% of income on living expenses. Families do well to save at least 20% of their income, and discretionary items should be limited to less than 30% of the family budget (Esswein 2019). As Renzulli (2017) advised, families should plan for known travel expenses by buying airline tickets 21 days in advance, avoiding Friday purchases, and shopping for the lowest prices on the weekend. According to Mulhere (2019), to motivate themselves to budget, families should picture life in the future after reaching their financial goals. Planning for retirement requires a calculated approach. 70% to 80% of one's preretirement income is recommended to utilize in retirement (Esswein, 2019).

General principles related to income and taxes should be detailed in the financial literacy instruction of participants. Citizens should know each year's current tax rules before filing (Bonner, 2020). The connection of business professionals and educators in classrooms could make financial education more dynamic. According to Garcia (2019), accounting graduates could be a potential resource to acquire financial literacy. Some service professionals and military members may even gain career advances through philanthropy. Choosing to deploy professionals in the acquisition of financial knowledge can be a beneficial and cost-effective

strategy when the goal is to increase financial literacy (García, 2019). The financial literacy curriculum should stimulate students to plan for the future.

Business and Entrepreneurship

Creating multiple streams of income rather than a singular job opportunity may be one of the fundamental components of a financial literacy curriculum. According to Moon (2011), many businesses can be run part-time, and some businesses can be run from one's home, lowering start-up capital. New revenue streams involving digital media sources may be an additional source of income (Barland, 2013). When starting a business, the objectives should be clearly defined. Evaluating the business plan can also benefit existing businesses (Brad, 2014). Entrepreneurs should consider alternative sources of income. Selling goods in hotels could be another revenue stream (Carlino, 2018). An encouraging financial literacy curriculum could be a catalyst toward entrepreneurship.

Entrepreneurs strive to transform an entrepreneurial idea into a successful business. Szala (2020) encourages entrepreneurs to pursue a field where their passion lies. Creating a successful business model is the precursor to entrepreneurial success (Diaconu & Baraitaru, 2019). Obtaining multiple streams of income is a wealth-building strategy. Acquiring and retaining customers and growing customer engagement may rely on effective marketing strategies. According to Terech (2018), marketing strategy consists of understanding the market, choosing a strategy, and executing it. Entrepreneurs may want to research extensively to understand how they wish to compete in the market before investing money. Terech (2018) advises entrepreneurs to evaluate their competition and outline how their business can add value. Motivating students for business success invigorates them to learn for a purpose.

Developing multiple revenue streams could promote future financial stability.

Developing complementary streams of income that overlap with current employment may be a path to success (Holmes, 2019). According to Szala (2020), entrepreneurs may consider partnering with other professionals to meet the needs of their clients. Entrepreneurs often need to draw investors to further their business ventures. Investors may seek entrepreneurs with a strong team, a well-defined market strategy, and a risk mitigation plan (Engle, 2020). Small businesses should be aware of tax deductions that could save the company money. According to Lyon and Catlin (2019), consumers in the United States had substantial gaps in knowledge of literacy concerning tax law concepts on withholding, tax liability, payroll tax, tax brackets, tax deductions versus credits, income and exclusions, charitable contributions, and self-employment tax. Allocating money to hire a tax professional may indeed be worth the additional expense (Fineman, 2016). Analyzing the financial literacy knowledge of adults may also bolster the financial literacy curriculum for students.

Small businesses should focus on problem-solving and communication with stakeholders. According to Terech (2018), entrepreneurs should assess their consumers, competitors, company resources, and potential collaborators. Focusing on business resiliency will protect small businesses during turbulent times (Iapalucci, 2020). According to Oprea (2015), some objectives of a start-up enterprise developer may include the following:

- Build a positive company image
- Stabilize the cash flow position
- Set the company on a growth path
- Formulate human resource and sales strategies
- Prepare a cash flow forecast

- Establish a strategy to counterbalance a difficult image position

Stock Market Investing

Detailing the benefits of stock market investing in a financial literacy curriculum may allow students to become investors now and in the future. Moolla (2016) proclaims that stock market investing is considered saving for a long-term future goal. There are benefits to protecting assets when the market is going down and identifying stocks that are poised to go up when markets are going up (Alpert, 2017). A thorough knowledge of stock market investing is pertinent for inexperienced investors. Some initial terms to research include dividends, growth investments, bonds, cash equivalents, and income investments (Holmes, 2015). Moolla (2016) denotes that exchange-traded funds (ETFs) are a cost-effective, highly accessible way to get into the blue-chip market as a number of ETFs track the Financial Times Stock Exchange (FTSE) and the Johannesburg Stock Exchange (JSE) top 40 index. This gives investors market access to some of the top-performing shares.

Investors can choose from thousands of mutual fund offerings. Funds focused on social, corporate governance, and environmental factors are set to flourish in the future (Huang, 2019). According to Huang (2020), exchange-traded funds are a type of investment vehicle traded on stock exchanges. Dividend stock funds focus on high-yield, financially strong firms. Dividend stock funds may be a cornerstone of a solid investment portfolio (Huang, 2020). A sage investor does research rather than depending solely on a financial planner. According to Luthy and Hafele (2011), investors would be wise to garner an understanding of the importance of top-down macroeconomic analysis and diversification strategy, the ability to conduct fundamental investment research, signal monitoring of The Federal Reserve, consideration of transaction costs, sell disciplines, technical analysis, and economic cycles. A financial literacy curriculum

with a detailed synopsis of investment vehicles could render profitable results for students and teachers.

Planning for a Financial Future

Financial literacy is linked to one's planning for their financial future. According to Nguyen et al. (2019), financial literacy significantly affects the selection of growth investment options for retirement. As noted by Larracilla-Salazar et al. (2019), the starting point of financial education is the culture of savings and investments, and applying this knowledge paves the way for future planning. Financially literate persons are more likely to save for the future (Aggarwal & Gupta, 2020). Obtaining one million dollars could be a target goal for retiring at 65, but it requires planning. If a person starts saving at age 20, and assuming an 8% return on stocks, a 4% return on bonds, and accounting for an inflation rate of 2%, the least one could save to become a millionaire by age 65 is \$306 a month (Langone, 2019). It would take approximately 40 years to save 1 million dollars with a savings of \$444 per month (Langone, 2019). At age 45, one would need to save \$2,126 per month and \$3,406 per month at age 50 to reach a 1-million-dollar goal by age 65 (Langone, 2019). One's financial future could depend on their financial knowledge.

Financial literacy education is essential to managing daily financial needs. Qianwen et al. (2020) found that savings and investing responsibilities have been increasingly transferred from governments and employers to consumers. Financial literacy education should also include the ramifications of emotional spending (Alsemgeest, 2015). Financial advisors may be utilized to facilitate investment and retirement goals. Porto and Xiao (2016), state that low to moderate-income households may need financial advice for debt-related issues. In consonance with O'Neill (2020), a good retirement plan must be flexible to allow for public policy changes, inflation changes, and market risks because the design is based on an undetermined period. An

engaging, impactful financial literacy education should aim to produce efficacy and stability throughout one's financial future.

Summary

The purpose of this quantitative study was to examine teacher perceptions as related to the influence of financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve. The problem addressed in this study is that financial literacy education may be excluded from the standardized school curriculum, which may cause students a measure of future financial distress. Financial stress is correlated with psychological distress. The study was of significant interest because the lack of financial literacy education could negatively impact psychological well-being. This current study addressed the gap in the literature by subjecting the existing protocol to empirical scrutiny.

Many Americans accumulate debt at some point in their life. Schools and universities are tasked with providing instruction critical to students' future well-being. Future research is warranted because a lack of financial literacy education could negatively impact psychological well-being. Given that financial literacy skills can be considered general skills, basic financial education should be embedded in the compulsory education curriculum.

Chapter 3: Methods

Overview

This quantitative study aimed to examine teacher perceptions of the influence of financial literacy on the psychological well-being of military-connected students. The methodology chapter details the sequential approach utilized to direct the study and offers an overview of the study environment and sample population. Names of the study participants were not collected. Data connected to the study participants and utilized throughout the study was collected anonymously. The methodology was planned so the analysis could be completed during the 2022-2023 school year. First, the research design was outlined, and research questions were delineated. Next, the participants and setting were specified. Then instrumentation was characterized, and the procedures were presented. Finally, the data analysis method was charted. This study aimed to provide empirical evidence for promoting financial literacy concepts to military-connected students.

Research Design

Following the Institutional Review Board (IRB) approval, the proposed study employed a quantitative design. The study utilized a non-probability convenience sampling procedure. Proper use of sampling procedures generated samples that were reasonably representative of the larger population (Knight and Tetrault, 2017). An online survey was administered to current and former Department of Defense Dependent School System teachers and staff. The survey was uploaded to a social media platform that houses the DoDDS teacher page. Survey participants were recruited through the social media platform Facebook. Consent was obtained through participation. Survey data was collected as participants completed and submitted the survey. The data was analyzed and interpreted using descriptive statistics.

An adequately powered study is one in which an expected effect is significant at $p < .05$ (Brysbaert, 2019). Power is equal to $1 - \beta$, whereas β denotes the probability of a type 2 error; to reject the null hypothesis, power should be at least .80 (Research Consultation, 2007). A priori power analysis was completed before data collection. The G power was performed to determine the appropriate sample size. For a two-tailed independent samples t-test, the minimal sample size needed is 128 participants with the level of significance being .05 ($\alpha = .05$), power being .80 and a Cohen's d value of .50.

An independent samples t-test was selected as the model employed. The researcher anticipated 128 respondents to participate in this quantitative study. The independent variable consisted of a grouping variable. Survey participants indicated their years of experience. Survey participants with 0-16 years of experience were evaluated collectively, and survey participants with 17 or more years of experience were clustered as well. The dependent variables were measured using a psychometric response scale. Survey participants specified their level of agreement with statements as measured by a 4-point Likert scale. The Levene's test of equal variance was assessed for each independent samples t-test in order to determine if the variation of the dependent variable is similar for each group of the independent variable.

Research Questions

The research questions for this study were as follows:

RQ1: What are teacher perceptions of the importance of teaching financial literacy in the kindergarten through grade twelve (12) educational curricula of military-connected students?

RQ2: What are teacher perceptions regarding the benefits of teaching financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve (12)?

Hypotheses

There were two alternative hypotheses to test for from the stated research questions. The alternative hypotheses were the following:

H_{a1}: There is no perception of importance in teaching financial literacy concepts in the kindergarten through grade twelve (12) educational curricula among educators who instruct military-connected students.

H_{a2}: There is no perception of benefit regarding the teaching of financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve (12).

This research study was designed to provide an extensive analysis and synthesis of teacher perceptions related to the financial literacy curricula of military-connected students who may benefit from financial literacy instruction. The research utilized assessment questionnaires and was conducted via a controlled field experiment quantitative design. An advantage of using questionnaires with the quantitative method is that the scores obtained from questionnaires are stable and show moderate convergent validity with the scores obtained from other measures and moderate predictive validity (Cazan, 2012). Studies using questionnaires reported high stability of results over time and good internal consistency coefficients for all scales (Cazan, 2012).

Participants and Setting

The Department of Defense School District operates 160 schools in eight districts. The school districts incorporate the Americas, the Pacific, and Europe regions. The Department of Defense Americas region includes the Mid-Atlantic District and the Southeast District. The Americas region steers fifty schools in two countries, seven states, and one territory. The Department of Defense Pacific region encompasses the Pacific East District, the Pacific West

District, and the Pacific South District. The Pacific region guides 45 schools in two countries and one territory. DoDEA schools function across three time zones. The Department of Defense Europe comprises the Europe South District, the Europe East District, and the Europe West District. The Department of Defense Europe region manages 64 schools which are located in eight countries. All schools within the Department of Defense Education Activity are fully accredited by the United States accreditation agencies (DoDEA Communications, 2021).

The Department of Defense employs one mission for all of the associated schools. The targeted mission is to educate, engage, and empower military-connected students to succeed in a dynamic world. The vision of DoDEA is excellence in education for every student, every day, everywhere. The guiding principles begin with success for all students, trust and respect for others, uncompromising advocacy for students, and development of lifelong learners. The guiding principles extend to equal access to quality, rigorous education, new and motivating challenges to inspire excellence, teaching with high expectations, and a safe and stable learning environment.

DoDEA's elementary, middle, and high schools are situated on United States military bases. Military bases are comprised of Army, Navy, Air Force, Marine, and Coast Guard personnel. Military bases may also serve Department of State civilians, Department of Defense civilians, and civilian contractors. Each school student body is comprised of dependent children whose family members provide support for military operations. The North Atlantic Treaty Organization (NATO), an intergovernmental military alliance between 28 European countries and two North American countries, may also be attached to military bases.

The participants for this quantitative study were drawn from a convenience sample of military-connected teachers residing in a United States or connected to United States military

bases abroad. Former and current DoDEA teachers educate military-connected students in several countries around the world. The survey was posted on a DoDEA teacher social media site. This social media group is entitled DoDDS teachers and was created on September 28, 2007. This social media site is not sponsored or endorsed by the Department of Defense.

The DoDDS social media group is a private social group that currently has 9.7 thousand members. Only group members may see the names or social media pseudonyms of other group members. Member posts are only visible to group members, and the group is intended only for current and former teachers and staff of DoDEA. DoDDS teachers can invite other teachers to join the social media group. Acceptance into the DoDDS teacher social media group is limited to those persons that are connected to DoDEA or were previously connected in the past.

Acceptance into the group is only granted by the group administrators. In order to join the group, a requestor is required to outline when and how he or she is associated with DoDEA.

Instrumentation

This study employed a self-developed survey to gather data from current and retired DoDEA teachers and staff members. The researcher developed a self-administered quantitative survey to evaluate the research questions. The assessment used a multiple-choice answer format, and participants were required to select an answer for each scenario. The assessment used a four-point Likert scale ranging from 1 to 4, extremely appropriate/likely to extremely inappropriate/unlikely, respectively.

The study was arranged into seven segments. Segment one furnished the participants with an overview of the study's purpose and reiterated that participant responses were anonymous and not shared in any capacity that would identify the individual participant. Segment two of the survey comprised demographic information. There were seven questions included in the second

segment. These questions applied a range of scales, including fill-in-the-blank and checklists. Variables for the second segment included but were not limited to: years of teaching with DoDEA, current or former position, and college or university classes in economics, finance, or financial literacy.

Three questions were included in the third segment. The third segment of the survey collected participants' perceptions about the cognitive readiness of kindergarten through grade twelve students to incorporate financial literacy concepts into their existing schema. There were five questions contained in the fourth segment, which requested teacher perceptions of the importance of teaching financial literacy in the kindergarten through grade twelve educational curricula of military-connected students. Segment four questions employed a four-point Likert scale corresponding to 1 = Extremely appropriate, 2 = Slightly appropriate, 3 = Slightly inappropriate, and 4 = Extremely inappropriate.

The fifth segment had five questions. This survey segment compiled teacher and staff perceptions regarding the benefits of teaching financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve. Segment five utilized a four-point Likert scale corresponding to 1 = Extremely likely, 2 = Slightly likely, 3 = Slightly unlikely, and 4 = Extremely unlikely. There were three questions in the sixth segment, which gathered teacher perceptions of the financial literacy concepts salient to teaching financial literacy in the kindergarten through grade twelve educational curricula of military-connected students. Segment six was comprised of short answer questions and checklists. Segment seven contained the final question on the survey, which indicated the procedures for inclusion in the raffle. The quantitative survey is displayed in Appendix A. Table 3 presents the alignment of survey questions with research questions.

Table 3*Research Questions and Corresponding Survey Questions*

RQ1: What are teacher perceptions of the importance of teaching financial literacy in the kindergarten through grade twelve (12) educational curricula of military-connected students?	In your opinion, how appropriate is it to teach students the principles of saving money in the kindergarten through grade twelve (12) curricula?
	In your opinion, how appropriate is it to teach students the principles of budgeting money in the kindergarten through grade twelve (12) curricula?
	In your opinion, how appropriate is it to teach students the principles of financial goal setting in the kindergarten through grade twelve (12) curricula?
	In your opinion, how appropriate is it to teach students the concepts related to business and entrepreneurship in the kindergarten through grade twelve (12) curricula?
	In your opinion, how appropriate is it to teach students the principles of investing and wealth building in the kindergarten through grade twelve (12) curricula?
RQ2: What are teacher perceptions regarding the benefits of teaching financial literacy on the psychological	Could financial literacy benefit students by reducing anxiety that is caused by financial need?

well-being of military-connected students in kindergarten through grade twelve (12)?	
	Could financial literacy benefit students by reducing depression that is caused by financial need?
	Could financial literacy benefit students by reducing discord among family members that is caused by financial need?
	Does using productive financial behaviors benefit one's psychological well-being?
	Could financial literacy benefit students by positively affecting their psychological well-being?
Teacher perceptions regarding financial literacy.	What is your perception of the amount of prior knowledge your students have regarding financial concepts?
	What is your perception of where your students obtained their prior knowledge regarding financial concepts?
	How likely are your students to be cognitively ready to understand grade-level financial education concepts?
	What financial skills and concepts do you teach in your classroom?
	In what subject areas does financial literacy apply?

	Rank the financial literacy skills and concepts in order of importance.
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According to Heale and Twycross (2015), the reliability or accuracy of an instrument is a measure of validity. The threat of maturation to interval validity was limited as the study would occur during a single school year. The same quantitative self-administered survey was implemented for each research question to remedy the internal validity threat of instrumentation. The regression to the mean threat to internal validity was limited as only one survey was given during the study. The social interaction threat to interval validity was minimized as the survey was distributed online.

The selection bias threat to internal validity was truncated because the participants were drawn from the same population. According to Knight and Tetrault (2017), external validity relates to the generalizability of the study to people outside of the study. Therefore, the researcher strived to reduce or eliminate threats to external validity. The experimenter threat to external validity was negated as the survey was anonymous. The situation effect on external validity was neutralized as each survey was conducted online.

Procedures

Before administering the quantitative online survey, Liberty University's Institutional Review Board approval was requested and granted. The letter of the Institutional Review Board's approval is found in Appendix B. According to the United States Department of Education (2021), the Family Educational Rights and Privacy Act (FERPA) protects the privacy of student education records and applies to all schools that receive funds under an applicable program of the United States Department of Education. The FERPA was adhered to during the

course of this study. No student data was gathered, and participants were not embarrassed, berated, or singled out.

The quantitative survey was posted online so participants could complete the questionnaire in a safe, private environment. No deception or false pretense was applied during this study. Participants may have been compensated for their participation. Two survey participants won \$20 Starbucks gift cards for completing the survey. The last question on the survey provided raffle details. Survey participants were provided with the researcher's email address, and participants were asked to email the researcher for inclusion in the raffle. The researcher chose an unbiased observer to select two names from the list of participants who requested entry in the raffle. The researcher emailed the two raffle winners a notification and sent each a gift card in the manner they requested.

Data Analysis

After the survey was administered, the data was collected and analyzed. When all assumptions were met, the analysis was conducted using an independent samples t-test. The researcher and a statistician analyzed the scores. Accumulated ratio data provided the study's quantitative data. Descriptive statistics were reported, including the variance, range, and standard deviation. Population distributions were analyzed to determine the measure of variation. The study aimed to answer questions about the participants' acquisition of financial literacy knowledge and teacher perceptions of the importance of teaching financial literacy in the kindergarten through grade twelve educational curricula of military-connected students. The study sought to analyze teacher perceptions regarding the benefits of teaching financial literacy on the psychological well-being of military-connected students. The quantitative study ascertained teacher perceptions concerning the cognitive readiness of students to incorporate

financial literacy concepts into their current curriculum. The quantitative self-administered survey revealed teacher perceptions about the perceived competency of educators to instruct on financial literacy concepts. The data underscored the teacher perceptions of financial literacy concepts that were salient to the teaching of financial literacy in the educational curricula of military-connected students. Table 4 provides a tentative timeline of the study.

Table 4

Procedure Timeline

Month	Action
October	Document study approval
November	IRB Approval
December	Recruit study participants
January	Aggregate data
February	Draft Dissertation Chapters 4 and 5
April	Dissertation Final Defense
April	Library presentation of dissertation

According to Bolt et al. (2021), the t-test, analysis of variance (ANOVA), linear regression, chi-squared test, and other classical statistical methods have been and remain the most mentioned analytic methods in biomedical, life science, and social science research articles. The independent samples t-test was administered to test the hypotheses to ascertain whether a significant difference existed among the different sample means. The significance level of $p < .05$, 95%, was applied to determine if the null hypotheses should be rejected. The study aimed to denote the impact of financial literacy education on the psychological well-being of military-connected students.

Summary

This quantitative study was conducted during the 2023-2023 school year. The study engaged a non-probability convenience sampling procedure. An online survey was administered to current and former Department of Defense Dependent School System teachers and staff. The survey was uploaded to Facebook, a social media platform that hosts the DoDDS teacher page. An independent samples t-test was selected to analyze the data. The study was designed to provide an extensive investigation of teacher perceptions of the financial literacy curricula of military-connected students.

Chapter 4: Findings

Overview

The goal of this study was to gain a more thorough understanding of teacher perceptions about the influence of financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve. A quantitative survey was devised. The survey was distributed to current and former teachers and staff affiliated with the Department of Defense Education Activity. The survey consisted of seven segments. Segments one and two provided an overview of the study's purpose and highlighted demographic information. Segments three and four examined teachers' perceptions of the importance of teaching financial literacy. Segments five and six analyzed teachers' perceptions of the benefits of teaching financial literacy on military-connected students' psychological well-being. Segment seven revealed the raffle as a participation incentive. Data yielded by the survey was evaluated for statistical significance.

Descriptive Statistics

Descriptive statistics were employed to scrutinize the study and describe the features of the data sets. The sample size equated to $N=107$. To answer research question one, an independent samples t-test was performed. A t-test was the inferential statistic of choice to determine the level of the significant relationship between the two groups. The independent or grouping variable was years of teaching and was dichotomized whereby 1=zero through 16 years, and 2=17 or more years. The dependent variable was the perceived importance of teaching financial literacy and was treated as a continuous or interval variable.

The sample for this quantitative study had a 3.63 mean score for financial literacy importance and 3.43 means score for financial literacy benefits. Descriptively, most of the

sample had positive perceptions of the importance of teaching financial literacy and the benefits of teaching financial literacy.

A description of the characteristics of the data sets furnishes an opportunity to summarize the data. Table 5 displays the descriptive statistics for the two levels of the grouping variable by the dependent variable. Table 6 provides the analysis results. Examination of Table 6 reveals there was no significant difference between the two levels for years of teaching by teachers' perception as to the importance of teaching financial literacy ($p = .107$).

Table 5

Descriptive Statistics

	Yrs. Taught	<i>N</i>	<i>M</i>	<i>SD</i>
Importance of Teaching	0-16 yrs.	71	3.68	0.40
Financial Literacy	17+ years	36	3.54	0.49

$$^1t(105) = 1.52, p = .131, d = .31$$

Table 6

Results of T Tests for Perceptions as to the Importance of Teaching Financial Literacy

		Levene's Test of Equality		T-Test for Equality of Means		
		<i>F</i>	Sig	<i>t</i>	<i>df</i>	Sig (2-tailed)
Importance of Teaching	Equal variances assumed	1.983	.162	1.524	105	.131
Financial Literacy	Equal variances not assumed			1.422	58.884	.160

To examine research question two, the independent samples t-test was analyzed. The independent or grouping variable was years of teaching and was dichotomized whereby 1=zero through 16 years, and 2=17 or more years. The dependent variable was the perceived benefits of teaching financial literacy and was treated as a continuous or interval variable. Table 7 presents the descriptive statistics for each of the two levels of the grouping variable by the dependent variable. Table 8 provides the results of the analysis. Examination of Table 8 reveals there was no significant difference between the two levels for years of teaching by teachers' perception as to the importance of teaching financial literacy.

Table 7*Descriptive Statistics*

	Yrs. Taught	N	M	SD
Benefits of Teaching	0-16 yrs.	71	3.42	0.57
Financial Literacy	17+ years	36	3.43	0.59

$$^2t(105) = -.09, p = .927, d = .02$$

Table 8*Results of T Tests for Perceptions as to the Benefits of Teaching Financial Literacy*

		Levene's Test of Equality		t-test for Equality of Means		
		<i>F</i>	Sig	<i>T</i>	<i>df</i>	Sig (2-tailed)
Importance of Teaching Financial Literacy	Equal variances assumed	.341	.561	-.092	105	.927
	Equal variances not assumed			-.091	68.595	.928

Results

Hypotheses

The research questions for this study were the following:

RQ1: What are teacher perceptions of the importance of teaching financial literacy in the kindergarten through grade twelve (12) educational curricula of military-connected students?

RQ2: What are teacher perceptions regarding the benefits of teaching financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve (12)?

Two independent sample t-tests were conducted to examine if there was a significant difference in participants' perception of the importance and benefits of teaching financial literacy to school-age children. The Levene's test of equal variance was assessed for each independent samples t-test to determine if the variation of the dependent variable is similar for each group of the independent variable. The equal variance of the dependent variable for the importance of financial literacy ($F(105) = 1.98, p = .682$) and the benefits of financial literacy ($F(105) = .34, p = .561$) is shown to be met since the p-values for both tests are greater than .05. No significant differences were found based on years of experience for financial literacy importance ($t(105) = 1.52, p = .131, d = .31$) nor financial literacy benefits ($t(105) = -.09, p = .927, d = .02$).

The voluntary quantitative survey was created in Google Forms. The link for the survey was provided to DoDEA teachers and staff via social media. Consent was stated on the survey form. If a current or former teacher or staff member opened the survey link and completed the survey, the action denoted consent for participation, per implicit consent included on the form. There were 107 participants that completed the survey in its entirety. An incentive to be included in a drawing for two \$20 gift cards to Starbucks was included as the final question on the survey.

Survey participants were provided with the researcher's email address and could request to be included in a raffle that was included to heighten the response rate. The two raffle winners were selected by an adult not participating in the survey.

Of the DoDEA staff participating in the survey, 43.9% had been teaching with DoDEA for eight years or less, and 22.4% had been teaching between nine and sixteen years. Of the staff surveyed, 26.2% had been teaching for seventeen through twenty-four years. Only 7.5% of the staff had been teaching for at least twenty-five years. Table 9 illustrates that 27 males and 80 females participated in the survey.

Table 9

Reported Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	80	74.8	74.8	74.8
Male	27	25.2	25.2	100.0
Total	107	100.0	100.0	

As illustrated in Table 10, survey participants reported the percentage of college or university courses taken in economics, finance, or financial literacy. Of those participants, 18.7% acknowledged taking one course, and 24.3% engaged in two courses. 28.0% of survey participants reported taking more than two courses, while 29.0% received no college or university-level training in economics, finance, or financial literacy. Table 11 reveals that 15.9% of survey participants perceived themselves as extremely competent to teach financial literacy to students, but 22.4% did not feel any level of competence to engage students in financial literacy concepts. Of all survey respondents, 31.8% perceived themselves to be moderately competent, and 29.9% felt only slightly competent.

Students may enter each grade level with differing amounts of financial literacy knowledge. Table 12 underscored teachers' perceptions of the amount of prior knowledge students had regarding financial concepts. Only 0.9% of teachers felt that students came to class with a great deal of prior knowledge. Another 9.3% presumed students had a moderate amount of prior knowledge. On the other end of the spectrum, 42.1% of teachers believed that students had little prior knowledge, while 47.7% believed students came to class with no prior knowledge about financial literacy concepts.

Table 10*University Courses in Financial Literacy*

	Frequency	Percent	Valid Percent	Cumulative Percent
None	31	29.0	29.0	29.0
One	20	18.7	18.7	47.7
Two	26	24.3	24.3	72.0
More than two	30	28.0	28.0	100
Total	107	100.0	100.0	

Table 11*Competence in Teaching Financial Literacy*

	Frequency	Percent	Valid Percent	Cumulative Percent
Extremely competent	17	15.9	15.9	15.9
Moderately competent	34	31.8	31.8	47.7
Slightly competent	32	29.9	29.9	77.6
No	24	22.4	22.4	100.0
Total	107	100.0	100.0	

Table 12*Teacher Perceptions of Students' Level of Prior Knowledge*

	Frequency	Percent	Valid Percent	Cumulative Percent
A great deal	1	0.9	0.9	0.9
A moderate amount	10	9.3	9.3	10.2
A little	45	42.1	42.1	52.3
None at all	51	47.7	47.7	100.0
Total	107	100.0	100.0	

Table 13 denotes teacher perceptions of instructing students on the principles of saving money in the kindergarten through grade twelve curricula. Of teachers in the survey, 76.6% expressed that it was extremely appropriate to teach the principles of saving money, while 17.8% felt it was slightly appropriate. Only 5.6% of teachers believed it was slightly inappropriate, and none of the staff members surveyed felt it was extremely inappropriate to teach the principles of saving money to students.

Table 13*Teacher Perceptions of Instructing Students on the Principles of Saving Money*

	Frequency	Percent	Valid Percent	Cumulative Percent
Extremely appropriate	82	76.6	76.6	76.6
Slightly appropriate	19	17.8	17.8	94.4
Slightly inappropriate	6	5.6	5.6	100
Extremely inappropriate	0	0.0	0.0	
Total	107	100.0	100.0	

Table 14 illustrates teachers' perceptions of instructing students on the principles of budgeting money in the kindergarten through grade twelve curricula. Of the teachers responding,

76.6% felt it was extremely appropriate to teach students the principles of budgeting money, while 21.5% thought it was slightly appropriate. Only 1.9% felt it was slightly inappropriate, and no participants thought teaching students the principles of budgeting money was extremely inappropriate. Table 15 highlights teachers' perceptions of instructing students on the principles of financial goal setting. A clear majority, 71.1%, expressed it was extremely appropriate to teach students the principles of financial goal setting, while a quarter—25.2%—felt it was slightly appropriate. Only 3.7% expressed that it was slightly inappropriate, and there were no responses for extremely inappropriate.

Table 16 conveyed teachers' perceptions of instructing students on the concepts related to business and entrepreneurship in the kindergarten through grade twelve curricula. Over half, 54.2%, expressed their belief that it was extremely appropriate to teach students concepts related to business and entrepreneurship, while another 39.3% felt it was slightly appropriate. Only 5.6% thought it was slightly inappropriate, and just 0.9% held that it was extremely inappropriate to teach students concepts related to business and enterprise in the kindergarten through grade twelve curricula.

Table 17 underscores teacher perceptions of instructing students on the principles of investing and wealth building in the kindergarten through grade twelve curricula. Investing and wealth building included teaching about compound interest, mutual funds, exchange-traded funds, capital gains, hedge funds, short selling, trusts, retirement accounts, stocks, bonds, and initial public offerings. A total of 60.8% of survey participants revealed that it is extremely appropriate to teach principles of investing and wealth building, and 35.5% felt it was slightly appropriate. Only 3.7% felt it was slightly inappropriate, and no participants selected extremely inappropriate.

Table 14*Teacher Perceptions of Instructing Students on the Principles of Budgeting Money*

	Frequency	Percent	Valid Percent	Cumulative Percent
Extremely appropriate	82	76.6	76.6	76.6
Slightly appropriate	23	21.5	21.5	98.1
Slightly inappropriate	2	1.9	1.9	100.0
Extremely inappropriate	0	0.0	0.0	
Total	107	100.0	100.0	

Table 15*Teacher Perceptions of Instructing Students on the Principles of Financial Goal Setting*

	Frequency	Percent	Valid Percent	Cumulative Percent
Extremely appropriate	76	71.1	71.1	71.1
Slightly appropriate	27	25.2	25.2	96.3
Slightly inappropriate	4	3.7	3.7	100.0
Extremely inappropriate	0	0.0	0.0	
Total	107	100.0	100.0	

Table 16*Teacher Perceptions of Instructing Students on the Concepts of Business and Entrepreneurship*

	Frequency	Percent	Valid Percent	Cumulative Percent
Extremely appropriate	58	54.2	54.2	54.2
Slightly appropriate	42	39.3	39.3	93.5
Slightly inappropriate	6	5.6	5.6	99.1
Extremely inappropriate	1	0.9	0.9	100.0
Total	107	100.0	100.0	

Table 17*Teacher Perceptions on Instructing Students on Investing and Wealth Building*

	Frequency	Percent	Valid Percent	Cumulative Percent
Extremely appropriate	65	60.8	60.8	60.8
Slightly appropriate	38	35.5	35.5	96.3
Slightly inappropriate	4	3.7	3.7	100
Extremely inappropriate	0	0.0	0.0	
Total	107	100.0	100.0	

Table 18*Teacher Perceptions on the Benefits of Financial Literacy in Reducing Anxiety*

	Frequency	Percent	Valid Percent	Cumulative Percent
Extremely likely	60	56.1	56.1	56.1
Slightly likely	39	36.4	36.4	92.5
Slightly unlikely	8	7.5	7.5	100.0
Extremely unlikely	0	0.0	0.0	
Total	107	100.0	100.0	

Table 19*Teacher Perceptions on the Benefits of Financial Literacy in Reducing Depression*

	Frequency	Percent	Valid Percent	Cumulative Percent
Extremely likely	56	52.3	52.3	52.3
Slightly likely	37	34.6	34.6	86.9
Slightly unlikely	13	12.2	12.2	99.1
Extremely unlikely	1	0.9	0.9	100.0
Total	107	100.0	100.0	

Table 20*Teacher Perceptions on the Benefits of Financial Literacy in Reducing Discord*

	Frequency	Percent	Valid Percent	Cumulative Percent
Extremely likely	50	46.7	46.7	46.7
Slightly likely	41	38.3	38.3	85.0
Slightly unlikely	14	13.1	13.1	98.1
Extremely unlikely	2	1.9	1.9	100.0
Total	107	100.0	100.0	

Table 21*The Benefits of Productive Financial Behaviors on Psychological Well-Being*

	Frequency	Percent	Valid Percent	Cumulative Percent
Extremely likely	61	57.0	57.0	57.0
Slightly likely	39	36.5	36.5	93.5
Slightly unlikely	4	3.7	3.7	97.2
Extremely unlikely	3	2.8	2.8	100.0
Total	107	100.0	100.0	

Table 22*Benefits of Financial Literacy in Positively Affecting Psychological Well-Being*

	Frequency	Percent	Valid Percent	Cumulative Percent
Extremely likely	60	56.1	56.1	56.1
Slightly likely	40	37.4	37.4	93.5
Slightly unlikely	6	5.6	5.6	99.1
Extremely unlikely	1	0.9	0.9	100.0
Total	107	100.0	100.0	

Table 18 denotes the participant responses related to the likeliness that financial literacy will benefit students by reducing anxiety caused by financial need. Among respondents, 56.1% felt teaching financial literacy was extremely likely to reduce anxiety caused by financial need, while 36.4% of survey respondents believed that teaching financial literacy was slightly likely to reduce anxiety. From the other side of the ledger, 7.5% reported that teaching financial literacy was slightly unlikely to reduce anxiety caused by financial need, and no survey participants believed teaching financial literacy was extremely unlikely to reduce anxiety caused by financial need.

Table 19 is about teacher perceptions on the benefits of financial literacy in reducing depression. Approximately half of the teachers, 52.3%, noted it was extremely likely that financial literacy would benefit students in reducing depression caused by financial need, and another 34.6% of teachers felt that teaching financial literacy was slightly likely to benefit students in reducing depression caused by financial aid. Just 12.1% of teachers believed it was slightly unlikely, and only 0.9% of the staff members surveyed felt it was extremely unlikely that financial literacy would benefit students in reducing depression caused by financial need.

Table 20 conveys teachers' perceptions on the benefits of financial literacy in reducing discord among family members caused by financial need. In this group, 46.7% expressed their belief that it was extremely likely that financial literacy would benefit students in reducing discord, and 38.3% felt teaching financial literacy was slightly likely to reduce discord. Another 13.1% said it was slightly unlikely, and 1.9% held that it was extremely unlikely that financial literacy would benefit students in reducing discord among family members caused by financial need.

Table 21 described teacher perceptions on the benefits of productive financial behaviors on psychological well-being. In this case, 57% of teachers said using productive financial behaviors would benefit students' psychological well-being, and 36.4% of teachers felt that using productive financial behaviors was slightly likely to benefit students. Only 3.7% of teachers believed it was slightly unlikely, and 2.8% of the staff members surveyed felt it was extremely unlikely that using productive financial behaviors would benefit students' psychological well-being.

Table 22 characterized teacher perceptions of the likelihood that financial literacy would benefit students by positively affecting their psychological well-being. Of the respondents, 56.1% felt teaching financial literacy was extremely likely to benefit students by positively affecting their psychological well-being. Another 37.4% of survey respondents believed that financial literacy would benefit students by positively affecting their psychological well-being, and 5.6% of survey participants reported that financial literacy was slightly unlikely to benefit students by positively affecting their psychological well-being. Only 0.9% of staff noted that financial literacy was extremely unlikely to benefit students by positively affecting their psychological well-being.

Summary

A quantitative survey was created to collect survey data to examine teacher perceptions as related to the influence of financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve. Current and former Department of Defense teachers and staff were invited via social media to participate in the survey. There were 107 respondents who completed the survey. The independent variable was years of teaching. The dependent variable for research question one was the perceived importance of teaching financial

literacy. For research question two, the independent variable was years of teaching, and the dependent variable was the perceived benefits of teaching financial literacy. An independent samples t-test was utilized to analyze the data, and descriptive statistics for each research question were presented.

Chapter 5: Conclusions

Overview

This chapter comprises valuable insight gained from conducting this quantitative study. The chapter incorporates five sections that summarize the statistical findings, examine the outcomes based on current literature, delineate the practical implications, examine the study's limitations, and offer recommendations for future research.

Discussion

The purpose of this quantitative study was to examine teacher perceptions as related to the influence of financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve. A quantitative survey was formulated. The survey participants were current and former DoDEA teachers and staff. The survey consisted of 24 questions, and a Likert scale format was utilized for the majority of the questions, which included multiple-choice questions and checklists. The data was analyzed, and descriptive statistics were generated.

RQ1: What are teacher perceptions of the importance of teaching financial literacy in the kindergarten through grade twelve (12) educational curricula of military-connected students? The first research question addressed teacher perceptions of the importance of teaching financial literacy in the kindergarten through grade twelve educational curricula of military-connected students. Survey questions that corresponded to this research question encompassed teacher perceptions of the importance of five components related to financial literacy. The survey respondents revealed that 94.4% of DoDEA teachers and staff members felt it was extremely or slightly appropriate to teach students the principles of saving money in the kindergarten through

grade twelve curricula. Another 98.1% of survey participants deemed it extremely or slightly appropriate to teach students the principles of budgeting money.

The majority of the current and former DoDEA teachers and staff who agreed to complete the survey were mostly united in their opinion that students should be instructed on the principles of financial goal setting. 96.3% of participants responded that it was extremely or slightly appropriate to instruct students on the principles of financial goal setting, while 93.5% of survey respondents noted it was extremely appropriate or slightly appropriate to teach students the concepts of business and entrepreneurship in the kindergarten through grade twelve curricula. On the topic of investing and wealth building, 96.3% of survey participants revealed that it was extremely appropriate or slightly appropriate to instruct military-connected students on investing and wealth building in the kindergarten through grade twelve curricula.

The findings from this study reveal that teachers and staff of military-connected students believe it is appropriate—even necessary—to teach financial literacy in the kindergarten through grade twelve curricula. Qianwen et al. (2020) promoted mandatory financial education programs in the kindergarten through grade twelve curricula. Mohelsha and Zubr (2019) affirmed that financial literacy is an essential and indispensable necessity of lifelong education and should begin in the early primary grades. Contreras and Bendix (2021) noted that high school students lack basic financial skills and knowledge even with a mandated financial literacy high school class. Financial literacy should be offered at the elementary, middle, and high school levels. Qianwen et al. (2020) touted that the evidenced lack of financial literacy highlighted the vital need for financial literacy instruction.

Stress caused by financial need can hasten depression, discord among family members, substance abuse, increased tendencies for violence, and crime. According to a study by Lee et al.

(2013), living in a disadvantaged neighborhood predicted youth depressive symptoms. Another study explicated financial hardship as a factor in increased discordance within familial relationships (Paat, 2011). Babiarz and Robb (2013) illuminated the significant relationship between low income and substance abuse. Slabbert (2016) elucidated poverty as an inflaming component in domestic violence occurrences. Dong et al. (2020) characterized low-income levels and homicide rates as positively correlated. Data gathered from teachers and staff participating in the quantitative survey revealed they unequivocally agree on the importance of teaching financial literacy in the kindergarten through grade twelve educational curricula of military-connected students.

RQ2: What are teacher perceptions regarding the benefits of teaching financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve (12)? The second research question addressed teacher opinions about the benefits to the psychological well-being of military-connected students taught financial literacy in kindergarten through grade twelve. Survey questions corresponding to this research question incorporated reducing anxiety, depression, and discord caused by financial need. Additional survey questions were related to teachers' perceptions of using productive financial behaviors and the benefit of financial literacy on students' psychological well-being.

Of current and former DoDEA teachers and staff members surveyed, 88% felt it was extremely likely or slightly likely that teaching financial literacy to military-connected students would reduce anxiety caused by financial need. Another 86.9% of survey respondents expressed that it was extremely likely or slightly likely that teaching financial literacy would reduce depression caused by financial need, while 85% summarized that teaching financial literacy in

kindergarten through grade twelve curricula would reduce discord caused by a financial need in military-connected families.

Survey participants embraced the benefits of productive financial behaviors on the psychological well-being of military-connected students. Of participants, 93.5% replied that it was extremely likely or slightly likely that teaching students to utilize productive financial behaviors would benefit their psychological well-being. Survey responses of teacher perceptions related to the benefits of financial literacy in positively affecting psychological well-being highlighted a perceived positive connection between teaching financial literacy and psychological well-being. Of current and former DoDEA teachers and staff surveyed, 93.5% expressed that teaching financial literacy was extremely likely or slightly likely to affect students' psychological well-being positively.

Studies have shown that increased feelings of well-being were associated with productive financial behaviors (Shim, 2012). Garasky et al. (2012) suggested that financial status is associated with health and overall well-being. Sel and Sozer (2020) asserted that personal finance activities bolster children's potential for learning, while Frisancho (2018) declared that financial education positively influences students' self-control and consumption tendencies. The teachers and staff surveyed for this study significantly communicated their beliefs regarding the benefits of teaching financial literacy on military-connected students' psychological well-being.

Study Implications

The results of this study added to the existing body of knowledge by showing a continued connection between the influence of financial literacy and the psychological well-being of military-connected students. This study focused on military-connected students. To date, there is little research drawn from military-connected students regarding psychological well-being and

financial literacy. The findings in this study are synchronal to research and beliefs that have developed over time regarding the interrelation of financial literacy and psychological well-being. A gap in the literature was addressed by exploring the aspects of financial literacy in the kindergarten through grade twelve curricula.

Per the findings of this study, there should be a review of current offerings related to financial education in the kindergarten through grade twelve curricula of military-connected students. By exploring various aspects of this study, curriculum developers could infuse financial literacy concepts into various educational disciplines. A revitalized curriculum may be the catalyst for students' increased understanding of financial literacy concepts. This study may help ameliorate the psychological well-being of military-connected students and the educators that teach the financial literacy curriculum.

Worry, anxiety, and depression have been linked to decreased psychological well-being. God instructs His followers to be more concerned with following His path than obtaining daily necessities. "Therefore I tell you, do not worry about your life, what you will eat or drink; or about your body, what you will wear. Is not life more than food, and the body more than clothes? Look at the birds of the air; they do not sow or reap or store away in barns, and yet your heavenly Father feeds them. Are you not much more valuable than they? Can any one of you by worrying add a single hour to your life?" (NIV, 2011, Matthew 6:25-27). Releasing worry due to financial instability allows a sovereign God to meet the needs of His followers.

The riches of this present time ultimately belong to God. "The earth is the Lord's, and everything in it, the world, and all who live in it; for he founded it on the seas and established it on the waters" (NIV, 2011, Psalms 24:1-2). God expects His followers to work diligently. "The Lord God took the man and put him in the Garden of Eden to work it and take care of it" (NIV,

2011, Genesis 2:15). The Lord warns against idleness. “For you yourselves know how you ought to follow our example. We were not idle when we were with you, nor did we eat anyone’s food without paying for it. On the contrary, we worked night and day, laboring and toiling so that we would not be a burden to any of you” (NIV, 2011, 2 Thessalonians 3:7-8).

God also commands His followers to be kind and generous to others. “Command them to do good, to be rich in good deeds, and to be generous and willing to share. In this way they will lay up treasure for themselves as a firm foundation for the coming age, so that they may take hold of the life that is truly life” (NIV, 2011, I Timothy 6:18-19). Trusting God to meet needs while working earnestly and giving magnanimously allows Christians to garner hope for their well-being from the Creator. “Command those who are rich in this present world not to be arrogant nor to put their hope in wealth, which is so uncertain, but to put their hope in God, who richly provides us with everything for our enjoyment” (NIV, 2011, I Timothy 6:18-19). God will provide if his elect follow his principles.

Study Limitations

The study utilized a quantitative design that employed a non-probability convenience sampling procedure. One of the study’s limitations involved the use of convenience sampling. The researcher drew the sample based on convenience rather than equal probability. Convenience sampling was not the ideal sampling method as it could lead to a statistically unbalanced selection of current and former teachers and staff members in DoDEA. The results of this study may not represent the general population of military-connected teachers and staff across the United States.

The number of respondents who completed the quantitative survey was another limitation of this study. The researcher had limited control over acquiring completed surveys. The survey

was voluntary and presented via social media. Current and former DoDEA teachers and staff members completed this survey outside their duty day. Survey participants received limited external motivation to complete the survey. Variables such as time and participant availability could have limited the number of survey responses.

This study was designed to evaluate perceptions from teachers and staff members of a military-connected school. The Common Core College and Career Ready Standards was the curriculum utilized. Curriculum varies by state, and the variations could pose limitations in the generalization of results. School districts within states vary in the resources and funding each school district receives. Teachers' perceptions of financial literacy's influence on students' psychological well-being can vary based on the curriculum, resources, and school district funding. While this research was conducted regarding military-connected students, financial literacy is also a sustained need for many students not connected to a military community. Every effort was made to minimize the impact of the study limitations.

Recommendations for Future Research

This study examined teacher perceptions of the influence of financial literacy on the psychological well-being of military-connected students in kindergarten through grade twelve. Future research may delve further into this topic. Exploring the relationship between financial literacy and the students' psychological well-being at each grade level may benefit students globally. Future studies would greatly contribute to the discussion of financial literacy initiatives in the kindergarten through grade twelve curricula. Recreating the quantitative survey and making it available to a more significant sample would rectify some of the study's limitations.

Future work should measure the impact of financial literacy on students' psychological well-being over time. In following students for an extended period, researchers could observe the

direct benefits of financial literacy on the students' psychological well-being. A qualitative study incorporating teacher and student perceptions of financial literacy's influence on the students' psychological well-being may increase the existing body of knowledge. Such studies could offer a more nuanced understanding of the relationship between financial literacy and well-being.

Additional demographic information, such as ethnicity, could increase the comparison depth of future studies. The disparity in the racial wealth gap could be viewed as a failure in the educational system. Obtaining the financial skills to secure basic needs—adequate shelter, clothing, and sustenance—could reduce the number of communities in despair from staggering crime and poverty rates. A supplemental study may propel researchers to identify the gaps in education and construct curricula to repair the crisis.

If this study were replicated on a larger scale, it would increase the external validity of the process. A more extensive study could allow researchers to study the relationship between financial literacy and psychological well-being more explicitly. This study of teacher perceptions on the influence of financial literacy should be broadened to include teachers with differing school populations throughout the United States of America. The potential to inform policy is vast. With more empirical studies of the relationship between financial literacy and psychological well-being, researchers and school district leaders could develop a more robust curriculum to challenge and inform student populations. School principals and curriculum developers could better conceptualize financial literacy and psychological well-being connections.

Summary

The purpose of this quantitative study was to examine teachers' perceptions regarding financial literacy's influence on military-connected students' psychological well-being in kindergarten through grade twelve. The problem addressed in this study centers around the need for increased financial literacy education for elementary, middle, and high school military-connected students. The study utilized a non-probability convenience sampling procedure. The t-test was administered to examine the hypotheses and ascertain whether a significant difference existed among the different sample means. The sample for this study consisted of 107 participants. The sample had a 3.63 mean score for financial literacy importance and a 3.43 mean score for financial literacy benefits. Descriptively, most of the sample had positive perceptions of the importance of teaching financial literacy and the benefits of teaching financial literacy.

Two independent sample t-tests were conducted to examine if there was a significant difference in participants' perception of the importance and benefits of teaching financial literacy to school-age children. The Levene's test of equal variance was assessed for each independent samples t-test to determine if the variation of the dependent variable was similar for each group of the independent variable. The equal variance of the dependent variable for the importance of financial literacy ($F(105) = 1.98, p = .682$) and the benefits of financial literacy ($F(105) = .34, p = .561$) was shown to be met since the p-values for both Levene's tests are greater than .05.

The t-tests found no significant difference between how teachers perceived the importance and benefits of teaching financial literacy based on their years of experience. Teachers and staff surveyed asserted the importance of teaching financial literacy in the kindergarten through grade twelve educational curricula. Survey respondents also gave credence to the benefits on military-connected students' psychological well-being from teaching financial

literacy in kindergarten through grade twelve. Research extending this knowledge base may prove essential to the future of educators, students, and society.

References

- Abdullah, N., Fazli, S. M., & Muhammad Arif, A. M. (2019). The relationship between attitude towards money, financial literacy and debt management with young worker's financial well-being. *Pertanika Journal of Social Sciences & Humanities*, 27(1), 361–378
- Abylkassymova, A., Mubarakov, A., Yerkisheva, Z., Turganbayeva, Z., & Baysalov, Z. (2020). Assessment of financial literacy formation methods in mathematics education: Financial computation. *International Journal of Emerging Technologies in Learning*, 15(16), 49–67. <https://doi.org/10.3991/ijet.v15i16.14587>
- Adams, D. R., Meyers, S. A., & Beidas, R. S. (2016). The Relationship between financial strain, perceived stress, psychological symptoms, and academic and social integration in undergraduate students. *Journal of American College Health*, 64(5), 362–370
- Aggarwal, M., & Gupta, V. K. (2020). Financial literacy and decision making. *ASBM Journal of Management*, 13(1/2), 21–38.
- Aizer, A. (2011). Poverty, violence, and health: The impact of domestic violence during pregnancy on newborn health. *Journal of Human Resources*, 46(3), 518–538. <https://doi.org/10.1353/jhr.2011.0024>
- Al, B. A., Weathers, J., & Patel, D. (2019). Racial differences in the returns to financial literacy education. *Journal of Consumer Affairs*, 53(2), 572–599. <https://doi.org/10.1111/joca.12205>
- Al-Huneidi, A. M., & Schreurs, J. (2012). Constructivism based blended learning in higher education. *International Journal of Emerging Technologies in Learning*, 7(1), 4–9. <https://doi.org/10.3991/ijet.v7i1.1792>

- Ali, A. (2021, July 16). *Visualizing U.S. household debt, by generation*. Visual Capitalist. Retrieved September 28, 2021, from <https://www.visualcapitalist.com/visualizing-u-s-household-debt-by-generation/>.
- Alpert, M. J. (2017). Investing in upmarket and down-market stocks according to the cycle. *Wall Street Transcript*, 198(11), 44–50.
- Alsemgeest, L. (2015). Arguments for and against financial literacy education: Where to go from here? *International Journal of Consumer Studies*, 39(2), 155–161. <https://doi.org/10.1111/ijcs.12163>
- Álvarez-Franco, P. B., Muñoz-Murillo, M., & Restrepo-Tobón, D. A. (2017). Challenges in assessing the effectiveness of financial education programs: The Colombian case. *Cuadernos de Administración* (01203592), 30(54), 1–26. <https://doi.org/10.11144/Javeriana.cao30-54.caef>
- Amari, M., & Jarboui, A. (2015). Financial literacy and economics education among young adults: An observation from Tunisia. *Journal of Business & Finance Librarianship*, 20(3), 209–219. <https://doi.org/10.1080/08963568.2015.978834>
- Appleyard, L., & Dibb, S. (2018). Responsible personal finance: Three fundamental questions. *Social Business*, 8(1), 57–63. <https://doi.org/10.1362/204440818X15208755029564>
- Athreya, K., Mustre-del-Rio, J., & Sanchez, J. M. (2019). The persistence of financial distress. *Review of Financial Studies*, 32(10), 3851–3883. <https://doi.org/https://academic.oup.com/rfs/issue>
- Babiarz, P., & Robb, C. A. (2014). Financial literacy and emergency saving. *Journal of Family and Economic Issues*, 35(1), 40–50.

- Badie, F. (2016). Towards concept understanding relying on conceptualisation in constructivist learning. *Proceedings of the IADIS International Conference on Cognition & Exploratory Learning in Digital Age*, 292–296.
- Banzai. (2022). *What does Banzai teach?* Financial and Life Literacy. Retrieved February 14, 2022, from <https://teachbanzai.com/>
- Barland, J. (2013). Innovation of new revenue streams in digital media. *NORDICOM Review*, 99–111
- Barrington, R. (2021, October 5). *States where financial literacy education is working*. MoneyRates. Retrieved January 17, 2022, from <https://www.moneyrates.com/research-center/financial-literacy.htm>
- Barton, B. A., & Bulmer, S. M. (2017). Correlates and predictors of depression and anxiety disorders in graduate students. *Health Educator*, 49(2), 17–26.
- Beckett, K. S. (2019). Dewey online: A critical examination of the communities of inquiry approach to online discussions. *Philosophical Studies in Education*, 50, 46–58.
- Bhutoria, A., & Vignoles, A. (2018). Do financial education interventions for women from poor households impact their financial behaviors? Experimental evidence from India. *Journal of Research on Educational Effectiveness*, 11(3), 409–432.
<https://doi.org/10.1080/19345747.2018.1465317>
- Bi, R. (Qianwen), Dean, L. R., Jingpeng Tang, & Smith, H. L. (2020). Limitations of retirement planning software: Examining variance between inputs and outputs. *Journal of Financial Service Professionals*, 74(2), 60–81.
- Bjerk, D. (2007). Measuring the relationship between youth criminal participation and household economic resources. *Journal of Quantitative Criminology*, 23(1), 23–39.

Board of Governors of the Federal Reserve System. (2020, May). *Report on the Economic Well-Being of U.S. Households in 2019. Featuring Supplemental Data from April 2020.*

Economic Research. Retrieved September 28, 2021, from

<https://www.federalreserve.gov/publications/files/2019-report-economic-well-being-us-households-202005.pdf>

Board of Governors of the Federal Reserve System. (2021, August 6). *Student loans owned and securitized*. Economic Research. Retrieved September 27, 2021, from

<https://fred.stlouisfed.org/series/SLOAS>.

Board of Governors of the Federal Reserve System. (2021, September 8). *Consumer Credit*. The Fed – consumer credit – G.19. Retrieved September 28, 2021, from

<https://www.federalreserve.gov/releases/g19/current/>.

Bodnar, J. (2020). Advice from a pro: Invest in yourself. *Kiplinger's Personal Finance*, 74(11), 50.

Bodnar, J. (2020). Family finances are a joint project. *Kiplinger's Personal Finance*, 74(4), 50.

Bolt, T., Nomi, J. S., Bzdok, D., & Uddin, L. Q. (2021). Educating the future generation of researchers: A cross-disciplinary survey of trends in analysis methods. *PLoS Biology*, 19(7), 1–23. <https://doi.org/10.1371/journal.pbio.3001313>

Bonner, P. (2020). 2020 tax filing season preview. *Journal of Accountancy*, 229(1), 17.

Brad, I. (2014). Business plan – Major management tools in development of a business.

Agricultural Management / Lucrari Stiintifice Seria I, Management Agricol, 16(2), 214–

217

- Bright, C. L., & Jonson-Reid, M. (2015). Multiple service system involvement and later offending behavior: Implications for prevention and early intervention. *American Journal of Public Health, 105*(7), 1358–1364. <https://doi.org/10.2105/AJPH.2014.302508>
- Brysbaert, M. (2019). How many participants do we have to include in properly powered experiments? A tutorial of power analysis with reference tables. *Journal of Cognition*. Retrieved December 25, 2021, from <https://www.journalofcognition.org/articles/10.5334/joc.72/>
- Burnette, C. E., Renner, L. M., & Figley, C. R. (2019). Framework of historical oppression, resilience and transcendence to understand disparities in depression amongst indigenous peoples. *British Journal of Social Work, 49*(4), 943–962. <https://doi.org/10.1093/bjsw/bcz041>
- Cadaret, M. C., & Bennett, S. R. (2019). College students' reported financial stress and its relationship to psychological distress. *Journal of College Counseling, 22*(3), 225–239. <https://doi.org/10.1002/jocc.12139>
- Caldwell, M. (2020, November 22). *Learn the 10 things you should do to turn around your finances*. Budgeting. Retrieved February 7, 2022, from <https://www.thebalance.com/plan-to-turn-around-your-finances-4119172>
- Campbell-Grossman, C., Hudson, D., Kupzyk, K., Brown, S., Hanna, K., & Yates, B. (2016). Low-income, African American, adolescent mothers' depressive symptoms, perceived stress, and social support. *Journal of Child & Family Studies, 25*(7), 2306–2314. <https://doi.org/10.1007/s10826-016-0386-9>
- Carlino, N. (2018). Riding the wave of new revenue streams: Personalized, local travel creates opportunities to sell. *Hotel Business, 27*(1), 4.

Carter, S. (2016). Popular money-saving strategies prove elusive for low-income households.

Monthly Labor Review. <https://doi.org/http://www.bls.gov/opub/mlr/#>

Cazan, A.-M. (2012). Assessing self regulated learning: Qualitative vs quantitative research methods. *Proceedings of the Scientific Conference AFASES*, 307–312.

Chin, A., & Williams, A. K. (2020). Take-up of financial education: Demographic characteristics and prior knowledge. *Journal of Public Policy & Marketing*, 39(3), 319–333.

<https://doi.org/10.1177/0743915619858928>

Clark, K. R. (2018). Learning theories: Constructivism. *Radiologic Technology*, 90(2), 180–182.

Common Core State Standards Initiative. (2021). *Standards in your state. Preparing America's students for college and career*. Retrieved September 14, 2021, from <http://www.corestandards.org/standards-in-your-state/>.

Contreras, O., & Bendix, J. (2021, November 3). *The Financial Literacy Crisis*. Financial Literacy in the United States. Retrieved January 24, 2022, from <https://www.damngoodplanning.com/articles/thefinancialliteracycrisis>

Cordero, J. M., & Pedraja, F. (2019). The effect of financial education training on the financial literacy of Spanish students in Pisa. *Applied Economics*, 51(16), 1679–1693. <https://doi.org/10.1080/00036846.2018.1528336>

Corporate Finance Institute. (2020, March 15). *Revolving debt*. CFI. Retrieved September 28, 2021, from <https://corporatefinanceinstitute.com/resources/knowledge/finance/revolving-debt/>.

Corredor, J. A., González-Arango, F., & Maldonado-Carreño, C. (2020). When unintended effects are really unintended: Depressive symptoms and other psychological effects of

- forgivable loan programs for college education. *Higher Education: The International Journal of Higher Education Research*, 80(4), 645–662.
- Council for Economic Education. (2021). *Research of the Council for economic education*. Industry data and research. <https://www.councilforeconed.org/news-information/research/>.
- Council For Economic Education. (2022). *Personal finance lessons for grades K-12*. Financial Fitness for Life. Retrieved February 10, 2022, from <https://fffl.councilforeconed.org/grade-levels.php>
- Crawford, A., Lajbcygier, P., & Maitra, P. (2018). Financial education via television comedy. *Applied Economics Letters*, 25(20), 1407–1410. <https://doi.org/10.1080/13504851.2017.1422595>
- Dewi, V. I., Febrian, E., Effendi, N., & Anwar, M. (2020). Financial literacy among the millennial generation: Relationships between knowledge, skills, attitude, and behavior. *Australasian Accounting Business & Finance Journal*, 14(4), 24–37. <https://doi.org/10.14453/aabfj.v14i4.3>
- Diaconu, M., & Baraitaru, N. (2019). From business ideas to successful entrepreneurship. *Scientific Bulletin – Economic Sciences / Buletin Stiintific – Seria Stiinte Economice*, 18(2), 10–16.
- DioGuardi, S. (2017). Teaching criminological theory: Using a Piaget platform to support higher level learning. *Journal of Criminal Justice Education*, 28(3), 441–460. <https://doi.org/10.1080/10511253.2017.1324888>
- DoDEA Communications. (2021). *Complete list of DoDEA courses*. DoDEA Curriculum Guide 2022. Retrieved December 20, 2021, from

<https://www.dodea.edu/Curriculum/allDoDEACourses.cfm?courseView=&currYear=&currSelectBtn=>

DoDEA Communications. (2021). *Department of Defense Education Activity*. DoDEA.

<https://www.dodea.edu/index.cfm>.

DoDEA Communications. (2021). *DoDEA graduation requirements*. DoDEA Graduation

Requirements. Retrieved December 20, 2021, from

<https://www.dodea.edu/studentservices/graduation/index.cfm>

Dong, B., Egger, P. H., & Guo, Y. (2020). Is poverty the mother of crime? Evidence from homicide rates in China. *PloS One*, 15(5), e0233034.

<https://doi.org/10.1371/journal.pone.0233034>

Drake, S., & Reid, J. L. (2020, July). *21st century competencies in light of the history of Integrated Curriculum*. Policy and Practice Reviews. Retrieved March 2, 2022, from

<https://www.frontiersin.org/articles/10.3389/feduc.2020.00122/full>

EdGate Correlation Services. (2012). *Common Core College and Career Readiness Anchor Standards: Language Arts – Grade 6*. Financial literacy. Retrieved May 12, 2022, from

<http://www.rosenpub.net/finlit/>

Endlich, J., & Ranzetta, T. (2022). *Join our mission*. Next Gen Personal Finance. Retrieved

February 14, 2022, from <https://www.ngpf.org/curriculum/>

Engle, P. (2020). Business plan fundamentals. *ISE: Industrial & Systems Engineering at Work*, 52(11), 20.

Ertmer, P. A., & Newby, T. J. (2017, January 1). *Behaviorism, cognitivism, constructivism*.

Foundations of Learning and Instructional Design Technology. Retrieved September 28,

- 2021, from <https://lidtfoundations.pressbooks.com/chapter/behaviorism-cognitivism-constructivism/>.
- Esswein, P. M. (2019). When to swim against the tide. *Kiplinger's Personal Finance*, 73(6), 38–40.
- Estelami, H., & Florendo, J. (2021). The role of financial literacy, need for cognition and political orientation on consumers' use of social media in financial decision making. *Journal of Personal Finance*, 20(2), 57–73.
- EverFI. (2021, December 7). *Financial education for students*. K-12 Financial Literacy. Retrieved February 12, 2022, from <https://everfi.com/k-12/financial-education/>
- Farinella, J., Bland, J., & Franco, J. (2017). The impact of financial education on financial literacy and spending habits. *International Journal of Business, Accounting, & Finance*, 11(1), 1–12.
- Federal Deposit Insurance Corporation. (2021, October 7). *Teach money smart*. Resources and Consumers. Retrieved February 12, 2022, from <https://www.fdic.gov/resources/consumers/money-smart/teach-money-smart/index.html>
- Federal Interagency Forum on Child and Family Statistics. (FDIC) (2019, September). *America's children: Key national indicators of well-being*. <https://files.eric.ed.gov/fulltext/ED599946.pdf>.
- Federal Reserve Bank of Chicago. (2022). *Ready to get money smart?* Money Smart Week. Retrieved February 14, 2022, from <https://www.moneysmartweek.org/>
- Federal Reserve Bank of St. Louis. (2021, May 28). *Mississippi personal finance curriculum*. Resources for teachers and students in Economic and Personal Finance. Retrieved

- January 22, 2022, from <https://www.stlouisfed.org/education/mississippi-personal-finance-curriculum>
- Fineman, B. (2016). Small deductions, big savings: Top tax tips for small businesses. *Massachusetts Family Business*, 5
- Fisher, P. (2019). Black-white differences in financial risk tolerance. *Journal of Financial Service Professionals*, 73(4), 70–82.
- Flueras, H., Zaharie, M., & Osoain, C. (2012). Social networks mobilization on housing market: Managing quantitative and qualitative data differences. *Managerial Challenges of the Contemporary Society*, 3, 170–174.
- Folke, T., Gjorgjiovska, J., Paul, A., Jakob, L., & Ruggeri, K. (2020). Assessment of economic and financial literacy. *PsycTESTS*. <https://doi.org/10.1037/t75739-000>
- Fomby, P., & Kravitz-Wirtz, N. (2019). Family systems and parents' financial support for education in early adulthood. *Demography*, 56(5), 1875–1897.
- Foran, H. M., Heyman, R. E., & Slep, A. M. S. (2011). Hazardous drinking and military community functioning: Identifying mediating risk factors. *Journal of Consulting and Clinical Psychology*, 79(4), 521–532.
- Frączek, B. (2014). Main purposes and challenges in the financial education of financial consumers in the world. *Journal of Economics & Management*, 16, 27–43.
- Frazier, L. (2021, January 8). *New Jersey requires financial literacy courses in middle schools, why more states should do the same*. Forbes. Retrieved January 22, 2022, from <https://www.forbes.com/sites/lizfrazierpeck/2019/01/08/new-jersey-requires-financial-literacy-courses-in-middle-schools-why-more-states-should-do-the-same/?sh=3b7964743ea6>

- Frisancho, V. (2018, March). *The impact of school-based financial education on high school students and their teachers: Experimental evidence from Peru*. Retrieved February 15, 2022, from <https://gflec.org/wp-content/uploads/2018/09/Frisancho-2018-FinancialEdSecondaryPeru.pdf?x87657>
- Gaitán-Rossi, P., & Velázquez Guadarrama, C. (2021). A systematic literature review of the mechanisms linking crime and poverty. *Convergencia: Revista de Ciencias Sociales*, 28, 1–25. <https://doi.org/10.29101/crcs.v28i0.14685>
- Garasky, S., Martin, P., Margrett, J. A., & Cho, J. (2012). Understanding perceptions of economic status among centenarians. *International Journal of Aging and Human Development*, 75(4), 365–382.
- García, E. M. (2019). Empirical study on financial education. Case study of public accounting graduates in Veracruz, Mexico. *European Journal of Contemporary Education*, 8(4), 828–840.
- Gash, H. (2020). Constructivism, fast thinking, heuristics and sustainable development. *Constructivist Foundations*, 16(1), 1–12.
- Gramlich, J. (2020, November 23). *What the data says (and doesn't say) about crime in the United States*. Criminal Justice. Retrieved February 8, 2022, from <https://www.pewresearch.org/fact-tank/2020/11/20/facts-about-crime-in-the-u-s/>
- Geddes, S., & Steen, T. (2016). The argument for teaching financial literacy at higher-education institutions. *Michigan Academician*, 43(3), 349–365. <https://doi.org/10.7245/0026-2005-43.3.349>
- Georgia Department of Education. (2013, October 11). *Finance Career Cluster*. Financial Literacy Standards. Retrieved January 17, 2022, from

- <https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Documents/Financial-Literacy.pdf>
- Gerrans, P., Heaney, R., & Smith, T. (2019). The impact of undergraduate personal finance education on individual financial literacy, attitudes and intentions. *Accounting & Finance*, 59(1), 177–217. <https://doi.org/10.1111/acfi.12247>
- Gil, E. L. (2015). Leading the way for financial literacy education: A case study on collaboration. *Journal of Business & Finance Librarianship*, 20(1/2), 27–53. <https://doi.org/10.1080/08963568.2015.978710>
- Gnagey, J. (2020). Laying a foundation for the fight against poverty: Developing a locally relevant poverty measure with community-based research. *Journal of Higher Education Outreach and Engagement*, 24(1), 113–125.
- Gok, I. Y., & Ozkale, A. (2019). Testing the influence of college education on the financial literacy level of university students in Turkey. *E-Journal of Business Education and Scholarship of Teaching*, 13(1), 46–58.
- Government of New Jersey. (2014). *Personal financial literacy*. New Jersey Core Curriculum Content Standards 21st Century Life and Careers. Retrieved January 22, 2022, from <https://www.nj.gov/education/cccs/2014/career/91.pdf>
- Grable, J. E., & Rabbani, A. (2020). Are Americans financially illiterate? *Journal of Financial Service Professionals*, 74(1), 11–14.
- Gramlich, J. (2020, November 23). *What the data says (and doesn't say) about crime in the United States*. Criminal Justice. Retrieved February 8, 2022, from <https://www.pewresearch.org/fact-tank/2020/11/20/facts-about-crime-in-the-u-s/>

- Grohmann, A. (2016). The gender gap in financial literacy: Income, education, and experience offer only partial explanations. *DIW Economic Bulletin*, 6(46/47), 531–537.
- Gurria, A. (2020). *Are students smart about money?* Pisa 2018 Results Volume IV. Retrieved January 24, 2022, from https://read.oecd-ilibrary.org/education/pisa-2018-results-volume-iv_48ebd1ba-en#page6
- Gutter, M., Copur, Z., & Garrison, S. (2010). *Financial capabilities of college students from states with varying financial education policies*. Financial Education Mandates Report. Retrieved February 26, 2022, from https://www.nefe.org/_images/research/Financial-Education-Mandates-Report/Financial-Education-Mandates-Report-Final-Report.pdf
- Hanfstingl, B., Benke, G., & Zhang, Y. (2019). Comparing variation theory with Piaget's theory of cognitive development: More similarities than differences? *Educational Action Research*, 27(4), 511–526.
- Hanson, M. (2021, November 22). *College dropout rate [2022]*. Education Data Initiative. Retrieved February 12, 2022, from <https://educationdata.org/college-dropout-rates#:~:text=General%20Statistics&text=more%20educated%20peers.-,In%20the%20United%20States%2C%20the%20overall%20dropout%20rate%20for%20undergraduate,out%20before%20their%20sophomore%20year.>
- Harper, D. (2021, December 4). *Getting to know the stock exchanges*. Investing. Retrieved December 23, 2021, from <https://www.investopedia.com/articles/basics/04/092404.asp>
- Harvey, M. (2019). Impact of financial education mandates on younger consumers' use of alternative financial services. *Journal of Consumer Affairs*, 53(3), 731–769. <https://doi.org/10.1111/joca.12242>

- Hauff, J. C., Carlander, A., Gärling, T., & Nicolini, G. (2020). Retirement financial behaviour: How important is being financially literate? *Journal of Consumer Policy*, 43(3), 543–564.
<https://doi.org/10.1007/s10603-019-09444-x>
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. Retrieved August 19, 2021, from <https://ebn.bmj.com/content/ebnurs/18/3/66.full.pdf>
- Henning, M. B., & Lucey, T. A. (2017). Elementary preservice teachers' and teacher educators' perceptions of financial literacy education. *Social Studies*, 108(4), 163–173.
<https://doi.org/10.1080/00377996.2017.1343792>
- Hinders, D. (2021, April 12). *Poverty and addiction relationship*. Drug and Alcohol Addiction Family Resource. Retrieved February 9, 2022, from <https://stjosephinstitute.com/understanding-the-relationship-between-poverty-and-addiction/>
- Holmes, T. E. (2015). Ready, set, invest! *Essence*, 46(6), 73–76.
- Holmes, T. E. (2019). Major key: Revenue streams. *Essence*, 50(1), 82–85.
- Hopper, E. (2020, February 24). *Maslow's hierarchy of needs explained*. Key Takeaways. Retrieved February 23, 2022, from <https://www.thoughtco.com/maslows-hierarchy-of-needs-4582571>
- Howell, D.C. (2011). *Fundamental statistics for the behavioral sciences* (7th ed.). Belmont, CA: Thomson/Wadsworth.
- Huang, N. S. (2019). 2019 Mutual fund guide. *Kiplinger's Personal Finance*, 73(3), 44–47.
- Huang, N. S. (2020). Find the best etfs for your goals. *Kiplinger's Personal Finance*, 74(9), 16–24.

- Huang, R., Ghose, B., & Tang, S. (2020). Effect of financial stress on self-reported health and quality of life among older adults in five developing countries: a cross sectional analysis of WHO-SAGE survey. *BMC Geriatrics*, 20(1), 1–12. <https://doi.org/10.1186/s12877-020-01687-5>
- Iapalucci, M. (2020). How your small businesses can plan for 2021. *Central Penn Business Journal*, 36(31), 14.
- Idaho Central Credit. (2020, January 16). Grant to bring personal finance education to every high school in Idaho. Retrieved January 17, 2022, from https://www.idahostatejournal.com/community/grant-to-bring-personal-finance-education-to-every-high-school-in-idaho/article_cc865718-a19a-57f5-b6c6-1ea9c4531cce.html
- I.-Hsing Sun. (2017). Strategies for long-term financial success: The cities for financial empowerment fund teaches youth about saving and managing money. *Children's Voice*, 26(1), 22–23.
- Inceptia. (2013, February). *The intersection of student financial literacy and career readiness*. Retrieved from https://www.inceptia.org/PDF/Inceptia_StudentFinancialLit_ResearchBrief.pdf.
- Iowa Department of Education. (2022). *9-12 financial literacy*. The Iowa Core Standards. Retrieved January 20, 2022, from <https://iowacore.gov/standards/social-studies/9-10-11-12/9-12-financial-literacy>
- Istocescu, A. (2019). The rising need for financial education in Romania. *Review of General Management*, 29(1), 116–124.

- Jackson, S. L. (2016). *Research methods and statistics: A critical thinking approach*. Cengage Learning.
- Jenkins Jr., E. R. (2020). Financial planning challenge: Longer lives, less money. *Pennsylvania CPA Journal*, 91(1), 31–38.
- Jones, K. T., & Hamm, R. (2020). Look before you leap into a 529 plan. *Journal of Accountancy*, 229(6), 1–7.
- Jones, L., & Sumnall, H. (2016, June). *Understanding the relationship between poverty and alcohol abuse*. Retrieved February 2022, from <https://www.drugsandalcohol.ie/25676/1/Understanding-the-relationship-between-poverty-and-alcohol-abuse-2.pdf>
- JumpStart Coalition. (2022, February 11). *Financial Smarts for Students*. Advancing Financial Literacy for Students. Retrieved February 12, 2022, from <https://www.jumpstart.org/#>
- Kaiser, T., & Menkhoff, L. (2017). Does financial education impact financial literacy and financial behavior, and if so, when? *World Bank Economic Review*, 31(3), 611–630. <https://doi.org/10.1093/wber/lhx018>
- Kaiser, T., Lusardi, A., Menkhoff, L., & Urban, C. (2020, April). *Financial Education affect financial knowledge and downstream behaviors*. Nber Working Paper Series. Retrieved February 22, 2022, from https://www.nber.org/system/files/working_papers/w27057/w27057.pdf
- Kalwij, A., Alessie, R., Dinkova, M., Schonewille, G., Schors, A., & Werf, M. (2019). The effects of financial education on financial literacy and savings behavior: Evidence from a controlled field experiment in Dutch primary schools. *Journal of Consumer Affairs*, 53(3), 699–730. <https://doi.org/10.1111/joca.12241>

- Kamp Dush, C. M. (2013). Marital and cohabitation dissolution and parental depressive symptoms in fragile families. *Journal of Marriage and Family*, 75(1), 91–109.
- Keller, K., LeBeau, C., Malafi, E., & Spackman, A. (2015). Meeting the need for library-based financial literacy education. *Reference & User Services Quarterly*, 54(3), 47–51.
<https://doi.org/10.5860/rusq.54n3.47>
- Kennon, J. (2021, June 30). *Investment terms everyone should know*. Investing for Beginners. Retrieved December 23, 2021, from <https://www.thebalance.com/investing-terms-you-should-know-356338>
- Kentucky Department of Education. (2020). *Financial Literacy Standards Resources*. Standards/Content Areas. Retrieved January 20, 2022, from <https://education.ky.gov/curriculum/conpro/Pages/FinLit.aspx>
- Kinderman, P., Schwannauer, M., Pontin, E., & Tai, S. (2011). BBC well-being scale. *PsycTESTS*. <https://doi.org/10.1037/t29219-000>
- Kitch, M. (2020, February 28). *Measure seeks to beef up financial literacy in NH*. Education. Retrieved January 22, 2022, from <https://www.nhbr.com/measure-seeks-to-beef-up-financial-literacy-in-nh/>
- Kiyosaki, K. (2017, June 8). *Financial Literacy for Kids*. Financial Education & Coaching for Everyone. Retrieved February 10, 2022, from <https://www.richdad.com/financial-literacy-for-kids>
- Knight, A., & Tetrault, D. (2017). Quasi-Experimental Design. In *Research Methods and Program Evaluation* (p. 163). Kona Publishing and Media Group.

- Knyazeva, T. N., Semenova, L. E., Chevachina, A. V., Batuta, M. B., & Sidorina, E. V. (2016, March 19). *Semantic meaning of money in the perception of modern ...*
<https://files.eric.ed.gov/fulltext/EJ1117415.pdf>.
- Kosakowski, J. E. (2021, November 15). *10 million reasons for work and career readiness education*. Corporate Responsibility. Retrieved February 14, 2022, from
<https://jausa.ja.org/news/blog/10-million-reasons-for-work-and-career-readiness-education>
- Langone, A. (2019). Here's how to save \$1 million by 65 based on how old you are now. *Money*, 48(4), 28.
- Lankford, K. (2019). Generation x: Time is on your side. *Kiplinger's Personal Finance*, 73(2), 38–41.
- Larracilla-Salazar, N., Yadira Peña-Osorio, I., & Molchanova, V. S. (2019). Education and financial inclusion. An empirical study in students of higher education. *European Journal of Contemporary Education*, 8(4), 810–818. <https://doi.org/10.13187/ejced.2019.4.810>
- Lay, A., & Furnham, A. (2018). Money attitudes measure. *PsycTESTS*.
<https://doi.org/10.1037/t68162-000>
- Lee, G., McCreary, L., Kim, M. J., Park, C. G., Jun, W. H., & Yang, S. (2013). Depression in low-income elementary school children in South Korea: Gender differences. *Journal of School Nursing*, 29(2), 132–141. <https://doi.org/10.1177/1059840512452887>
- Lee, K., & Clancy, B. (2020). Impact of poverty on adolescent drug use: Moderation effects of family support and self-esteem. *Journal of Social Work Practice in the Addictions*, 20(4), 272–291. <https://doi.org/10.1080/1533256X.2020.1838860>

- Leś, T., & Moroz, J. (2021). More critical thinking in critical thinking concepts (?) A constructivist point of view. *Journal for Critical Education Policy Studies (JCEPS)*, 19(1), 98–124.
- Lesser, B. (2021, March 20). *Related tie between economic status and substance abuse*. Drug Addiction and Economic Status. Retrieved February 9, 2022, from <https://dualdiagnosis.org/drug-addiction/economic-status/>
- Lindblad, M. R., Manturuk, K. R., & Quercia, R. G. (2013). Sense of community and informal social control among lower income households: The role of homeownership and collective efficacy in reducing subjective neighborhood crime and disorder. *American Journal of Community Psychology*, 51(1–2), 123–139. <https://doi.org/10.1007/s10464-012-9507-9>
- Lusardi, A., Schneider, D., & Tufano, P. (2011). Financially fragile households: Evidence and implications. *Brookings Papers on Economic Activity*, 83–134.
- Lusardi, A., Michaud, P.-C., & Mitchell, O. (2013). Optimal financial knowledge and wealth inequality. *National Bureau of Economic Research*. <https://doi.org/10.3386/w18669>
- Luthy, M. R., & Hafele, C. (2011). Is your portfolio manager smarter than a second grader? Allied Academies International Conference: Proceedings of the Academy of Accounting & Financial Studies (AAFS), 16(2), 13–17.
- Lyon, E., & Catlin, J. R. (2020). Consumer misconceptions about tax laws: Results from a survey in the United States. *Journal of Consumer Policy*, 43(4), 807–828.
- Mancebón, M., Ximénez, de-Embún, D. P., Mediavilla, M., & Gómez, S. J. (2019). Factors that influence the financial literacy of young Spanish consumers. *International Journal of Consumer Studies*, 43(2), 227–235. <https://doi.org/10.1111/ijcs.12502>

- Manuel, D. (2021). *Definition of non-revolving credit*. DaveManuel.com. Retrieved September 28, 2021, from <https://www.davemanuel.com/investor-dictionary/non-revolving-credit/>.
- Marone, V. (2016). Playful constructivism: Making sense of digital games for learning and creativity through play, design, and participation. *Journal of Virtual Worlds Research*, 9(3), 1–18. <https://doi.org/10.4101/jvwr.v9i3.7244>
- Marta-Christina, S., & Liana, L. M. (2013). A new challenge in Eu: Effective financial education. *Annals of the University of Oradea, Economic Science Series*, 22(1), 551–560.
- Maslow, A. H. (1954). The instinctoid nature of basic needs. *Journal of Personality*, 22(3), 326–347. <https://doi.org/10.1111/j.1467-6494.1954.tb01136.x>
- Massey, E., Wyatt, A., & Smit, C. (2016). Evaluating financial education initiatives in South Africa: The importance of multiple evaluation approaches. *African Evaluation Journal*, 4(1), 1–6. <https://doi.org/10.4102/aej.v4i1.125>
- McLaughlin, M., & Rank, M. R. (2018). Estimating the economic cost of childhood poverty in the United States. *Social Work Research*, 42(2), 73–83. <https://doi.org/10.1093/swr/svy007>
- Michigan Department of Education. (2019). *Michigan personal finance courses*. Personal finance. Retrieved January 22, 2022, from https://www.michigan.gov/documents/mde/Personal_Finance_557249_7.pdf
- Mitchell, J. P. (2020). Financial capability as a determinant of health. *Journal of Personal Finance*, 19(1), 67–79.
- Mohelska, H., & Zubr, V. (2019). Financial literacy as a part of lifelong education. *International Association for Development of the Information Society*.

- Money Savvy Generation. (2022). *Personal finance curriculum*. Money Savvy Kids. Retrieved February 10, 2022, from https://www.moneysavvy.com/assembled/money_savvy_kids.html
- Moreira Costa, V., De Sá Teixeira, N. A., Cordeiro Santos, A., & Santos, E. (2021). When more is less in financial decision-making: Financial literacy magnifies framing effects. *Psychological Research*, 85(5), 2036–2046. <https://doi.org/10.1007/s00426-020-01372-7>
- Moolla, R. (2016). Investing in the stock market – not just for the pros. *Finweek*, 39.
- Moon, T. (2011). Making money, on the side. *Library Journal*, 136(6), 40–42
- Mulhere, K. (2019). Money makeover! *Money*, 48(5), 68–71.
- National Financial Educators Council. (2022, February 2). *Complimentary financial literacy resources for kids*. Financial Education. Retrieved February 10, 2022, from <https://www.financialeducatorsCouncil.org/complimentary-financial-literacy-resources-for-kids/#curr>
- Netemeyer, R. G., Warmath, D., Fernandes, D., & Lynch Jr., J. G. (2018). How am I doing? Perceived financial well-being, its potential antecedents, and its relation to overall well-being. *Journal of Consumer Research*, 45(1), 68–89. <https://doi.org/10.1093/jcr/ucx109>
- New York State Education Department. (2018, June). *Financial and consumer literacy*. Career and Technical Education. Retrieved January 22, 2022, from <http://www.nysed.gov/common/nysed/files/programs/career-technical-education/financial-and-consumer-literacy.pdf>
- Nguyen, T. A. N., Polách, J., & Vozňáková, I. (2019). The role of financial literacy in retirement investment choice. *Equilibrium (1689-765X)*, 14(4), 569–589. <https://doi.org/10.24136/eq.2019.027>

- North Dakota Department of Public Instruction. (2017, July). *High school of business program course*. CTE High School Business. Retrieved January 22, 2022, from <https://www.nd.gov/dpi/>
- O'Connell, B. (2020, March 12). *Revolving vs. non-revolving credit: What's the difference?* Personal Finance. Retrieved September 28, 2021, from <https://www.foxbusiness.com/money/revolving-vs-non-revolving-credit-difference>.
- Ohio Department of Education. (2018, February). *Financial Literacy*. Ohio's Learning Standards. Retrieved January 24, 2022, from <https://education.ohio.gov/getattachment/Topics/Learning-in-Ohio/Financial-Literacy/Financial-Literacy-Standards/FLFinalStandards060518.pdf.aspx?lang=en-US>
- O'Neill, B. (2020). What you need to know about retirement income planning under the secure act. *Journal of Financial Planning*, 33(2), 40–45.
- O'Neill, B., & Gillen, M. (2021). 2020 personal finance year in review. *Journal of Financial Planning*, 34(1), 48–59.
- Oprea, G. (2015). Start up enterprise – Preparation for putting into practice a business idea through its simulation. *Economic Insights – Trends & Challenges*, 67(3), 163–171.
- The Organisation for Economic Co-operation and Development. (2020). *Are students smart about money?* Pisa 2018 Results Volume IV. Retrieved January 24, 2022, from https://read.oecd-ilibrary.org/education/pisa-2018-results-volume-iv_48ebd1ba-en#page6
- Organisation for Economic Co-operation and Development (2021). *Household debt*. OECD Data. Retrieved September 28, 2021, from <https://data.oecd.org/hha/household-debt.htm>.

- Ozkale, A., & Erdogan, E. O. (2020). A conceptual model for the interaction of mathematical and financial literacies. *International Journal of Progressive Education*, 16(5), 288–304.
<https://doi.org/10.29329/ijpe.2020.277.18>
- Paat, Y.-F. (2011). The link between financial strain, interparental discord and children's antisocial behaviors. *Journal of Family Violence*, 26(3), 195–210.
<https://doi.org/10.1007/s10896-010-9354-0>
- Pear, V. A., Ponicki, W. R., Gaidus, A., Keyes, K. M., Martins, S. S., Fink, D. S., Rivera-Aguirre, A., Gruenewald, P. J., & Cerdá, M. (2019). Urban-rural variation in the socioeconomic determinants of opioid overdose. *Drug and Alcohol Dependence*, 195, 66–73. <https://doi.org/10.1016/j.drugalcdep.2018.11.024>
- Peltzer, K., & Pengpid, S. (2020). Social determinants of depression among adults in South Africa. *Journal of Human Behavior in the Social Environment*, 30(5), 525–532.
<https://doi.org/10.1080/10911359.2019.1703236>
- Peterson, T. E. (2012). Constructivist pedagogy and symbolism: Vico, Cassirer, Piaget, Bateson. *Educational Philosophy and Theory*, 44(8), 878–891.
- Porto, N., & Jing Jian Xiao. (2016). Financial literacy overconfidence and financial advice seeking. *Journal of Financial Service Professionals*, 70(4), 78–88.
- Porto, N., & Jing Jian Xiao. (2019). Financial education and demand for debt counseling advice. *Journal of Personal Finance*, 18(2), 25–38.
- Public Schools of North Carolina State Board of Education. (2022, February). *Economics and personal finance*. North Carolina Standards for Economics and Personal Finance. Retrieved January 22, 2022, from <https://www.dpi.nc.gov/media/11823/open>

- Qianwen Bi, Luke Dean, & Xiangyi Meng. (2020). The impact of financial software use on financial literacy education – Evidence from China. *Journal of Personal Finance*, 19(1), 81–95.
- Ramsey, D. (2022). *Foundations in personal finance: Middle school edition for self-study*. Ramsey Online Store. Retrieved February 10, 2022, from <https://www.ramseysolutions.com/store/education/foundations-in-personal-finance-middle-school-edition-for-self-study>
- Ramsey Solutions. (2021, September 24). *The state of debt among Americans*. Debt. Retrieved September 27, 2021, from <https://www.ramseysolutions.com/debt/state-of-debt-among-americans-research>.
- Raven, K. (2020, May 21). *Stress, anxiety, or depression?* Family Health. Retrieved February 19, 2022, from <https://www.yalemedicine.org/news/stress-anxiety-depression>
- Reich, K., Garrison, J., & Neubert, S. (2016). Complexity and reductionism in educational philosophy--John Dewey's critical approach in "democracy and education" reconsidered. *Educational Philosophy and Theory*, 48(10), 997–1012
- Remund, D. L. (2010). Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. *Journal of Consumer Affairs*, 44(2), 276–295.
- Renzulli, K. A. (2017). 6 money-saving travel hacks. *Money*, 46(8), 16.
- Research Consultation. (2007). *Power analysis calculation for dissertation students & researchers*. Dissertation Help, Thesis Editing, Statistics Consulting, Dissertation Topics & Research Ideas. Retrieved November 28, 2022, from <http://www.researchconsultation.com/how-to-calcuate-sample-size-power-analysis-help.asp>

Richter, F. (2018, August 28). *Infographic: How U.S. education became a “debt sentence”*.

Statista Infographics. Retrieved September 27, 2021, from

<https://www.statista.com/chart/15235/outstanding-student-loans-in-the-us/>.

Richter, F. (2020, June 16). *Infographic: A quarter of Americans have no retirement savings*.

Statista Infographics. Retrieved September 28, 2021, from

<https://www.statista.com/chart/18246/share-of-americans-who-have-no-retirement-savings/>.

Robles, B. J. (2014). Economic inclusion and financial education in culturally diverse communities: Leveraging cultural capital and whole-family learning. *New Directions for Adult & Continuing Education*, 2014(141), 57–66. <https://doi.org/10.1002/ace.20085>

Rose, S. (2021, September 27). *Getting an “A”: Financial literacy in Alabama*. OppU. Retrieved January 17, 2022, from <https://www.opploans.com/oppu/articles/alabama-high-school-financial-literacy/>

Rothwell, D. W., & Wu, S. (2019). Exploring the relationship between financial education and financial knowledge and efficacy: Evidence from the Canadian financial capability survey. *Journal of Consumer Affairs*, 53(4), 1725–1747.

Royal, J. (2021, December 1). *9 best retirement plans in December 2021*. Retirement. Retrieved December 23, 2021, from <https://www.bankrate.com/retirement/best-retirement-plans/>

Sari, R., Fatimah, P., & Suyanto. (2017). Bringing voluntary financial education in emerging economy: Role of financial socialization during elementary years. *Asia-Pacific Education Researcher (Springer Science & Business Media B.V.)*, 26(3/4), 183–192.

<https://doi.org/10.1007/s40299-017-0339-0>

- Schenck-Fontaine, A., & Panico, L. (2019). Many kinds of poverty: Three dimensions of economic hardship, their combinations, and children's behavior problems. *Demography*, 56(6), 2279–2305.
- Sel, B., & Sözer, M. A. (2020). The examination of primary school teachers' financial literacy attitudes and behaviors in terms of different variables. *Ilkogretim Online*, 19(4), 1987–1997. <https://doi.org/10.17051/ilkonline.2020.763118>
- Senejko, A., Łoś, Z., & Oleszkowicz, A. (2019). Perception of money resources and psychological attitudes toward globalised world. *Research in Globalization*, 1, 100007. <https://doi.org/10.1016/j.resglo.2019.100007>
- Sesame Street Workshop. (2021, August 4). *For me for you for later*. Sesame Street in Communities. Retrieved February 12, 2022, from <https://sesamestreetincommunities.org/funder/pnc-grow-great/>
- Shapiro, T., Meschede, T., & Osoro, S. (2013). The roots of the widening racial wealth gap: Explaining the black-white economic divide. Waltham, MA: Institute on Assets and Social Policy, Brandeis University. Retrieved from <http://iasp.brandeis.edu/pdfs/Author/shapiro-thomas-m/racialwealthgapbrief.pdf>
- Sharma, R. K. (2014). Constructivism-an approach to enhance participatory teaching learning. *GYANODAYA: The Journal of Progressive Education*, 7(2), 12–17. <https://doi.org/10.5958/2229-4422.2014.00003.6>
- Shift Processing. (2021, January 7). *Average credit card debt statistics*. U.S. Consumer Debt Statistics Profile. Retrieved September 28, 2021, from <https://shiftprocessing.com/credit-card-debt/>.

- Shim, S. (2012). The ant and the grasshopper revisited: The present psychological benefits of saving and future oriented financial behaviors. *Journal of Economic Psychology*, 33(1), 155–165. <https://doi.org/10.1016/j.joep.2011.08.005>
- Short, K. J., Goetz, J. W., Cude, B. J., Sperling, L., Welch-Devine, M., & Chatterjee, S. (2019). A case for graduate student financial education. *College Student Journal*, 53(1), 47–55.
- Slabbert, I. (2016). Domestic violence and poverty. *Research on Social Work Practice*, 27(2), 223–230. <https://doi.org/10.1177/1049731516662321>
- Sohilauw, M. I., Nohong, M., & Sylvana, A. (2020). The relationship between financial literacy, rational financing decision, and financial performance: An empirical study of small and medium enterprises in Makassar. *Jurnal Pengurusan*, 59, 1–15.
- Son, J., & Park, J. (2019). Effects of financial education on sound personal finance in Korea: Conceptualization of mediation effects of financial literacy across income classes. *International Journal of Consumer Studies*, 43(1), 77–86. <https://doi.org/10.1111/ijcs.12486>
- South Carolina Department of Education. (2022). *Financial literacy*. Standards and Learning. Retrieved January 24, 2022, from <https://ed.sc.gov/instruction/standards-learning/social-studies/financial-literacy/>
- Starnes, J. R., Di Gravio, C., Irlmeier, R., Moore, R., Okoth, V., Rogers, A., Ressler, D. J., & Moon, T. D. (2021). Characterizing multidimensional poverty in Migori County, Kenya and its association with depression. *PLoS ONE*, 16(11), 1–10. <https://doi.org/10.1371/journal.pone.0259848>

Statista Research Department. (2021, July 16). *Credit card debt in the U.S., quarterly 2021*.

Finance. Retrieved September 28, 2021, from

<https://www.statista.com/statistics/245405/total-credit-card-debt-in-the-united-states/>.

Stoddard, C., & Urban, C. (2018). (rep.). *The effects of state mandated financial education on college financing behaviors*. Retrieved February 15, 2022, from

https://www.nefe.org/_images/research/Effects-of-K-12-Financial-Education-Mandates/Effect-State-Mandated-Fin-Ed-June25-2018.pdf.

Sun, J., Buys, N., & Wang, X. (2012). Association between low income, depression, self-efficacy and mass-incident-related strains: an understanding of mass incidents in China. *Journal of Public Health (Oxford, England)*, 34(3), 340–347.

<https://doi.org/10.1093/pubmed/fdr107>

Szala, G. (2020). Finding your niche. *Investment Advisor*, 40(11), 34–36.

Tang, N., & Peter, P. C. (2015). Financial knowledge acquisition among the young: The role of financial education, financial experience, and parents' financial experience. *Financial Services Review*, 24(2), 119–137.

<https://doi.org/http://www.academyfinancial.org/Abstracts>

Tennessee Department of Education. (2016, April 15). *Personal Finance*. College, Career, and Technical Education. Retrieved January 24, 2022, from

https://www.tn.gov/content/dam/tn/financialinstitutions/images/DOE-TN-cte_std_personal_finance.pdf

Terech, A. (2018). An introduction to marketing and branding. *Generations*, 42(1), 45–49.

Texas Education Agency. (2019, August 23). *Personal Financial Literacy Materials*. Social Studies. Retrieved January 24, 2022, from <https://tea.texas.gov/academics/subject->

areas/social-studies/personal-financial-literacy-materials-approved-november-2012-and-earlier

The Holy Bible, New International Version. (2011). International Bible Society. (Original work published 1973).

Thorne, J. A. (2013). Biblical online education: contributions from constructivism. *Christian Education Journal*, 10(1), 99–109.

UC Regents. (2021). *Statistical Methods and Data Analysis*. OARC Stats. Retrieved November 28, 2022, from <https://stats.oarc.ucla.edu/other/gpower/one-way-anova-power-analysis/>

Ultanir, E. (2012). An epistemological glance at the constructivist approach: Constructivist learning in Dewey, Piaget, and Montessori. *Online Submission*, 5(2), 195–212.

United States Department of Education. (2021). *Family educational rights and privacy act*. FERPA. Retrieved January 4, 2022, from <https://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html>

United States Securities and Exchange Commission. (n.d.). *Compound interest calculator*. Investor.gov. Retrieved December 28, 2021, from <https://www.investor.gov/financial-tools-calculators/calculators/compound-interest-calculator>

Utah State Board of Education. (2019, August). *Strands and standards*. General Financial Literacy. Retrieved January 24, 2022, from <https://schools.utah.gov/file/0ef7870d-abb3-4efe-aba0-f186609eee9d>

Vanguard Group. (2019). *Bring financial lessons to life for students of any age*. My Classroom Economy. Retrieved February 12, 2022, from <https://myclassroomeconomy.org/>

van Rooij, M. C. J., Lusardi, A., & Alessie, R. J. M. (2012). Financial literacy, retirement planning and household wealth. *Economic Journal*, 122(560), 449–478.

- Virginia Department of Education. (2021). *Economics & Personal Finance*. Standards of Learning Resources. Retrieved January 24, 2022, from https://www.doe.virginia.gov/testing/sol/standards_docs/economics_personal_finance/index.shtml
- Vreeland, A., Gruhn, M. A., Watson, K. H., Bettis, A. H., Compas, B. E., Forehand, R., & Sullivan, A. D. (2019). Parenting in context: Associations of parental depression and socioeconomic factors with parenting behaviors. *Journal of Child & Family Studies*, 28(4), 1124–1133. <https://doi.org/10.1007/s10826-019-01338-3>
- Vultaggio, M., & Richter, F. (2019, December 18). *Infographic: Most Americans lack savings*. Statista Infographics. Retrieved September 27, 2021, from <https://www.statista.com/chart/20323/americans-lack-savings/>.
- Wagner, J., & Walstad, W. B. (2019). The effects of financial education on short-term and long-term financial behaviors. *Journal of Consumer Affairs*, 53(1), 234–259. <https://doi.org/10.1111/joca.12210>
- Warner, R. M. (2013). *Applied statistics: From bivariate through multivariate techniques*. Thousand Oaks, CA: SAGE Publications.
- Weida, E. B., Phojanakong, P., Patel, F., & Chilton, M. (2020). Financial health as a measurable social determinant of health. *PLoS ONE*, 15(5), 1–14. <https://doi.org/10.1371/journal.pone.0233359>
- Wheeler, B. E., Kerpelman, J. L., & Yorgason, J. B. (2019). Economic hardship, financial distress, and marital quality: The role of relational aggression. *Journal of Family and Economic Issues*, 40(4), 658–672.

- Wojcik, N. (2017, May 17). *Here are 10 financial terms everyone should know*. Portfolio Perspective. Retrieved December 23, 2021, from <https://www.cnbc.com/2017/05/17/here-are-10-financial-terms-everyone-should-know.html>
- Wong, M. (2020). Your money and your life. *Hoover Digest: Research & Opinion on Public Policy*, 20(4), 108–112.
- 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>
- Xyst, K. (2016). Constructivism, Dewey, and academic advising. *NACADA Journal*, 36(2), 11–19.
- Yates, S. R. (2019). From financial education to financial literacy to financial stability: Evidence of national and regional connections. *Journal of Personal Finance*, 18(2), 51–59.
- Yee, K. (2019, September 16). *Arizona students must now take a financial literacy class to graduate*. The Arizona Republic. Retrieved January 17, 2022, from <https://www.azcentral.com/story/opinion/op-ed/2019/09/10/financial-literacy-now-high-school-requirement-arizona/2215134001/>
- Zerihun, M. F., & Makgoo, D. M. (2019). Assessment of financial literacy on financial management outcomes: Evidence from the south Africa employed youth. *Journal of Global Business & Technology*, 15(2), 48–63.
- Zhang, H., Watson-Singleton, N. N., Pollard, S. E., Pittman, D. M., Lamis, D. A., Fischer, N. L., Patterson, B., & Kaslow, N. J. (2019). Self-criticism and depressive symptoms:

Mediating role of self-compassion. *Omega: Journal of Death & Dying*, 80(2), 202–223.

<https://doi.org/10.1177/0030222817729609>

Appendix A: Quantitative Survey

1. As of the end of the 2021-2022 school year, how many years have you taught with the Department of Defense Education Activity (DoDEA)?

____ 0-8 years

____ 17-24 years

____ 9-16 years

____ 25 or more years

2. What is the current grade level that you are teaching with DoDEA? If teaching multiple grades, please check all that that apply.

____ Sure Start

____ Grade 6

____ Kindergarten

____ Grade 7

____ Grade 1

____ Grade 8

____ Grade 2

____ Grade 9

____ Grade 3

____ Grade 10

____ Grade 4

____ Grade 11

____ Grade 5

____ Grade 12

3. What is your current (or former) position or job title with DoDEA?

4. Aside from your current position, what other grade levels have you taught? (Please check all that apply.)

____ Sure Start

____ Grade 4

____ Kindergarten

____ Grade 5

____ Grade 1

____ Grade 6

____ Grade 2

____ Grade 7

____ Grade 3

____ Grade 8

____ Grade 9

____ Grade 11

____ Grade 10

____ Grade 12

5. What is your gender?

____ Male

____ Female

6. How many college/university courses have you taken in economics, finance, or financial literacy?

____ None

____ One

____ Two

____ More than two

7. Do you feel competent to teach financial literacy to students?

____ No

____ Slightly competent

____ Moderate competent

____ Extremely competent

8. What is your perception of the amount of prior knowledge your students have regarding financial concepts?

____ None at all

____ A little

____ A moderate amount

____ A great deal

9. What is your perception of where your students obtained their prior knowledge regarding financial concepts? (Please check all that apply.).

- ☐ Home environment
 - ☐ DoDEA curriculum
 - ☐ Students have no prior knowledge of financial concepts
 - ☐ Other (Please specify below.)
-

10. How likely are your students to be cognitively ready to understand grade-level financial education concepts?

- ☐ Extremely likely
- ☐ Slightly likely
- ☐ Slightly unlikely
- ☐ Extremely unlikely

11. In your opinion, how appropriate is it to teach students the principles of saving money in the kindergarten through grade twelve (12) curricula?

- ☐ Extremely appropriate
- ☐ Slightly appropriate
- ☐ Slightly inappropriate
- ☐ Extremely inappropriate

12. In your opinion, how appropriate is it to teach students the principles of budgeting money in the kindergarten through grade twelve (12) curricula?

- ☐ Extremely appropriate
- ☐ Slightly appropriate
- ☐ Slightly inappropriate
- ☐ Extremely inappropriate

13. In your opinion, how appropriate is it to teach students the principles of financial goal setting in the kindergarten through grade twelve (12) curricula?

- ☐ Extremely appropriate
- ☐ Slightly appropriate
- ☐ Slightly inappropriate
- ☐ Extremely inappropriate

14. In your opinion, how appropriate is it to teach students the concepts related to business and entrepreneurship in the kindergarten through grade twelve (12) curricula?

- ☐ Extremely appropriate
- ☐ Slightly appropriate
- ☐ Slightly inappropriate
- ☐ Extremely inappropriate

15. In your opinion, how appropriate is it to teach students the principles of investing and wealth building in the kindergarten through grade twelve (12) curricula?

- ☐ Extremely appropriate
- ☐ Slightly appropriate
- ☐ Slightly inappropriate
- ☐ Extremely inappropriate

16. How likely is financial literacy to benefit students in reducing anxiety that is caused by financial need?

- ☐ Extremely likely
- ☐ Slightly likely
- ☐ Slightly unlikely

____ Extremely unlikely

17. How likely is financial literacy to benefit students reducing depression caused by financial need?

____ Extremely likely

____ Slightly likely

____ Slightly unlikely

____ Extremely unlikely

18. How likely is financial literacy to benefit students in reducing discord among family members caused by financial need?

____ Extremely likely

____ Slightly likely

____ Slightly unlikely

____ Extremely unlikely

19. How likely will using productive financial behaviors benefit students' psychological well-being?

____ Extremely likely

____ Slightly likely

____ Slightly unlikely

____ Extremely unlikely

20. How likely is financial literacy to benefit students in positively affecting their psychological well-being?

____ Extremely likely

____ Slightly likely

____ Slightly unlikely

____ Extremely unlikely

21. What financial skills and concepts do you teach in your classroom? (Please check all that apply.)

____ Coin identification

____ Counting money

____ Principles of saving money

____ Budgeting

____ Balancing a checkbook

____ Managing or avoiding debt

____ Financial goal setting

____ Business and enterprise

____ Investing

____ Wealth Building

____ Other _____

22. In what subject areas does financial literacy apply? (Please check all that apply.)

____ Language Arts

____ Math

____ Science

____ Social Studies

____ Other (Please specify.) _____

____ Other _____

____ Other _____

23. Rank the financial literacy skills and concepts in order of importance (1= most important).

- ____ Coin identification/counting money
- ____ Principles of saving money
- ____ Budgeting/Accounting
- ____ Banking: Savings and checking accounts
- ____ Assets vs debt
- ____ Financial goal setting
- ____ Business and enterprise
- ____ Investing
- ____ Wealth Building
- ____ Other _____
- ____ Other _____
- ____ Other _____
- ____ Other _____
- ____ Other _____

24. Two survey participants will win a \$20 gift card to Starbucks for completing the survey.

If you would like to be entered into the raffle to win a gift card, please email:

cdavis229@liberty.edu

Appendix B: Institutional Review Board Approval Letter**LIBERTY UNIVERSITY**
INSTITUTIONAL REVIEW BOARD

November 16, 2022

Cynthia Davis

Mary Hollingsworth

Re: IRB Exemption – IRB-FY22-23-415 Examining Teacher Perceptions of the Influence of Financial Literacy on the Psychological Well-Being of Military-Connected Students in Kindergarten through Grade Twelve

Dear Cynthia Davis, Mary Hollingsworth,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP

Administrative Chair of Institutional Research

Research Ethics Office