INVESTOR INVESTMENT CHOICES FOR BETTER DECISION-MAKING AMONG INVESTMENT OPTIONS

by

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ABSTRACT

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There is a problem in society regarding individual investing. That problem is how investors can decide where to invest their money when there are many viable options that are not clearly explained or that the investor does not understand. The purpose of this qualitative case study was to explore the decision-making process of investors when choosing among investments such as stocks, bonds, mutual funds, index funds, savings, children's education, and retirement plans, to name a few, and how it be beneficial to them in the future. The theoretical framework that supported this qualitative case study was constructed from Markowitz's modern portfolio theory, Kahneman & Tversky's prospect theory, Goleman's five components of emotional intelligence (1995), and Mayer and Salovey's (1990) four branch model of emotional intelligence. The research questions developed for this study focused on what factors influence individual investors when deciding upon an investment option, what informational sources individual investors use to make informed investment decisions, what investors do not understand when choosing investment options, and what investors need to do to make better-informed investment decisions. Interviews were conducted with a convenience sample of 12 private investors selected from the Cleveland Investment group and from the Cincinnati Investment Group research population who responded to the request to participate in the study. The results indicated there was an ample learning opportunity for investors in various forms—portfolio management, accounting, investment analysis, and emotional intelligence management—to help them make better-informed decisions when making investment choices. Financial planners could benefit from the results by working with investors to meet their investment goals.

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CHAPTER 1

INTRODUCTION AND STATEMENT OF THE PROBLEM

Introduction

The problem is that investors have so many options available to them today compared to when investing started with only stocks and bonds. This study's purpose was to investigate how an investor decides among the many options available to them and how they benefit from them going forward. Modern portfolio theory, prospect theory, and emotional intelligence theory provided a foundation for the study to help investors maximize a return on their investment. This chapter contains background of the problem, statement of the problem, the purpose of the study, theoretical support for the study, research questions, assumptions, scope and delimitations, limitations, nature of the study, definitions of terms, significance of the study, and a summary.

Background of the Problem

Remund (2010) defined financial literacy as a person's competency for managing money and established five categories of conceptual financial literacy: knowledge of financial concepts, ability to communicate about financial concepts, aptitude in managing personal finances, skill in making appropriate financial decisions, and confidence in planning effectively for future financial needs. He also identified four categories of operational financial literacy: budgeting, saving, borrowing, and investing.

An investor is an individual or firm with an expectation of receiving a financial return on their capital investment (Chen, 2019). The Security and Exchange Commission (SEC) referred to an *accredited investor* as did Lozza et al. (2017), and they identified different types of investors as risk-averse, risk-seeking, and neither risk-averse nor risk-seeking. The SEC accredited investor is a qualified person with income exceeding $200,000 in each of the two most recent

years; joint income with a spouse exceeding $300,000 for those years; or joint net worth with a spouse that exceeds $1 million at the time of the purchase excluding the value of the primary residence (Waddell, 2014). Risk-averse is when investors are faced with choosing two investments who expect a similar return but prefer a low-risk option (Chen, 2019). Risk-seeking is when investors accept greater volatility and uncertainty from investments or anticipate higher returns from trading in exchange (Kenton, 2019). Risk-neutral is when an individual evaluates alternative investments (Chen, 2019).

The history of investing starts with stocks. Stock trading began as early as the 18th century with the first stock exchange in 1785, called Amsterdam's Bourse. In the United States trading stocks started in the mid-19th century. In the early 1900s, individuals began purchasing stocks and stock exchanges began to form, such as the Philadelphia Stock Exchange in 1800, New York Stock Exchange in 1817, and the New York Curb Agency in 1908, which later became the American Stock Exchange in 1953 (Cuadra, 2002). The first bond ever recorded was in 2400 B.C., but the first bond ever recorded in the United States was a government bond that began with the Revolutionary War (1775–1783). The treasury bond was issued to fund World War I (A Brief History of Bond Investing, n.d.). Today, there are many investment choices for investors in addition to stocks and bonds such as commodities, retirement plans, gold, silver, futures, mutual funds, exchange-traded funds (ETFs), foreign exchange, and real estate (Chen, 2019). Because of the many investment options to be considered by individual investors, it is necessary to research the process current investors use to choose investments and what they perceive as needs to improve making investment decisions and hence their investment performance.

Statement of the Problem

There is a problem in society about individual investing. That problem is how an investor can decide where to invest their money when many viable options for them are not clearly explained or understood. Investors can choose from different types of stocks, bonds, mutual funds, index funds, savings, children's education, and retirement plans. Sahi (2017) stated there are more investment opportunities than there was a decade ago that makes it difficult for an investor to evaluate all these opportunities when investing. This problem affects new and inexperienced investors who do not understand the financial terminology, financial documents, and financial theories of investing.

Purpose of the Study

The purpose of this qualitative case study was to explore the process individual investors use to decide on investment options, the basic principles of investing those individual investors understand, and those they don't understand, as well as what they view their needs are to improve their investment performances. Entrop et al. (2016) suggested the problems with individual investing do not benefit from financial innovation, making poor choices of structured product investments, and are prone to the disposition effect.

Theoretical Support for the Study

The theoretical framework was based on the theories of modern portfolio theory, prospect theory, and emotional intelligence theory. Modern portfolio theory related to the problem by suggesting how investors can act more rationally in making investment decisions. Portfolio theory is important for investors to learn how to diversify instead of focusing on one investment strategy. Prospect theory related to the problem by helping investors through a two-step process representation (a mental aspect of gains and losses from risk) and evaluation (evaluating

representation of gains and losses if it is appealing; Barberis et al., 2016). Emotional intelligence theory related to the problem for investors in dealing with their emotional decision making through Goleman's five components of emotional intelligence and Mayer and Salovey's four-branch model. Markowitz, in 1952, developed the modern portfolio theory (Grujić, 2016). The theory is based on two concepts:

- An investor requires from their portfolio an acceptable level of risk to expect a maximized return.
- An investor expects a certain level of return from the portfolio with a decreased level of risk. (Grujić, 2016)

For an investor to achieve a maximized return from their portfolio with an acceptable level of risk is to construct a portfolio of multiple assets (Chen, 2019). Therefore, if the investor constructs a portfolio of multiple assets instead of one, they can achieve considerable portfolio risk reduction (Biswas, 2015).

Kahneman and Tversky's prospect theory is based on individual decision making under risk and was developed in 1979. The theory has two phases in the choice process: editing consists of coding (gains and losses), combination (probabilities with identical outcomes), segregation (segregating riskless component from risk component), cancellation (discarding of components), and evaluation is developed after editing (Kahneman & Tversky, 1979, p. 274). As with modern portfolio theory, prospect theory related to the problem by looking into rationality with investment decisions and investigating uncertainty with investing.

The two theories of emotional intelligence that supported the problem were Goleman's (1995) five components of emotional intelligence and Mayer and Salovey's (1990) four-branch model of emotional intelligence. Goleman's (1995) five components of emotional intelligence are self-awareness, self-regulation, motivation, empathy for others, and social skills (Ovans,

2015). Mayer and Salovey's four-branch model consist of perceived emotion, facilitate emotion in thought, understanding emotions, and managing emotions (Mayer et al., 2004). Goleman's five components of emotional intelligence focus on self-awareness (motives and desires) and self-regulation (controlling one's emotions). The four-branch model focuses on perceived emotion (recognition), facilitating emotion in thought (intelligence), understanding emotions (analyzing), and managing emotions (self-management; Mayer et al., 2004). These emotional intelligence theories supported the problem as investors have trouble in managing their emotions as they make irrational decision-making due to being emotionally strapped (e. g., greed, fear, anger) from their past experiences, preferences, and knowledge from being overwhelmed in choosing various financial products (Johnsi & Sunitha, 2019). The theories that supported the problem will be discussed in more detail in Chapter 2.

Research Questions

The following research questions supported the problem and purpose of this research.

1. What are the factors that influence individual investors when deciding upon an investment option?
2. What sources of information do individual investors use when making investment decisions?
3. What investment options do investors not understand?
4. What do investors perceive as their needs to make better investment decisions?

Assumptions

The following assumptions are factors that were taken for granted about the research and were not part of the overall study:

- Participants will answer the interview questions regarding their investment decisions honestly.
- Participants will answer the interview questions regarding their investment decisions free from biases.
- Participants are aware of the different investment options.
- The interview questions/questionnaire will provide an understanding of an investor's emotional intelligence regarding their investment decisions.
- With convenience sampling, there could be a problem with inexperienced and experienced investors and outliers from the chosen population.
- The age and gender of the participant may affect the responses from all participants.

Scope and Delimitations

The scope and delimitations are the breadths of the study. The sample was obtained from two regional investor groups, namely the Cleveland Investment Group and the Cincinnati Investment Group. Therefore, the results of this study cannot be generalized to all employees across the United States. A convenience sample of 12 private investors was selected from those in the two investor groups who responded to the request to participate in the study.

Limitations

Limitations impact the validity of the research from internal and external threats. The limitations below may have an impact on the research findings.

- The small sample size compared with the target population's size may not be perceived as representative of the larger target population.

- Gaining an understanding of investor emotional intelligence regarding their investment decisions may be difficult due to the lack by the participants about the many investment options available.
- This research is not studying the responses about investor behavior from the viewpoint of financial advisers which may contribute additional perceptions about investor investing needs.

Nature of Study

The research design was a qualitative case study. The qualitative aspect of the case study referred to the social and cultural contexts that characterized the subjects (investors) and their environment (investments; Shkedi, 2019). Trochim and Donnelly (2008) defined a case study as an intensive study of a specific individual or specific context. Therefore, the method was appropriate to look through the lens of the investor to investigate obstacles in trying to choose from so many investment choices.

The target populations consisted of two groups. One was a national investor group, which was a large organization that spanned multiple regions in the United States. The research population for this target population was obtained from a regional investor group, the Cleveland Investment Group. The other target population was also a national investor group, which was a large organization that spans across multiple regions in the United States. The research population for this target population was obtained from a regional investor group, the Cincinnati Investment Group.

The research population for the Cleveland Investment Group consisted of 250 individual investors who were at least 18 years of age and were private investors. The research population for the Cincinnati Investment Group consisted of 150 individual investors who are at least 18

years of age and are private investors. A convenience sample of 12 private investors was selected from those in the two research populations who responded to the request to participate in the study. Equal representation from the two groups was not possible because of the difference in the number of respondents from the groups. Two investors were selected for the pilot study, one from each investor group.

The data collection method consisted of two parts, namely a questionnaire (Appendix A) consisting of lists of options for participants to respond to and an interview via ZOOM with each participant (Appendix B). The interview did not take longer than 45 minutes. An analysis of the data from the questionnaire and interview questions was done by the researcher and a colleague familiar with investing. Themes were developed for each research question.

Definition of Terms

The following terms are defined in a way, so they are familiar through the reader's lens throughout the study.

Emotional intelligence: Clancy (2014) defined emotional intelligence *as the ability to perceive, manage, and evaluate emotions in oneself, in others, and in groups.*

Behavioral finance is defined as "the study of the influence of psychology on the behavior of investors or financial analysts" (Behavioral Finance, n.d.).

Financial literacy: Remund (2010) defined financial literacy as a person's competency for managing money.

Risk-averse: Risk averse is where investors are faced with choosing two investments that expect a similar return but prefer a low-risk option (Chen, 2019).

Risk-seeking: Risk seeking is where investors accept greater volatility and uncertainty from investments or anticipate higher returns from trading in exchange (Kenton, 2019). Neither would be neither risk-averse nor risk-seeking but risk-neutral (individual evaluating alternative investments) (Chen, 2019).

Portfolio management: Hayes (2019) defined portfolio management as Portfolio management is the art and science of making decisions about investment mix and policy, matching investments to objectives, asset allocation for individuals and institutions, and balancing risk against performance.

Investor: An investor is an individual or firm with an expectation of receiving a financial return on their capital investment (Chen, 2019).

Significance of Study

The reason for the research is that investor behavior is ever-changing due to an increase in trading volume and options for investment by investors, and they have become unable to do the research required for understanding company financial data (Smith & Harvey, 2011). Why does this happen? Does the problem lie with investors not understanding the financial terminology, financial documents, and financial theories of investing (e.g., how to analyze financial statements, financial adviser trust, how to analyze market trends, and information overload)? This study provided insight into the reasons for investment options, gaining an understanding of the basic principles of investing to provide clarity, identifying investor needs for better investment performance, and gaining an understanding of emotional intelligence impacts investor investment decisions. By having a better understanding of investment options, investors can improve their performance with little emotional intelligence impact. The study provided awareness of the individual needs of investors so they can benefit from investing in the

various options available to them. Investors need to know how to invest actively instead of letting emotions get in the way and to treat investment as an opportunity by delving into the individual's needs on a larger scale.

Summary

Investors need to become investment savvy and decide where to invest their money when there are so many viable options for them compared to when there was only stocks and bonds. The purpose of this qualitative case study was to explore the process individual investors use to decide on investment options, basic principles of investing those individual investors understand, and those they do not understand, as well as what they view as their needs to improve their investment performance. The data collection for the study included 12 private investors from two separate investor groups. Each investor came from various levels of investing experience. When the data was collected, it was reviewed, analyzed, and used to develop themes that help to explain each research question. Chapter 2 will contain a review of the literature about the problem, theoretical foundation, data to be collected to explain the research questions supporting the problem, and the research design.

CHAPTER 2

LITERATURE REVIEW

Introduction

There is a problem in society about individual investing. That problem is how a person can decide where to invest their money when many viable options for them are not clearly explained or understood. The current situation is that investors can choose from different types of stocks, bonds, mutual funds, index funds, savings, children's education, and retirement plans, to name a few. Sahi (2017) stated there are more investment opportunities than there were a decade ago, which makes it difficult for an investor to evaluate all these opportunities when investing. This problem affects new and inexperienced investors who do not understand financial terminology, financial documents, and financial theories of investing.

The purpose of this qualitative case study was to explore the process individual investors use to decide on investment options, the basic principles of investing those individual investors understand, those they do not understand, as well as what they view as their needs are to improve their investment performance. Entrop et al. (2016) suggested individual investors are not benefiting from financial innovation, make poor choices of structured product investments, and are prone to the disposition effect. Chapter 2 contains a literature review of the problem, theoretical framework, investor influencing factors, sources of information, investment options, needs of investors, research design, and a summary.

The literature search strategy consisted of using keywords related to the topic, searching various databases and the internet, and bibliographic mining. The keywords included *investor*, *investors*, *investing*, *investment*, *investments*, *portfolio*, *portfolio investment*, *portfolio management*, *asset management*, *investor behavior*, *investor decision making*, *portfolio decision making*, *behavioral finance*, *psychological*, and *emotional intelligence*. The databases for the literature review included but were not limited to the following: EBSCO, ProQuest, Wall Street Journal, Merchant InvestorEdge, Gale PowerSearch, ProQuest eBook central, and eBooks on EBSCOhost. Bibliographic mining involved researching references provided by other articles in finding related articles to the topic.

Table 1

Literature Review Concept Map

Section	Reference 1 & 1a	Reference 2
Problem	https://www.investopedia.com /articles/active-trading/013015/worst-mistakes-beginner-traders-make.asp Entrop, O., McKenzie, M., Wilkens, M., & Winkler, C. (2016). The performance of individual investors in structured financial products. Review of Quantitative	Danila, N., Ali, Z., Bunyamin, & Marlinda, D. K. (2019). Socio-Demographics Characteristics on Investment Objectives of Individual Investors: Empirical Study in Indonesia. Journal of Accounting, Business & Management, 26(2), 12–34. https://doi.org/10.31966/jabminternational.v26i2.410

	Finance & Accounting, 46(3), 569–604. https://doi.org/10.1007/s11156-014-0479-8	
Theoretical Framework	Grujić, M. (2016). Application of the Modern Portfolio Theory in Diversification of the Debt Securities Portfolio in Emerging Markets. Zbornik Radova Ekonomskog Fakulteta u Istocnom Sarajevu, (13), 67–80. https://doi.org/10.7251/ZREFIS1613067G	Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional Intelligence: Theory, Findings, and Implications. Psychological Inquiry, 15(3), 197–215. https://doi.org/10.1207/s15327965pli1503_02
Investor Influencing Factors	Nagy, R. A., & Obenberger, R. W. (1994). Factors Influencing Individual Investor Behavior. Financial Analysts Journal, 50(4), 63–68. https://doi.org/10.2469/faj.v50.n4.63	Sahi, S. K. (2017). Psychological biases of individual investors and financial satisfaction. Journal of Consumer Behaviour, 6, 511. https://doi.org/10.1002/cb.1644

Sources of Information		
Investment Options	https://www.bankrate.com/investing/best-investments/	https://investor.vanguard.com/investing/investor-education
Needs of Investors	https://www.kiplinger.com/article/investing/T023-C032-S014-what-an-investor-wants-what-an-investor-needs.html	Lydenberg, S. (2013). Responsible Investors: Who They Are, What They Want. Journal of Applied Corporate Finance, 3, 44. https://doi.org/10.1111/jacf.12027
Research Design	Tetnowski, J. (2015). Qualitative Case Study Research Design. Perspectives on Fluency & Fluency Disorders, 25(1), 39–45. https://doi.org/10.1044/ffd25.1.39	Gog, M. (2015). Case Study Research. International Journal of Sales, Retailing & Marketing, 4(9), 33–41.
Summary		

Theoretical Framework

The theoretical framework supporting the problem was based on the theories of modern portfolio theory, prospect theory, and emotional intelligence theory. Markowitz's modern portfolio theory related to the problem by suggesting how investors can act more rationally in making investment decisions. The modern portfolio theory is important for investors to learn how to diversify instead of investing in a single area. Kahneman and Tversky's prospect theory related to the problem by helping investors through a two-step process representation (gains and losses from risk) and evaluation (representation of gains and losses; Barberis et al., 2016). Emotional intelligence theory related to the problem for investors in dealing with their emotional decision-making in using Goleman's five components of emotional intelligence (Savel & Munro, 2016) and John Mayer and Peter Salovey four-branch model (Sadri, 2012).

Modern Portfolio Theory

Markowitz (1952) developed the modern portfolio theory (Grujić, 2016). The theory is based on two concepts:

- An investor requires from their portfolio an acceptable level of risk to expect a maximized return.
- An investor expects a certain level of return from the portfolio with a decreased level of risk (Grujić, 2016).

To achieve a maximized return from their portfolio with an acceptable level of risk, an investor can construct a portfolio of multiple assets (Chen, 2019). Therefore, if the investor constructs a portfolio of multiple assets instead of one, they can achieve considerable portfolio risk reduction (Biswas, 2015).

What are some of the definitions, criteria, assumptions, advantages, and disadvantages of modern portfolio theory? WallStreetMojo defined modern portfolio theory as "an investing model in which investors invest with the motive of taking the minimum level of risk and earning the maximum amount of return for that level of acquired risk". The Business Dictionary definition is a "set of concepts aimed at building a most efficient collection (portfolio) of different types of assets, based on the observation that although investors want high returns, they dislike high risk (likelihood of the deviation of an actual return from the anticipated return)." Chen (2020) defined the modern portfolio theory as a "theory on how risk-averse investors can construct portfolios to optimize or maximize expected return based on a given level of market risk, emphasizing that risk is an inherent part of higher reward". The criteria for the statistical analysis of modern portfolio theory for each investment (stocks, bonds, etc.) are; expected rate of return E (r), standard deviation of returns, σ, and correlation coefficients, ρ. Investor assumptions for using this theory are: a probability distribution of returns, risk estimates are proportional to the variability of the returns, decisions are based on only the expected return and risk statistics, and preferring higher returns to lower returns (Frances & Kim, 2013). The advantages of modern portfolio theory are evaluation and managing risks of investments and portfolio diversification, and disadvantages are company's past performance, correlations of assets change over a period, securities have minimum order sizes (WallStreetMojo, 2020).

Santos and Brandi (2017) conducted a study using modern portfolio theory (MPT) as well as an overview of it to calculate composite competitiveness indicators from a group of five countries (Brazil, Russia, India, China, and South Africa). The input dataset used for the study came from the Global Competitiveness Index (GCI). Using MPT statistical analysis mentioned 12 pillars scored from 1 to 7 (7 being the highest): institutions, infrastructure, macroeconomic

environment, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, market size, business sophistication, and innovation in analyzing Brazil's competitiveness. The findings for Brazil showed the portfolio of technological readiness, infrastructure, and market size minimizes risk while maximizing expected return. The findings for Russia showed market size, high education and training, and labor market efficiency as minimizing risk while maximizing expected return. India showed infrastructure, macroeconomic environment, and high education and training as important. China emphasized market size, innovation, and business sophistication. South Africa's competitive indicators included technological readiness, financial market development, and high education and training. The results of this study indicated different competitive factors in these countries that provided knowledge of risks with associated expected returns based on competitiveness. These results provide data about different factors that can influence an individual investor when making investment decisions.

Širůček and Křen (2015) conducted a study using modern portfolio theory (MPT) to find the most suitable method for optimal portfolio compilation that favors stocks with high or low beta coefficients or random selection to bring the investor the highest return with a certain level of risk or a lower level of risk with a certain level of return. The sample used for the study was the Dow Jones Industrial Average (DJIA) because it accounts for 42% of global market capitalization. The capital asset pricing model (CAPM) and its maximization task to set up an optimal portfolio (portfolio of low beta stocks, portfolio of high beta stocks, and portfolio using random stock picking) from all stocks included in the index. The results from low beta stocks had the second highest rate of return, but the risk increased; high stocks had low returns with high risk; and random picking had the third lowest rate of return and the third lowest risk. The

authors emphasized that to select low beta stocks and not select by random picking, the investor should participate in capital market returns but will find it difficult to monitor market trends and events from companies' financial statements for long-term investments. These results contribute to exploring the problem of what individual investors can use in making investment decisions by changing the sample stocks and selecting from developing markets or combing from several countries.

Thirimanna et al. (2013) conducted a study using a cointegration approach and modern portfolio theory and capital market theory. They used stock market trading to develop portfolios and use the better performances from them to compare with the Sharpe ratio, information ratio, return, and risk in determining the best portfolio with the best strategy. The methodology of the study develops a sector portfolio from the Colombo Stock Exchange (CSE), consisting of 241 companies using daily sector indices from the two strategies mentioned above to determine the ideal portfolio as well as the optimal portfolio selection strategy. The data set consisted of daily closing sector indices using an in-sample from the beginning of 2009 through 2011 and a back-test sample was from January 3rd to March 31st, 2011. A three-step process was used to determine the sector portfolio for both strategies. The findings showed that the market portfolio was the safest portfolio compared to the cointegration approach, and it outperformed every other portfolio but generated negative returns over time. These results were related to the problem of this study by suggesting that the market portfolio could be used by investors in terms of profitability and portfolio risk aversion.

Prospect Theory

Kahneman and Tversky's prospect theory is based on individual decision making under risk and was developed in 1979. The theory has two phases, namely editing and evaluation in the

choice process; editing consists of coding (gains and losses), combination (probabilities with identical outcomes), segregation (segregating riskless component from risk component), and cancellation (discarding of components); evaluation is developed after editing (Kahneman & Tversky, 1979, p. 274). As with modern portfolio theory, prospect theory was related to the problem by looking into rationality about investment decisions and investigating uncertainty when investing.

Chen (2020) defined prospect theory as a "theory that assumes losses and gains are valued differently, and thus individuals make decisions based on perceived gains instead of perceived losses". Corporate Financial Institute defined prospect theory as "a psychology theory that describes how people make decisions when presented with alternatives that involve risk, probability, and uncertainty". The Business Dictionary definition is a "theory that suggests that individuals place more emphasizes on gains rather than losses and as a result, will try to make decisions that contribute to gains". Although these three definitions have a somewhat different emphases, they all focus on gains and losses and the characteristics of investing in risk, probability, and uncertainty. The criteria of prospect theory are that people evaluate choices concerning a reference point by being either risk averse (behaving cautiously in an advantageous situation) when it comes to protecting their gains and avoiding losses or risk acceptant (risky behavior in a disadvantage situation) that may reverse or worsen losses (He & Fang, 2012). Rossiter (2019) provided four criticisms of prospect theory: that it is unoriginal, requires high mathematical ability, information processing failed measures, and it is not applicable to real-world decisions. Unoriginal means that prospect theory rests solely on the concept of loss aversion. The high mathematical ability of prospect theory requires a knowledge of probability which makes the problems difficult to solve. Information processing failed measures of prospect

theory in checking how the respondents did process each prospect remains speculative and unproven. Real-world decisions of prospect theory should be whether to adopt a single prospect instead of a choice between two prospects. The Corporate Financial Institute provided two criticisms of prospect theory: lack of psychological explanations and inadequate framing theory. Psychological explanations came from psychologists who noted that factors such as human emotional and affective responses that are important in the decision-making process are absent in the model. Inadequate framing theory is an overlapping of competing frames that decision makers often deal with.

Muralidhar (2018) conducted a study of the consistency in risky gambles of investment decisions. The data for the study used Kahneman-Tverky's (1979) prospect theory questionnaire to test a diverse database of 442 people (81 investment professionals, 297 teens, and 64 nonprofession adults) by accounting factors like age, gender, experience, and literacy. The methodology behind the study consisted of Rikstyle (total risk-averse, moderately risk-averse, moderately risk-seeking, totally risk-seeking), consistency scoring (comparing Option A and Option B on a percentage chance of winning *x* amount of money), consistency of individuals, and the consistency smile (graphical presentation where the line fitting the points appears to be smiled shaped). The findings from the Rikstyle showed 25 were risk-seeking, 130 were moderately risk-seeking, 202 were moderately risk adverse, and 85 were risk-averse. The findings from consistency scoring showed that an individual should choose Option A (consistently rational) for gambles or Option B (consistently "irrational") for both gambles, independent of the expected value. The findings from the consistency of individuals showed two individuals were perfectly consistent, 10 individuals were perfectly inconsistent, two were risk-averse, and one individual was risk-seeking. The consistency smile showed individuals with

strong risk preferences (i.e., at both extremes of risk aversion and risk-seeking behavior) and higher consistency than those with weaker risk appetites, where there appears to be a dip inconsistency, weak preferences, and low consistency. These results were related to the problem of this study by suggesting that consistency in decision-making could be used by investors in selecting an asset manager for investment success.

De Bortoli et al. (2017) conducted a study using four paradigms to investigate which paradigm portrayed the risk profile manifested by investors in their financial asset investment decisions. The four paradigms included prospect theory, investor profile analysis (IPA), The Big Five Personality Test, and the Cognitive Reflection Test (CRT), which investigated which paradigm portrayed the risk profile manifest by investors in their financial asset investment decisions. Prospect theory is where people are risk-averse to gains and risk-seeking to losses. IPA consists of several different characteristics including their financial situation, experience with investments, risk tolerance, investment time horizon, and investment objectives. The Big Five Personality Test groups five dimensions: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. CRT attempts to measure people's cognitive capacity to substitute an impulsive, and incorrect, response with a reflection that leads to the correct response. The methodology for the study employed the experimental method. The data collection consisted of 140 undergraduate students from the economics and electrical engineering courses at the Federal University of Santa Catarina. However, some were excluded due to operational problems and knowing the answers to the CRT questionnaire, which left a final sample of 124. The questionnaire contained five blocks of questions; the first block was 10 questions related to investor profile, the second block was 10 questions about investment scenarios relative to prospect theory, the third block was 10 questions relative to the Big Five

Inventory, the fourth block was eight questions relative from the Bank of Brazil IPA questionnaire, and the final block was three questions from the CRT. Data analysis used for the study was a logistic regression model. The findings based on investment decision choices showed 11 people were risk-averse, 68 having moderate risk behavior, and 45 in having a daring risk profile. The IPA investor profile findings showed 52.5% was a moderate risk. 35.7% were timid, and 11.7% daring risk. Regarding prospect theory, 92% violated the expected utility theory. The CRT questionnaire indicated that an increase in correct answers triggered a reduction in the probability of greater risk-taking. These results were related to the problem of this study by understanding an investor profile when making investment decisions regarding risk.

Emotional Intelligence

The two theories of emotional intelligence that support the problem are Goleman's (1995) five components of emotional intelligence and Mayer and Salovey's (1990) four-branch model of emotional intelligence. Both relate to the problem that individual investors many times use emotional intelligence in making investment decisions. Mayer and Salovey (1990) defined emotional intelligence as "the capacity to reason about emotions, and of emotions to enhance thinking," and Goleman's definition was "abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one's moods and keep distressed from swamping the ability to think; to empathize and to hope". Wicks et al. (2019) stated there are two common definitions of emotional intelligence but not agreed by researchers in the field: "the ability to monitor the feelings and emotions of the self and others and to use this information to guide one's behaviors, and the ability to identify and control emotions in oneself and others".

Goleman's five components of emotional intelligence are self-awareness, self-regulation, motivation, empathy for others, and social skills (Ovans, 2015). Savel and Munro (2016) provided the background to each of the components. Self-awareness is the process of being aware of an emotional response to a situation. Self-regulation is the process by which we consciously turn an instinctive emotional response into some sort of lesser response or no response at all. Social skill is conscious, focused energy and efforts on managing relationships. Empathy for others is making a deliberate effort to take other people's emotions into account. Motivation is the ability to propel ourselves toward a specific goal. Goleman's components of emotional intelligence emphasize self-awareness as motives and desires and self-regulation as controlling one's emotions. These five components are related to this research study as investors must be self-aware of not being overwhelmed by so many options available to them today compared to when investing started with only stocks and bonds. Individual investors need to use self-regulation on whether to invest or not to invest. Social skills are obtained from acquired learning about investments and how to manage their investment(s). Individual investors should not allow letting empathy of others investor gains and losses affect their decision as to whether to invest. Investors need to develop motivation about setting attainable investment goals.

Mayer and Salovey's four-branch model consist of perceived emotion, facilitate emotion in thought, understanding emotions, and managing emotions (Mayer et al., 2004). Perceived emotion is recognizing and inputting verbal and nonverbal information. Facilitate in thought uses cognitive processes for creativity and problem-solving. Understanding emotions are to understand one's feelings or feelings of others. Managing emotions is self-regulating one's emotions and of other people. These emotional intelligence theories support the problem as investors have trouble managing their emotions. They make irrational decisions due to being

emotionally strapped from their past experiences, preferences, and knowledge, and being overwhelmed in choosing various financial products (Johnsi & Sunitha, 2019).

Johnsi and Sunitha (2019) conducted a study assessing the effect of personality and emotional intelligence on investor behavior. The authors used stratified random sampling from equity investors in Coimbatore, India. The sample consisted of 120 equity investors. A questionnaire consisted of three parts: Goldberg's predominant personality five factors (openness, conscientiousness, extraversion, agreeableness, and neuroticism), Goleman's five elements of emotional intelligence (self-awareness, self-regulation, motivation, empathy, and social skills), and Investor behavior that measured the behavioral biases (herding, loss aversion, overconfidence, anchoring, asymmetric information, cognitive dissonance, mental accounting, status quo bias, sensation seeking, representativeness, risk aversion, and locus of control; Johnsi & Sunitha 2019) . A factor analysis using logistic regression was conducted for the study. The hypothesis for the study tested individual personality traits and emotional intelligence competencies had an impact on investor locus of control bias, investor cognitive dissonance bias, investor overconfidence bias, and investor risk aversion bias. The findings from the study listed below identify the impact of individual personality traits and emotional intelligence on investor behavior. Personality traits extraversion had a significant relationship with locus of control, overconfidence, and cognitive dissonance. Agreeableness had a negative association and conscientiousness had a positive association with the locus of control. Self-awareness competency was positively associated with risk aversion and the locus of control and had a negative association with overconfidence. Empathy competency had a positive association with the locus of control and a negative association with overconfidence and cognitive dissonance. Social skills competency was positively associated with risk aversion, the locus of control, and

overconfidence. Motivation and managing emotions were negatively associated with cognitive dissonance and locus of control. The emotional intelligence competencies of an individual indicated that possessing self-awareness and social skills reflect more behavioral biases. These results were related to the problem of this study by understanding investor behavior when it is impacted by their emotional intelligence and individual personality traits.

Abdillah et al. (2019) conducted a study on the relation between the personality traits, emotional intelligence, and risk tolerance of the investors on investing in digital risk investments (e.g., bitcoin, forex, and others). The emotional intelligence for the study used the Mayer and Salovey four-branch model. The methodology for the study was a quantitative approach with variables tested - independent variables (emotional intelligence locus of control, risk aversion, and financial literacy), dependent variable (IT-based risk investment), and moderate variable (financial literacy). Purposive sampling was used for the study based on a criterion that an investor had invested at least 1 year, was 18 years or older, and had income on a regular basis. Research data from 98 investors were collected using an online questionnaire. The characteristics of the investors showed a median age of 28; 72% were male, had an undergraduate level of education, 41% had invested, and the investment portfolio was dispersed. The data were tested using Partial Least Square (PLS) method. A hypothesis was tested for the study using an inner model test with a 95% confidence level and error in 5% analysis to test the relationship between independent variables to the dependent variable with the moderating variable. The findings from the study showed emotional intelligence and locus of control have a positive effect on digital risk investment intention, but risk aversion and financial literacy have a negative effect. These results were related to the problem of this study by understanding investor emotional intelligence from financial information (financial literacy) in making risky digital investment decisions.

Tanvir et al. (2016) conducted a study on the emotional intelligence of investors and consideration of emotions in their decision makings. The study followed Goleman's emotional intelligence definition as well as Goleman's five components of emotional intelligence, which are self-awareness, self-regulation, motivation, empathy for others, and social skills. The questionnaire contained closed ended 5 elements using a Likert scale, 0=almost never, 1=rarely, 2=sometimes, 3= usually, and 4= almost always. The study was quantitative, using a target population from Islamabad, Karachi, and Lahore stock exchanges. Two hundred twenty-five investors were used for the study with all three stock exchanges. An analysis of the research data used SPSS 20.0 and the tests applied are Descriptive statistics, frequencies, Cronbach's alpha, regression (linear and multi), and correlation (Pearson). The emotional intelligence questionnaire characteristics showed 90.7% were male, their investment experience was 3-5 years, their age was between 35 and 54 years, their nationality was Pakistan, their occupation was private, the average monthly investments of 62.7% were between 50,000 and 51,000, their stock knowledge was better at 57.3%, and 73.8% were educated at the graduate level. The hypothesis for the study tested whether emotional intelligence, self-awareness, self-regulation (management), motivation, empathy, and social skills (relationship-management) had a significant impact on investor decisions. The findings showed that only one hypothesis rejected: social skills (relationship-management). These results were related to the problem of this study as they show how investor decision-making is compared with Goleman's five components of emotional intelligence for people to understand their emotions when making their investments.

Problem

A problem in society is how investors decide where to invest their money when they have many viable options that are not clearly explained or understood by the investor. Sahi (2017)

stated there are more investment opportunities than there were a decade ago which makes it difficult for an investor to evaluate all these opportunities when investing. This problem impacts new and inexperienced investors who do not understand the financial terminology, financial documents, and financial theories of investing.

History of Investing

The history of investing starts with stocks. Stock trading began as early as the 11th century with the first stock exchange beginning in 1785, called Amsterdam's Bourse. In the United States, trading stocks started in the mid-19th century. In the early 1900s, individuals began purchasing stocks, and stock exchanges began to form such as the Philadelphia Stock Exchange in 1800, New York Stock Exchange in 1817, and the New York Curb Agency in 1908, which later became the American Stock Exchange in 1953 (Cuadra, 2002, pp. 13-15). The first bond ever recorded was in 2400 B.C., but the first bond ever recorded in the United States was a government bond that began with the Revolutionary War (1775–1783). The treasury bond was issued to fund World War I (A Brief History of Bond Investing, n.d.). Today there are many investment choices for investors in addition to stocks and bonds, such as commodities, retirement plans, gold, silver, futures, mutual funds, ETFs (exchange-traded funds), foreign exchange, and real estate (Chen, 2019). Because of the many investment options to be considered by individual investors, it is necessary to research the process current investors use to choose investments and what they perceive as needs to improve making investment decisions and hence their investment performance.

Current Research on Investing

Gautam and Holani (2019) conducted a study that explores critical factors (awareness and knowledge of the financial market, risk perception, diversification, time horizon, and income and

priorities) that can affect an investor to make investment decisions. They used a structured questionnaire on a 5-point Likert scale along with 25 self-explanatory investment statements to investigate the critical factors that affect the investment decision-making of individuals. The data used for the analysis were collected from Google Docx using 168 out of 180 respondents and were analyzed using statistical tools: Microsoft Excel and SPSS. The data analysis for the study used descriptive analysis to illustrate the profile of the respondents, reliability analysis to determine consistency among the variables, and factor analysis to search for new factors affecting the individual investment decisions. Descriptive analysis findings showed 57.14% were male and 42.86% were female, the age range of 22-30 was 42.26%, 87 were married, and 47.2% had a postgraduate degree. Reliability analysis was done for the study using Cronbach's Alpha. Reliability refers to consistency and testing the strength of consistency by using Cronbach's Alpha. The finding from the reliability analysis using Cronbach's Alpha indicated from the 25 self-explanatory investment statements, 83.9% showed internal consistency among the variables that affected individual investing. Cronbach's Alpha coefficient of reliability ranged between 0 and 1 and the investment statements were between .7 and .9, which is greater than the required minimum of 70% needed for the data to be suitable for conducting factor analysis. Factor analysis is defined as the analytical process of transforming statistical data (such as measurements) into linear combinations of usually independent variables (Factor Analysis, n.d.). Factor analysis percentage of variance findings from the five critical factors were as follows: awareness and knowledge of the financial market (knowing about the avenues) was 24.1%, risk perception (high risk, high returns) was 14.5%, diversification (diversify portfolio) was 14.1%, time horizon (length of security being held) was 10.9%, and income and priorities (income,

savings, and future plans) was 6.6%. These results were related to the problem of this study as they showed how investor decision making is affected by these critical factors for investing.

Jabeen et al. (2019) conducted an exploratory study analyzing emotions, beliefs, and preferences of investors that affect the financial decision-making process. In-depth interviews were conducted to collect information about investment behavior and to qualitatively explore the major sources of behavioral biases in the Pakistan Stock Exchange. Twenty-five investors were selected, of whom 18 were male and seven were female. All had over 10 years of investment experience. Data analysis used for the study was an open-analysis technique and concluded with content analysis, summarizing, and categorizing the material. A summary of the results taken from the interviews revealed 11 factors that affect decision making. They were time pressures and rational decisions (reliance on representative sample information to make a quick and good decision), depression and rational decision (mood), being anxious at the start to make quick fortunes and investment decision (get rich quickly), social interaction and quality of decision (informal socializing), personality and quality of decision (independence), psychological condition and feeling of guilt (loss aspect), defense mechanism and optimization (fact-finding), distress, grief, and aversion (fear), the tendency to rely on own skills (trust), confidence and ability to control (handle uncertainty), and relying on the financial experts and stockbrokers (consulting). These factors were put into five categories: feelings and emotions, social interaction, information processing strategies, psychosomatic objectives, and personality. Feelings and emotions investment decisions are based on emotions instead of reasoning. Social interaction is a collection of information from social clout to make an investment decision. Information processing strategies in making investment decisions are purely heuristic simplifications instead of objective. Psychosomatic objectives impact investment decisions due

to stress, depression, and anxiety due to the level of risk associated with it. The personality of investor characteristics such as temperament intellect, experience, views, age, and risk-taking impact the investment decision. These results were related to the problem of this study as they show how investor responses and other factors affect their investment decision processes.

Gambetti and Giusberti (2019) conducted a study of whether certain personality traits can be associated with specific investment perceptions with the likelihood to invest. A 16PF (Personality Factor) Questionnaire and the General Decision-Making Styles Inventory along with a survey were used for the study. Cattell et al. developed the 16PF to evaluate personality traits and developed the five big factors: extroversion, anxiety, tough-mindedness, independence, and self-control. The 16PF questionnaire measures warmth, reasoning, emotional stability, dominance, liveliness, rule-consciousness, social boldness, sensitivity, vigilance, abstractedness, privacy, apprehensiveness, openness to change, self-reliance, perfectionism, and tension. Scott and Bruce's (1995) General Decision-Making Styles are a self-administered questionnaire composed of 25 items and structured by five different scales (rational, intuitive, dependent, avoidant, and spontaneous). The questionnaire's purpose was to identify individual decision-making characteristics. The surveys were counterbalanced, where one set of personality trait questions and the decision-making questions came before investment questions and the other set the investment questions came before the personality trait questions and the decision-making questions. Of a sample of 362 Italian adults of various occupations, the mean age was 48.32 years, 37.4% were men, 49% graduated from high school, 37.5% had of income between 21,000 to 40,000 Euros, and 57.3% had studied financial topics. The independent variables were personality traits and decision-making styles, and investment decisions and perceptions were the dependent variables. The data analysis conducted for the study included an evaluation as to

whether personality traits predict investment decisions. Hierarchical multiple regression was used to determine perceptions about risk and returns, demographic data and financial experience on investment decisions, and the connection between sets of variables. The findings from the hierarchical multiple regression analysis showed that anxious individuals, characterized by high levels of apprehension, tension, and vigilance, are prone not to invest or to save money. Negative emotional states, such as worry and anxiety, induce people to lack confidence in their ability to evaluate investment options. Anxious individuals are prone to perceive high levels of uncertainty and risk. These results were related to the problem of this study as they showed how investor personality traits along with investment perceptions affect the individual's decision to invest or not.

As can be seen from the research that has been completed, there are still questions about how investors make decisions about where to invest their money. More research needs to be conducted about this issue because of changing economic times as well as changes in the populations themselves begin to invest in their portfolios. Also, the ever-growing global trend impacts investing decisions as the world becomes a more multicultural society with different kinds of investments based on a global economy and preferences by multicultural decision-makers.

Investment Options

Previously, investment options only included stocks and bonds to choose from when investing. Gautam and Holani (2019) stated that an investor's decision to choose and invest in different instruments is a perplexing task due to many investment options today based on factors that affect their decision such as awareness and knowledge of the financial market, risk perception, diversification, time horizon, income, and priorities. Table 2 illustrates a timeline of

investment products which gives an investor many options to choose from but must understand them when making investment decisions.

Table 2

History of Investments

Investment Type	**Year Developed**
Common Stock	1602
Corporate Bonds	1623
Municipal Bonds	1812
Blue Chip Stocks	1923
Mutual Funds	1924
Treasury Bonds	1963
Certificate of deposit	1961
Hedge Funds	1949
Commodities	1848
Derivatives	1848
403(b) retirement plans	1958
Private Equity Funds	1946
REITs	1960
Traditional IRAs	1975
Index Funds	1975
401(k) retirement plans	1978
Money Market Funds	1970s
Series EE bonds	1980
Zero coupon bonds	1980s
High Yield Corporate Bonds	1980s
Series I Bonds	1998
Roth IRAs	1957
Target date funds	1990s
Cryptocurrency	2008
ETFs	1960s
Defensive stocks	Unknown
Growth stocks	1982
Preferred stock	1800s

Investment Products 1

Prior to 1970

Many investment products existed before 1970 that are still prevalent in investing today, including common stock, mutual funds, hedge funds, and derivatives. Chen (2020) defined

common stock as “a security that represents ownership in a corporation”. Advantages for an investor of common stock are ownership in the company, receiving dividends, and limited liability. The disadvantages for an investor are that they are last to get paid when it comes to dividends and volatility of the market. Any investor can purchase common stock in a publicly traded company.

Adams (2019) defined mutual funds as “investment vehicles in which money from a group of many different people is pooled together and invested in securities such as stocks and bonds”. The benefits of mutual funds are diversification, access to professional money managers, and liquidation of part of or all of the investment. The drawbacks to mutual funds are that they are not guaranteed because money managers provide no guarantee on bad decisions or lost money. Shareholders are charged operating fees. Mutual funds also decrease market competition, which causes higher prices for customers (Adams, 2019). Investors can buy from the fund or through a broker by paying the fund’s per-share net asset value plus any fees charged at the time of purchase, and investors can sell the shares back to the fund anytime (Mutual Funds, n.d.).

Sraders (2019) defined a hedge fund as “an investment pool contributed by a limited number of partners (investors) and operated by a professional manager with specific goals in mind - mainly to maximize returns and minimize risk”. A hedge fund is only available to qualified accredited investors (who are worth a net $1 million or have an annual income of $200,000 per year). Hedge funds are spread across many investment products (e.g., stocks, bonds, mutual funds), leverage other funds to increase returns, and have a “2 and 20” fee structure (hedge fudge manager 2% and 20% incentive fee; Sraders, 2019).

A derivative was defined by Chen (2020) as “financial security with a value that is reliant upon or derived from, an underlying asset or group of assets—a benchmark”. There are different

types of derivatives: futures contracts, forward contracts, options, and swaps. The advantages to derivatives include lock-in prices, hedge against risk can be leveraged, and they provide for a diversified portfolio. Disadvantages to deriviatives include that they are hard to value, subject to counterpart default, complex to understand, and sensitive to supply and demand factors (Chen, 2020). Investors use derivatives to increase leverage, hedge a position, or affect an asset's movement.

During the 1970s

The 1970s provided two new funds and two retirement account investment products. The funds are index funds and money market funds, and the two retirement accounts are traditional IRAs and 401(k). The focus here will be on the two retirement accounts. Hayes (2020) defined a traditional IRA as an "individual retirement account that allows individuals to direct pre-tax income towards investments that can grow tax-deferred". Traditional IRAs are held by custodians, commercial banks, and retail brokers where the funds can be placed by the investor into different investment products until they retire or can withdraw starting at the age of 59 ½. The caveat is they are deducted on the investor's income tax return up to the contribution limit and taxed once they start withdrawing at retirement (Hayes; 2020). A 401(k) is "a tax advantage, defined-contribution retirement account offered by many employers to their employees" (Kagan, 2020). An employer can match an employee's contribution. There are contribution limits based on the tax year for both the employer and employee.

1980s to Today

The 1980s saw an influx of new bond investments. New types of investment products came in 1998. They also came from the recession in 2008. The new bonds were Series EE

bonds, zero-coupon bonds, high yield corporate bonds, and Series I Bonds. The focus of this section will be Series EE Bonds, Series I Bonds, and cryptocurrency.

Treasury Securities and Programs (n.d.) defined Series EE bonds as low-risk savings product that pays interest until they reach 30 years or when cashed, whichever comes first. The interest rate for Series EE bonds is either fixed or variable, with no penalty for redemption after 5 years, and must be owned for at least 1 year and earn an annual fixed rate of 0.10%. Treasury Securities and Programs defined Series I bond as a savings bond that earns interest based on combining a fixed rate and an inflation rate. The Series I bond interest rate is either fixed or variable and interest is compounded semiannually, earned once a month, cashed out to receive the principal plus interest and a composite rate of 1.06%.

Frankenfield (2020) defined cryptocurrency as "a digital or virtual currency that is secured by cryptography, which makes it nearly impossible to counterfeit or double-spend". The most popular cryptocurrency is Bitcoin which was launched in 2009. An advantage of cryptocurrency is a transfer of funds between two parties with minimal processing fees and the disadvantage is they are well suited for a host of illegal activities (money laundering and tax evasion; Frankenfield, 2020). Any investor can who has a vested interest can invest in cryptocurrency. Other investment products from the table above that were not mentioned are still currently in use today. The problem of making investment decisions today is that investors have so many options available to them, as outlined in Table 1, compared to when investing started with only stocks and bonds.

Investor Influencing Factors

Investors today have many investment opportunities to invest their money. The types of investments are stocks, bonds, mutual funds, exchange-traded funds (ETFs), savings, money

market, certificate of deposits (CDs), annuities, 401(k), individual retirement accounts (IRAs), 529 savings plans, Bitcoin, cryptocurrencies, derivatives, and commodities. When it comes time to make an informed decision, there is an abundance of information from SEC, AICPA, investing websites, banks, and financial advisors. Information overload becomes a problem for investors. Jabeen et al (2019) identified some of these problems. One problem is that because of limited information and time, individuals find it difficult to make a sound investment decision. Another problem is that an investor may feel depressed because every investment is a failure or may have a feeling of guilt due to potential losses from an investment. To address these problems affecting individual investment decisions one needs to address some of the major factors that can influence their investing, such as personality (personality traits), financial (risk tolerance), and environmental (socio-cultural reliance on investment knowledge).

Personality Traits

Personality trait is defined as "a stable and characteristic aspect of one's personality as a discrete manifestation of a set of values, beliefs, thoughts, attitudes, intentions, feelings, or actions" (personality trait, n.d.). Dickason et al. (2019) conducted a study to determine an investor's level of life satisfaction based on the big five personality framework (agreeableness, conscientiousness, extraversion, neuroticism, and openness to experience). Agreeableness is how a person relates and interacts with people. Conscientiousness is where an individual has a sense of responsibility toward peers regarding emotional control. Extraversion is where an individual is easily approachable. Neuroticism is how an individual views the world while experiencing negative emotions. Openness to experience is where an individual has creativity, intelligence, takes on new tasks, and open to change and culture (Dickason et al., 2019). The sample study included 600 investors from a South African investment company. A two-part questionnaire

consisted of a subject well-being section and the personality measures section. The life satisfaction was assessed using the satisfaction with life scale (SWLS) to measure one's conscious evaluative decision-making skills as a dependent variable on the life satisfaction of South African investors. A regression analysis was done with a focus on the life satisfaction of investors based on personality traits. The findings regarding investors' decision making were that extraversion, openness, and consciousness personality traits of an investor are therefore more likely to have positive life satisfaction and hence the investor will make a more optimistic investment decision. Investors having high neuroticism are less likely to have positive life satisfaction and are more likely to make pessimistic investment decisions. The findings also cited that more research is needed about personality traits due to not considering the risk profiles of investors. Chitra and Ramya Sreedevi (2011) conducted a descriptive study to identify the personality traits of the investors, analyzing the personality traits on the investment method, analyzing the relationship between the demographic profile of the investors and the method of investment, and identifying variables discriminating the investment. The sample was 94 investors from an Indian brokerage firm. The findings from the study are that investors base their decisions on emotions and information-seeking before deciding. The recommendation from the findings was that a broker company needs to work with investors on their emotions and do a cost-benefit analysis to help investors information seeking so they can make an informed investment decision.

Financial

Chen (2020) defined risk tolerance as "the degree of variability in investment returns that an investor is willing to withstand in their financial planning". There are different types of investors based on their risk tolerance when making investment decisions. Lozza (2017)

identified different types of investors as risk-averse, risk-seeking, and neither risk-averse nor risk-seeking. Risk-averse is where investors are faced with choosing two investments that expect a similar return but prefer a low-risk option (Chen, 2019). Risk-seeking is where investors accept greater volatility and uncertainty from investments or anticipate higher returns from trading in exchange (Kenton, 2019). Neither would be neither risk averse nor risk seeking but risk-neutral (individual evaluating alternative investments; Chen, 2019). Nguyen et al. (2016) conducted a study that examines the influence on investors decisions from financial risk tolerance in a financial advice context with a focus on the key expected risk tolerance determinants: client financial literacy, trust in the financial advice service, and relationship length with the service. A sample of 548 clients from nine Financial Services Council member organizations in Australia participated in the study of which 52% were male and 48% female. Because the focus is on the investor's decision-making, a hypothesis tested financial risk tolerance and investment decision-making. The findings from the study found risk tolerance to intervene in the relationship between decision making and financial literacy, which suggested that clients who are not financially literate are less risk tolerant tend to invest their money in risky assets to a lesser degree. The findings also cited that more research to study casual relationships among key constructs such as risk perceptions as well as conducting dyadic research for both advisers and clients or expanding the research in other countries. The recommendation from the findings was to help regulators in the industry and financial advisers to understand investor risk and its impact on their investment decision-making. Raheja and Dhiman (2019) conducted a study of two relationships. One relationship involves behavioral biases and risk tolerance and the other involves behavioral biases and investors' investment decisions. Independent variables were behavioral biases and investment decisions of the investors were the dependent variables. A sample of 500 investors

investing through LSC Securities Ltd. In Punjab State, India. A purposive sampling technique and multiple regression analysis were used for the study. The findings from the study as related to investment decisions showed that there is a relationship between investment decisions and overconfidence bias and regret bias. The authors suggested that investors need to be patient when making investment decisions and analyze the behavioral factors which affect investment decisions.

Environmental

Investment knowledge as the ability for an investor to gainfully acquire knowledge of investments through various trustworthy resources from family and friends, educational institutions, financial advisors, online brokers, and robo-advisors to make an informed investment decision. Korniotis and Kumar (2011) conducted a study of older people's investment choices gets better with age as they gainfully increase their experience and investment knowledge or deteriorates because of cognitive aging. A hypothesis was tested to see if investment knowledge increases with both experience and age. The data for the study consisted of 77,995 households from a retail database at a major U.S. discount brokerage house from 1991 to 1996 which holds common stocks and trades a variety of other securities, including mutual funds, options, and American depository receipts (ADRs). The findings from the study indicated that older investors who follow best practices reflect increased knowledge in investing decisions, but investment skills deteriorate with cognitive aging. The authors could not measure the degree of cognitive decline among older investors. The recommendations taken from the study are that older investors should take advice from financial advisers due to a decline in age. Also, they suggested taking an investment course with a focus on the adverse effects of cognitive aging to help maintain their investment knowledge so they can continue to make sound investing

decisions. Forbes and Kara (2010) conducted a study using an investment literacy questionnaire that evaluated working adults' applied investment knowledge that included confidence about the accuracy of participants' responses to each item of investing knowledge. They also measured the participants' investing self-efficacy relating to knowledge and confidence in achieving long-term investment goals. The questionnaire was administered online, and 189 university employees participated in the study. The analysis was done using multiple regression that consistied of the following seven variables of self-efficacy: investment knowledge confidence, age, sex, occupation, retirement shelter participation, income, and ethnicity. The findings from the study were that for participants to achieve long-term investment goals, the effect of investment knowledge, even at 57%, was related to confidence, and one's knowledge relates to one's current investment knowledge in predicting investing self-efficacy. The authors argued that confidence has an impact on investment decisions and depended on the investors' knowledge about investments and recommended first-time investors do training before opening a brokerage account.

Research Design

The research design was a qualitative case study. The qualitative aspect of the case study referred to the social and cultural context that characterizes the subjects (investors) and their environment (investments; Shkedi, 2019, p. 17). Trochim and Donnelly (2008) defined a case study as an intensive study of a specific individual or specific context. Advantages to a qualitative case study include understanding the complexity of a person's interactions with specific situational demands, deeper description of a phenomenon, effects of individualized interventions, and can be combined with quantitative data (Tetnowski, 2015). The disadvantages of a qualitative case study include deeper involvement of the researcher's role in the research,

lack of a systematic procedure, and subjectivity (Gog, 2015). A qualitative case study method approach was appropriate because the study will look through the lens of the investor to investigate their challenges and needs in trying to choose from many investment choices for their personal portfolios.

Three research methodologies were considered for this study: qualitative, quantitative, and mixed methods. Creswell and Creswell (2018) defined quantitative research as testing objective theories using numerical data to examine the relationship amongst variables. The advantages of quantitative research are using statistical data as a tool for saving time and resources, generalization, replicability, use of control, and study groups (Eyisi, 2016). The disadvantages of quantitative research are detachment of the researcher, participants not contributing to the study, lack of thinking outside the box, and not being suited for social differences (Eyisi, 2016).

Moikwatlhai et al. (2019) conducted a quantitative research study that was exploratory and used a positivist paradigm to measure the relationship in investigating environmental, social, and governance (ESG) reporting and the institutional investor base relationship. A regression model was used for the study. The sample data included 114 JSE companies that had ESG scores reported on Thompson Reuters from 2012 to 2016. The findings from the quantitative study indicated that institutional investor's commitment to the United Nations Principles for Responsible Investment (UN PRI) and the Code for Responsible Investing in South Africa (CRISA) has yet to translate into investments in JSE companies being held in the long-term.

Mixed methods research is defined as a collection of both qualitative and quantitative data. Because this study was small in sample size, consisting of 10 investors and confined to two investor groups, the study may not reflect the broader group of investor populations. The

advantages of mixed methods research are qualitative and quantitative data comparison, developing cases, augmentation of experiments and trials of individuals' perspectives, and processes and outcomes program evaluation (Creswell & Creswell, 2018, p. 216). The disadvantages are that data collection is extensive and time-consuming, most researchers lack knowledge of both qualitative and quantitative methods and may not have a solid foundation of understanding models in the research design (Creswell & Creswell, 2018, pp. 216-217).

Xusen et al. (2019) conducted a mixed method research study that investigated the robo-advisors' trust influencing mechanism. The authors defined a Robo-advisor as "an automated investment service that facilitates wealth management for customers by combining modern technologies and scientific algorithms". A semistructured interview of 27 valid investors was conducted for the qualitative part of the study. The authors identified 17 keywords from the interview data. The research model used six of the 17 keywords in developing the hypothesis for the qualitative part of the study. A sample of 240 investors took an online survey for the quantitative part of the study. Data analysis involved reliability analysis, convergent validity, and testing the qualitative hypothesis. The findings from the mixed method study justified the relationships among trust influencing factors, trust in technologies, trust in vendor, and trust in robo-advisor, and found differences between junior and senior investors.

Qualitative research consists of narrative, phenomenology, grounded theory, and ethnography. A narrative researcher studies the lives and stories of individuals, phenomenological researchers study human experiences of a phenomenon, grounded theory researchers study the theory of a process grounded in the views of participants, and ethnographers study a culture over a period of time (Creswell & Creswell, 2018, p. 13). The purpose of this qualitative case study was to explore the process individual investors use to

decide on investment options. Looking at the history of individuals, human experiences, participants' views, or cultural aspects was not the focus of this research. Therefore, a qualitative case study that looks at the social and contextual content of individual investors' needs was chosen for this study.

Summary

A research foundation has been laid down to support the problem that investors have so many options available to them today compared to when investing started with only stocks and bonds. To gain an understanding of the problem, investigative research was conducted by looking into modern portfolio theory, prospect theory, and emotional intelligence in determining investors' decision-making when it comes to choosing investment products. Though the theories provided a foundation for the research, delving further into what influencing factors go into investors' decision making was needed. The problem for investors is that there are so many investment products and a wealth of resources, which makes it difficult for them to make an informed decision when choosing an investment. To address these problems, researchers need to examine some of the major factors that can influence investing, such as personality (personality traits), financial (risk tolerance), and environmental (socio-cultural reliance on investment knowledge).

Three research methods were considered for the study, namely qualitative, quantitative, and mixed methods. By looking at the advantages and disadvantages of each, it was determined a qualitative case study method approach was appropriate because the study looked through the lens of the investor to investigate their challenges and needs in trying to choose from many investment choices for their personal portfolios. Chapter 3 considered the research design, target population, research population, sample, sampling procedure, instrumentation, quality of

evidence, pilot study, data collection and analysis procedures, the role of the researcher, the protection of human participants, and a summary.

CHAPTER 3

METHODOLOGY

Introduction

There is a problem in society about individual investing. That problem is how an investor can decide where to invest their money when many viable options for them are not clearly explained or understood. Sahi (2017) stated there are more investment opportunities than there were a decade ago, which makes it difficult for an investor to evaluate all these opportunities when investing. This problem impacts new and inexperienced investors who do not understand the financial terminology, financial documents, and financial theories of investing. The purpose of this qualitative case study was to explore the process individual investors use to decide on investment options, the basic principles of investing those individuals understand, and those they do not understand, as well as what they view their needs are to improve their investment performances. Chapter 3 includes the research design, target population, sampling procedure, sample, instrumentation, quality of evidence, pilot study, data collection and analysis procedures, the role of the researcher, protection of human participants, and a summary.

Research Design

The research design was a qualitative case study. The qualitative aspect of the case study referred to the social and cultural context that characterizes the subjects (investors) and their environment (investments; Shkedi, 2019, p. 17). Trochim and Donnelly (2008, p. 147) defined a case study as an intensive study of a specific individual or specific context. Advantages to a qualitative case study include understanding the complexity of a person's interactions with specific situational demands, a deeper description of a phenomenon, effects of individualized interventions, and the ability to combine it with quantitative data (Tetnowski, 2015). The

disadvantages of a qualitative case study include deeper involvement of the researcher's role in the research, lack of a systematic procedure, and subjectivity (Gog, 2015). A qualitative case study method approach was appropriate because the study used the lens of the investor to investigate their challenges and needs in trying to choose from many investment choices for their personal portfolios.

Three research methodologies were considered for this study. They are qualitative, quantitative, and mixed methods. Creswell and Creswell (2018, p. 4) defined quantitative research as testing objective theories using numerical data to examine the relationship among variables. The advantages of quantitative research are using statistical data as a tool for saving time and resources, generalization, replicability, use of control, and study groups (Eyisi, 2016). The disadvantages of quantitative research are detachment of the researcher, participants do not contribute to the study, it does not allow for thinking outside the box, and it is not suited for social differences in society (Eyisi, 2016).

Moikwatlhai et al. (2019) conducted a quantitative study that was exploratory and used a positivist paradigm to measure the relationships among environmental, social, and governance (ESG) reporting and the institutional investor base. A regression model was used for the study. The sample data included 114 JSE companies that had ESG scores reported on Thompson Reuters from 2012 to 2016. The findings from the quantitative research study indicated that institutional investor's commitment to the United Nations Principles for Responsible Investment (UN PRI) and the Code for Responsible Investing in South Africa (CRISA) has yet to translate into investments in JSE companies being held in the long-term.

Mixed method is defined as a collection of both qualitative and quantitative data. Because this study had a small sample size consisting of 10 investors and confined to one investor group,

the study may not reflect the broader group of investor populations and hence a mixed methods research design may not need the quantitative data to begin looking at the needs of investors in this exploratory study. The advantages of mixed-method research are qualitative and quantitative data comparison, developing cases, augmentation of experiments and trials of individuals' perspectives, and processes and outcomes program evaluation (Creswell & Creswell, 2018, p. 216). The disadvantages are data collection is extensive, time-consuming, the need to be familiar with both qualitative and quantitative methods and having a solid foundation of understanding models in the research design (Creswell & Creswell, 2018, pp. 216-217).

Xusen et al (2019) conducted a mixed method research study that investigated the Robo-advisors trust influencing mechanism. The study defined a robo-advisor as "an automated investment service that facilitates wealth management for customers by combining modern technologies and scientific algorithms". A semistructured interview of 27 valid investors was conducted for the qualitative part of the study. The data analysis identified 17 keywords from the interview data. The research model used six of the 17 keywords to develop the hypothesis for the qualitative part of the study. A sample of 240 investors using an online survey was used for the quantitative part of the study. Data analysis involved reliability analysis and convergent validity and then testing the qualitative hypothesis. The findings from the mixed-method study justify the relationships among trust influencing factors, trust in technologies, trust in vendor, and trust in robo-advisors, and found differences between junior and senior investors.

Qualitative research consists of narrative, phenomenological, grounded theory, and ethnography. A narrative researcher studies the lives and stories of individuals, phenomenological research studies human experiences about a phenomenon, grounded theory studies a theory of a process ground in the views of participants, and ethnography studies a

culture over a period of time (Creswell & Creswell, 2018, p. 13). The purpose of this qualitative case study was to explore the process individual investors use to decide on investment options. A phenomenological study, a grounded theory, or an ethnographic study were not chosen because looking at the history of individuals, human experiences, participants' views, or cultural aspects was not the focus of this research. Therefore, a qualitative case study looking at the social and contextual content of individual investors' needs was chosen for this study.

Target Population

The target population was two national investor groups that are large organizations spanning multiple regions in the United States. The research population was obtained from the two national groups, namely the Cleveland Investment Group and the Cincinnati Investment Group. A request to participate (Appendix C) in the study was sent by email to investors in both groups. The research population consisted of 250 individual investors from the Cleveland Investment Group and 150 individual investors from the Cincinnati Group who were at least 18 years of age and were private investors. A convenience sample of 12 private investors were selected from those in the research population who responded to the request to participate in the study.

Sampling Procedure

The sampling procedure used for this study was convenience sampling. In convenience sampling, participants are selected from a population in a nonrandom order (Kandola et al., 2014). The advantage of using convenience sampling is the ability to sample from an accessible population and the disadvantage is sampling bias (Kandola et al., 2014). The sample consisted of 12 private investors for the study. The first 10 to respond comprised the sample, and the next 2

were part of the pilot study on the questionnaire and interview questions. The pilot study was discussed later in this chapter.

Instrumentation

The data collection consisted of a researcher-designed questionnaire of investing options (Appendix A) and researcher-designed interview questions (Appendix B). Both methods of data collection are based on knowledge of investing and the investing process. Four research questions with the associated questionnaire are outlined in Table 3 and interview questions are outlined in Table 4. The questionnaire of investing options was sent via email to the participants and returned to the researcher before the interview. Interviews took place using ZOOM. The interviews are semi-structured, and each investor was asked the same questions. By using the semi-structured interview process allowed for new concepts to emerge and encourage vitality and depth from the interview questions (Dearnley, 2005). The interviews were recorded pending consent to do so from the participant using the consent form (Appendix D).

Table 3

Research and Questionnaire Questions - Closed Ended

Research Questions	Questionnaire Questions
Research Question 1: What are factors that influence individual investors when deciding upon an investment option?	1. What factors do you consider when doing asset allocation for your investment portfolio. 2. Which of the following items influence your investment decision: a. gut feeling b. cash flow needs c. type of company to invest in like a technology company, or financial, etc. d. what friends, relatives, or coworkers are investing in e. suggestions for your banker f. planning for retirement g. the ups and downs of the market h. other_____

Research Question 2: What sources of information do individual investors use when making investment decisions?	3. Which of the following resources do you use when making an investment decision: a. Balance Sheet b. Profit & Loss Statement c. Stockholder equity statement d. Business magazines, newspaper e. Prospectus of a company f. Product the company makes g. History of the company's finances and profits h. Other _____ 4. What factors do you look for when reviewing your monthly/quarterly/semiannual/annual statements for your investments.
Research Question 3: What investment options do investors do not understand?	5. Which of the following options for investing do you not understand: a. Blue chip stocks b. Defensive stocks c. Growth stocks d. Preferred stock e. Treasury bonds

f. Corporate bonds
g. Municipal bonds
h. Series EE bonds and Series I bonds
i. Zero coupon bonds
j. Certificate of deposit
k. Mutual funds
l. Traditional IRAs
m. Roth IRAs
n. Hedge funds
o. Index funds
p. Commodities such as corn, wheat, gold, etc.
q. Derivatives
r. 401(K) retirement plans
s. 403(b) retirement plans
t. Other _____

6. Which of the following terms do you not understand?
   a. Assets
   b. Liabilities
   c. Annuities
   d. What is a bond

	e. What is a stock f. Price to Earnings ratio g. Prospectus h. Balance sheet i. Profit and loss statement j. S&P 500 k. Stock market pages in the newspaper l. Other _____
Research Question 4: What do investors perceive as their needs to make better investment decisions?	7. What type of educational offerings would help you to make better investment choices? 8. Do you have any other needs about financial advisers, information, terms—anything—that would make it easier for you to choose good investments.

Table 4

Research and Interview Questions - Open Ended

Research Questions	Interview Questions
Research Question 1: What are factors that influence individual investors when deciding upon an investment option?	1. How do you invest - choices - gut feeling, need additional cash flow, spur of the moment, or because of the company? 2. Describe the process you go through when selecting an investment. 3. How do you know what to choose from the available options, such as, types of stocks, dividends, types of bonds, etc., when it comes investing? 4. How often do you change your investments and what factors prompt this change?
Research Question 2: What sources of information do individual investors use when making investment decisions?	5. What do you know about the four financial statements (balance sheet, income statement, statement of stockholder's equity, statement of cash flows)?

	6. What do you find the most challenging when analyzing the financial statements when it comes to investing and why? 7. Do you use a financial adviser when making an investment decision? If so, how do you choose one. If not, why not.
Research Question 3: What investment options do investors do not understand?	8. What three things about investing would you like to better understand in order to make better informed decisions when it comes to investing. 9. What do you find the most confusing when trying to choose from the available options, such as, types of stocks, dividends, types of bonds, etc., when it comes investing?
Research Question 4: What do investors perceive as their needs to make better investment decisions?	10. How does emotional intelligence (skill in perceiving, understanding, and managing emotions and feelings) affect an investor's investment decision making?

11. How has COVID-19 impact your investment decision-making?
12. Do you let your emotions dictate your trading or investing behavior?
13. Do you typically follow 'the herd' into investing situations? Or are you more independent?

Quality of Evidence

Research must have validity and reliability. Trochim and Donnelly (2008, p. 14) defined validity as "the best available approximation of the truth of a given proposition, inference, or conclusion" and reliability as a measure that gives the same result over and over just as long as the phenomenon is consistent and dependable. There are two threats to validity: internal and external (Creswell & Creswell, 2018, pp. 167-169). Salkind defined internal validity as the accuracy of statements made about the causal relationship between two variables. Frey defined external validity as "to the degree to which the relations among variables observed in one sample of observations in one population will hold for other samples of observations within the same population or in other populations".

Validity was supported for this study by asking a colleague to also develop themes from participant responses. Internal validity was enhanced through pilot testing of the interview questions with two participants whose backgrounds were like those of the sample. Also, the sample selection of investors in Cleveland, Ohio, enhanced validity because they were from an investor group; hence, they had experience in investing. Validity was also enhanced because the

same questions were asked of each participant and, therefore, responses could be compared. External validity was enhanced because the results from one regional investment group, namely, the Cleveland, Ohio, group, may provide an example for other investment groups as to the needs of their investors.

Reliability is defined as the "consistency of measurement over time or stability of measurement over a variety of conditions" (Drost, 2011). Reliability was strengthened in this study due of the questions being asked of the participants were readily available so that any researcher can repeat the experiment by using those same questions as well as an investment group of their choosing. Dependability was strengthened by providing a detailed explanation of the procedures that were followed in conducting the study. These procedures are discussed in Chapter 4. Confirmability was strengthened as the researcher can provide documentation of notes and procedures to any researcher to verify the authenticity of this study.

The data cleaning process involved any questions that were not answered or need clarification required a follow-up with the participant. The follow-up was done by email. This allowed the participant to answer any omitted questions or clarify the ones the participant did not understand. If there was no answer from the participant, another email was sent asking them to reply.

A pilot test of two individual investors was done to determine that the interview questions/questionnaire properly provided data for the research questions and that the interview questions were understandable to the participants. The pilot test added to the reliability of the study. After the data were entered into Microsoft Excel, the data were checked using consistency checking. The answers were checked for reasonableness from two or more associated questions. Following is an example of inconsistency from the interview questions. If a respondent answered

the question of "Which of the following resources, do you use when making an investment decision?" by stating "balance sheet," but for the question asking, "Which of the following terms do you not understand?" and the response is "balance sheet," this demonstrates inconsistency.

Pilot Study

Drummond (2017) stated that pilot studies are smaller versions of a larger study that tests aspects of the proposed research. The pilot study focused on the questionnaire and interview questions and their relations and support of the research question. The pilot study involved two investors who met the same criteria as the sample used for this study. If the pilot study from the two individual investors revealed any significant issues in any of the questionnaire and interview questions, the questionnaire and interview questions would be revised.

Data Collection and Analysis Procedures

The data collection method consisted of emailing the interview questions/questionnaire (Appendix A and B) along with the consent forms (Appendix D) to 12 private investors. The email addresses were provided by the regional investor groups. Completing the interview questions/questionnaire took approximately 30–45 minutes. All responses from the individual investors were to be returned within seven days. If there was no response by the seventh day, a reminder was sent for those individual investors who did not respond. An analysis of the data from the interview questions was done by the researcher and a colleague familiar with investing. For each research question, themes were developed from the data. The themes provided a foundation for investors' decision making when choosing among various investment options.

The Role of the Researcher

A qualitative researcher has responsibilities for conducting the research. The researcher is to provide an understanding and responsibility for developing the instrument, describe relevant

aspects of self-related to the study, research journal keeping about the procedures of the study, designate if they are an insider or outsider, ask probing questions, and create a lens into his or her ideas and theories (Simon, 2011). The researcher has a Master of Business Administration degree. Since 2002, the researcher has taught various business courses at several schools. The researcher currently teaches Accounting for Managers for an online college in Michigan. The researcher's work experience includes various accounting positions since 1979 in Ohio and Kentucky. Each employer offered various 401k retirement accounts. Therefore, the work and teaching experience provide a foundation for studying the problem of how an investor decides where to invest their money when many viable options are not clearly explained or understood by the investor.

The Protection of Human Subjects

The researcher sought approval of this research from Baker College, Flint, MI. Per the Institutional Review Board's (IRB) Section 46.111, the following criteria must be met. All risk to participants will be minimized by keeping each participant's personal information confidential through coding and password protection of their data. The researcher will not risk participants for personable gain but will add value to the research. All participants selected for this research study are solely on a volunteer basis. The informed consent was sent, completed, and obtained from each participant via email. Data collection from each participant will be held in confidence to protect their privacy (45 CFR, n.d.).

The IRB requires informed consent in Section 46.116 "(1) Before involving a human subject in research covered by this policy, an investigator shall obtain the legally effective informed consent of the subject or the subject's legally authorized representative" (45 CFR, n.d.). "(2) An investigator shall seek informed consent only under circumstances that provide the

prospective subject or the legally authorized representative sufficient opportunity to discuss and consider whether or not to participate and that minimize the possibility of coercion or undue influence" (45 CFR, n.d.).

Before the qualitative case study began, an IRB application was completed and approved by Baker College. All participants will be coded so that names will remain anonymous. A random number generator was used to assign the codes. All data will be retained for 3 years on the researcher's personal computer so that no one else will have access, and then the data will be destroyed.

Summary

Investors have many options to choose from that include different types of stocks, bonds, mutual funds, index funds, savings, children's education, and retirement plans, to name a few. A qualitative case study was conducted by sending the interview questions/questionnaire to those who responded to participate in the study. The purpose of this qualitative case study was to explore the process individual investors use to decide on investment options. A convenience sample of 12 private investors was selected from the research population. The data was collected by email from those who responded to the questionnaire. Data was also collected from interviews with the participants. Data analysis used the three strategies provided by Creswell and Poth (2018, pp. 182-183) which consisted of preparing and organizing the data for analysis, reducing the data into themes (coding and condensing the codes), and represent the data in tables. Chapter 4 contained a summation of the study's results.

CHAPTER 4

RESULTS

Introduction

The purpose of this qualitative case study was to explore the process individual investors use to decide on investment options, the basic principles of investing those individuals understand, and those they do not understand, as well as what they view their needs are to improve their investment performances. The data for the research study were collected by email from those who responded to the questionnaire. Data were also collected from interviews with the participants. Data analysis was developed using the three strategies provided by Creswell and Poth (2018, pp. 182-183), which consisted of preparing and organizing the data for analysis, reducing the data into themes (coding and condensing the codes), and representing the data in tables. Chapter 4 contains an introduction, the participant demographics, the results of the study, and a summary.

Table 5 shows the demographics of the 10 participants from the Cincinnati and the Cleveland investor groups. Seven are 56 and over and three are less than 55 years of age. Eight of the 10 had 20 and over and two had less than 20 years of investing experience. Two of the 10 used an advisor while seven did not, and one did not respond.

Table 5

Demographics

Participant	Gender	Age	# Years Investing	Financial Advisor
P1	Male	26-35	5-9	No
P2	Male	56 and over	20 and over	No answer
P3	Male	56 and over	20 and over	No
P4	Male	56 and over	20 and over	Yes
P5	Male	56 and over	20 and over	No
P6	Male	56 and over	20 and over	Yes
P7	Male	36-45	10-14	No
P8	Male	46-55	20 and over	No
P9	Male	56 and over	20 and over	No
P10	Male	56 and over	20 and over	No

Procedures of the Study

The sample consists of 12 private investors from the Cleveland and Cincinnati investors groups. The first 10 who responded comprised the sample and the next two were for the pilot study on the interview questions. There were several steps to acquire the data needed for the research study. The first step was to send an email request to participate (Appendix C) in the study to investors in both groups. The research population consisted of 250 individual investors

from the Cleveland Investment Group and 150 individual investors from the Cincinnati Group who were at least 18 years of age and were private investors. A convenience sample of 12 private investors was selected from those in the research population who responded to the request to participate in the study.

The second step was the pilot study that focused on the questionnaire and interview questions and their relations and support of the research question. If the pilot study from the two individual investors revealed any significant issues in any of the questionnaire and interview questions, the questionnaire and interview questions were revised. The first private investor stated that the interview and questionnaire questions did relate to the research questions and did not need to change. However, he said that the questions seemed to be geared toward more sophisticated investors, who may not need financial advisors. The average investor may not be knowledgeable about several of the investment vehicles listed in the questionnaire. The second private investor provided two additional interview questions. The original interview questions (Appendix B) were updated with the two additional questions.

The third step was a researcher-designed questionnaire of investing options (Appendix A), which was based on knowledge of investing and the investing process that was sent via email to the participants and returned to the researcher before the interview. All responses from the individual investors were to be returned within 7 days. If there was a response by the 7th day, a reminder was sent for those individual investors who did not respond.

The final step was interviewing the same 10 private investors who completed the questionnaire, but only five were interviewed, two responded by email but were not interviewed, and three did not respond. The interviews were conducted using ZOOM by asking each participant the same interview questions (Appendix B) along with the two additional questions

from the pilot study. The researcher recorded the interview with consent (Appendix D). A few days after the interviews, the researcher sent an email to each participant to clarify the responses and made any changes to those said responses.

Data Analysis of Investors

The data analysis was organized by research question with their respective questionnaire and interview questions. Themes were developed for each research question based on the responses of participants to the questionnaire and interview questions.

Research Question 1

What are factors that influence individual investors when deciding upon an investment option?

Questionnaire Question 1

"What factors do you consider when doing asset allocation for your investment portfolio." Nine participants had different factors on asset allocations of their investment portfolio. Participants P3 and P7 had very different views when it comes to allocating their assets, one based on owning companies with a good record and the other basing allocation on age. Participant P3 stated:

> I try to maintain an average percent of the number of companies divided by 100 and with a position no more than 1.5 times the average. On the low side, I try to make sure I own at least one-half the average. Speaking of sector allocation, I am not so concerned as to maintain an equal percent. I am more concerned owning companies with a good expected total return.

Participant 7 stated:

> The primary factor I consider is the amount of time I plan to hold the investment until it is to be used. For my retirement investments, I have a long way to go, so I'm usually just monitoring annual performance. For my investments outside of retirement, I primarily am looking for dividend yield and opportunity for capital gains from price appreciation.

Participant 8 stated, "fed (*monetary)* policy, where investors should have a basic understanding of its direct impact (interest rates) and indirect impact (inflation) on investments (Investopedia Staff, 2021)." Participant 9 stated, "risk tolerance." Chen (2020) defines risk tolerance as "the degree of variability in investment returns that an investor is willing to withstand in their financial planning." There are different types of investors based on their risk tolerance when making investment decisions. Lozza et al. (2017) identified different types of investors as risk-averse, risk-seeking, and neither risk-averse nor risk-seeking. Risk-averse is when investors are faced with choosing two investments that expect a similar return but prefer a low-risk option (Chen, 2019). Risk-seeking is when investors accept greater volatility and uncertainty from investments or anticipate higher returns from trading in exchange (Kenton, 2019). Neither would be neither risk averse nor risk seeking but risk-neutral (individual evaluating alternative investments; Chen, 2019). Participant 4 stated, "historical performance during down markets." During a down market (recession), investors start to worry and become frightened about their prospective investment returns and minimize risk in their portfolios and during recovery, investors need to keep an eye on macroeconomic factors such as interest rates and inflation (Petroff, 2021). Other participants considered factors such as risking more than 2% of a particular stock, portfolio volatility, long term prospects for growth, not more than 5% in a portfolio in any one position, sector price, valuations, momentum, diversification, stocks, EFT's, cash, and "growth with some stability."

Questionnaire Question 2

"Which of the following items influence your investment decision?"

The participants could choose more than one influence. Therefore, the response column did not equal a sample size of 10.

Table 6

Investment Decision Influencers

Influencer	Responses
a. gut feeling	4
b. cash flow needs	3
c. type of company to invest in like a technology company, or financial, etc.	9
d. what friends, relatives, or coworkers are investing in	0
e. suggestions for your banker	0
f. planning for retirement	6
g. the ups and downs of the market	7
h. other_____	5

The biggest influencer when making an investment decision out of the nine responses received was type of company to invest in, like a technology or financial company. The next biggest influence was the ups and downs of the market. The least impactful influencer was cash flow needs. The zero influencers were what friends, relatives, or coworkers invest in and

suggestions for a banker. Five participants mentioned other investment influences were research/market analysis, recommendation of a financial advisor, dividend yield, and mostly technical.

Interview Question 1

"How do you invest - choices - gut feeling, need additional cash flow, spur of the moment, or because of the company?"

Table 7

Investment Choices

Choice	Number
gut feeling	3
need additional cash flow	5
spur of the moment	3
because of the company	5

Seven participants responded to their investment choices. Three of the participants mentioned all four choices, two participants needed additional cash flow, and two participants cited the company. Therefore, five out of the seven participants' relevant investment choices were based on needing additional cash flow and because of the company.

Interview Question 2

"Describe the process you go through when selecting an investment." Each of the eight participants goes through a different process when it comes to selecting an investment. Participants P1 and P10 have different approaches when selecting investments where P1 does analysis and P10 looks at investment trade resources. P1 stated, "he looks at 1 – 2-year trend,

Yahoo analyst, projected growth, how often earnings, project growth 20 years, cash flow, competition, and technical price transaction." P10 stated he "checks Investor's Business Daily and Market Smith: sometime rely on protraders, but still check it on Market Smith." P3, P4, and P7 use a great deal of resources for investors when selecting investments, which included fundamental investing, point of entry, companies on earnings, revenue, pretax profits, software, past performance, current asset or risk, allocation, looks at retirement funds, diversification, Roth IRA, S&P, Small Cap, Vanguard, senior performance, and age base. P4 and P6 seek advisor advice. P6 and P9 use analytics.

Interview Question 3

"How do you know what to choose from the available options, such as, types of stocks, dividends, types of bonds, etc., when it comes investing?" Each of the eight participants goes through choosing different available options when it comes to investing. P9 stated the most detailed response:

> his investing has always been based on stocks and options because he understands the way companies work based on their fundamentals and combined with my charting experience gives me a good feel for identifying trends and entry/exit timing. my basic process is as follows:
>
> a. first, using a program called 'Chaikin Analytics', he will determine what sectors are doing well based on weekly and monthly performance criteria.
> b. then he will choose a particular stock based on fundamental parameters. using a custom screen.
> c. then depending on whether the market is trending up.down / or sideways (and for how long), he will review the technicals on a chart and make a final decision based on

'overbought/oversold' metrics, 'relative strength' in relation to the spy, Chaikin money flow, Chaikin weekly power gauge, and finally a combination of Bollinger bands, moving averages and trend lines. everything he just described is available on the Chaikin platform including 'buy / sell' signals.

d. regarding options, I will generally trade at (or slightly out) of-the-money 'spy' calls and puts using intraday 3 / 5/ and 10-minute timeframes 1 to 2 weeks out if option pricing looks good to me. my favorite indicator for this is an oscillator referred to as the awesome oscillator (AO) on my trade navigator trading platform in addition to various exponential moving averages and a modified stochastics.

e. he will sometimes add a few options from various services like pro trade researchers.

P4 stated the next detailed response and the options he used included, "asset allocation, rebalance, blend, and cash needs." The least provided response was from P3, "goals." The goals P3 used were financial goals.

Interview Question 4

"How often do you change your investments and what factors prompt this change?" P7 does not change while the remaining seven participants have different reasons when they change investments. Participants P5 and P6 gave different reasons for changing investments and the reasons what prompted them to change. P5 stated, "I go to what sectors are hot, such as cryptos and cannabis." P6 changes investments on, "long-term, no set pattern, only change when necessary, peak performance." P1 changes investments weekly because of losses. P3 changes every 5 years as it becomes sour, reached its highest dollar, and need cash. P4 changes every 2- 3 years due to performance comparison.

Themes for Research Question 1

- Participants divided up their investment portfolio using various investing options such as stocks, ETF's, companies, and cash when doing asset allocation.
- Participants use a variety of personal options such as sectors, company, and too much debt in what to choose among the investing options when it comes to investing.
- Participants provided different personal methods such as weekly, anywhere from two to five years, and factors such as losses and becomes sour when changing their investments.
- Participants could benefit from portfolio management when it comes to asset allocation.
- Participants could benefit from investment management when it comes to selecting an investment and when it may be necessary to change their investments.

Research Question 2

What sources of information do individual investors use when making investment decisions?

Questionnaire Question 3

"Which of the following resources do you use when making an investment decision?" The participants could choose more than one investment resource. Therefore, the response column will not equal a sample size of 10. Table 8 demonstrates the investment resources that participants chose.

Table 8

Investment Decision Resources

Investment Resource(s)	Responses
a. Balance Sheet	4
b. Profit & Loss Statement	4
c. Stockholder equity statement	2
d. Business magazines, newspaper	5
e. Prospectus of a company	3
f. Product the company makes	5
g. History of the company's finances and profits	7
h. Other - Charts, news, technical, and sector strength	2

The resource that was chosen the most by the participants when making an investment decision was the history of the company's finances and profits. The next most popular investment resources used by the participants were business magazines, newspapers, and the product the company makes. The investment resource used the least was the stockholder equity statement. Two participants mentioned two other resources, which were charts, news, technical reports, and sector strength.

Questionnaire Question 4

"What factors do you look for when reviewing your monthly/quarterly/semiannual/annual statements for your investments?" Three participants P3, P4, P6 when looking at their monthly/quarterly/semiannual/annual statements for investments mentioned holdings. Holdings were defined differently by the three investors. P3 stated "Low growth and high growth – looking for needs to equalize the holdings. P4 stated "performance of holdings vs. peers and benchmarks, how close to a target the holding is." P6 stated "returns, value compared to other holdings." P7 and P9 had different takes when it comes to looking at their monthly/quarterly/semiannual/annual statements for investments. P7 stated:

> I look for any anomalies that I wasn't expecting…such as abnormal transactions from spin-offs. I look at income and period-to-date returns. I also look for changes and determine how best to proceed. For example, GE lowered their dividend to a penny in 2018. The stock price was declining, so I began looking for better yields in the market.

P9 stated "I look for performance comparisons (profit/loss) to the various sector and/or index the stock or ETF is in. I also review the strength of each stock looking at a few fundamentals but mostly technical in a program I use called Chaikin Analytics. I make the necessary adjustments/ trades going forward generally on a monthly basis." From the responses to this question, it is obvious that different investors interpret their investments by reviewing the monthly/quarterly/semiannual/annual statements in different ways to meet their individual investment goals.

Interview Question 5

"What do you know about the four financial statements (balance sheet, income statement, statement of stockholder's equity, statement of cash flows)?" Table 9illustrates the participants familiarity with the four financial statements.

Table 9

Knowledge of Financial Statements

Participant	Response
P1	Looks at all four
P3	Not an accountant, no knowledge.
P4	Very knowledgeable on all four statements
P5	Not enough. I could benefit from studying this stuff more.
P6	Very familiar with all four financial statements.
P7	Accounting background, financial news.
P9	Quite familiar as I used them in over 30 years of business & industry.
P10	Not much

P1, P4, P6, P7, and P9 are very familiar with each of the four financial statements. P5 and P10 had little knowledge of the four financial statements. P3 does not know about the four financial statements. Therefore, it is obvious that P3, P5, P10 could benefit from learning about

the four financial statements so they can make better-informed decisions when it comes to their investment choices using financial statement data.

Interview Question 6

"What do you find the most challenging when analyzing the financial statements when it comes to investing and why?" Table 10 illustrates what participants view as the most challenging aspects of analyzing the financial statements used for investing.

Table 10

Analysis of Financial Statements

Participant	Response
P1	Analysis and personal bias, analyze them.
P3	No knowledge.
P4	Future performance, predicting.
P5	Knowing what carries most weight in all those numbers.
P6	Financial analysis and better understanding
P7	Balance sheet, service debt, prospectus opinion.

All six participants had different challenges when analyzing financial statements that they use for making investment choices. P9 and P10 do not rely on them. P9 stated, "I no longer need to analyze financial statements since I rely on Chaikin Analytics to do that for me. P10 stated "I really don't; I rely on Market Smith or earnings history and projections."

Interview Question 7

"Do you use a financial adviser when making an investment decision? If so, how do you choose one. If not, why not." P4 and P6 were the only two participants who used a financial advisor. P4 explained his response by stating, "Yes, by assignment, revenue sharing, personal level, philosophy," meaning:

> Many of the financial services providers that I use have assigned a financial adviser to service my account. I use many providers and many of them have assigned an advisor based on the platform that I use with the firm. I picked the financial services provider based on the investment vehicles available (mainly mutual funds) or other services provided (money center bank) and later the provider made the decision to assign an individual to me rather than me picking a particular adviser. If I had picked the adviser myself, I may have used different criteria in the selection process. The personal level or investment philosophy of the advisor assigned varies between the different firms so I generally either consult them to see their views on things and make my own decision rather than blindly taking their advice.

P6 stated, "Yes, cold call, comfortability," meaning, "I started using him about a year after I first talked to him, I had to get comfortable with him, then did a small trade and built the relationship from there." The three most compelling responses from those who do not use a financial advisor were P5, P9, and P10. P5 stated, "I used to, but they lost me too much money. I don't need to pay someone to lose my money. I can accomplish that by myself." P9 stated, "no need since I personally enjoy investing and trading on my own. A little self-discipline, knowledge, and practice can go a long way in getting reasonably good & consistent results that do better than the s&p500 most years." P10 stated, "Don't think they are worth much."

Themes for Research Question 2

- 70% of the participants use the history of the company's finances and profits resource when making an investment decision.
- Less than half of participants mentioned some form of holdings such as holdings performance when reviewing their monthly/quarterly/semiannual/annual statements for investments.
- Over half of the participants have knowledge about the four financial statements.
- 75% of the participants found the financial statements to be challenging for various personal preferences such as analyzing them and the prospectus when it comes to investing.
- 75 % of the participants do not use a financial advisor when making an investment decision.
- Participants could benefit from a basic accounting course with emphasis on a company's annual report.

Research Question 3

What investment options do investors not understand?

Questionnaire Question 5

"Which of the following options for investing do you not understand?" Table 11 illustrates the responses to investment options that they do not understand.

Table 11

Investing Options

	Option	Responses
a.	Blue chip stocks	0
b.	Defensive stocks	3
c.	Growth stocks	1
d.	Preferred stock	1
e.	Treasury bonds	1
f.	Corporate bonds	2
g.	Municipal bonds	2
h.	Series EE bonds and Series I bonds	7
i.	Zero coupon bonds	5
j.	Certificate of deposit	0
k.	Mutual funds	0
l.	Traditional IRAs	1
m.	Roth IRAs	1
n.	Hedge funds	0
o.	Index funds	0
p.	Commodities such as corn, wheat, gold, etc.	1
q.	Derivatives	3
r.	401(K) retirement plans	2
s.	403(b) retirement plans	3
t.	Other _____	0

The investment options that seven out of 10 participants did not understand included Series EE bonds and Series I bonds. Therefore, the seven participants could benefit from learning more about these bonds. Five out of 10 participants could benefit from learning about zero-coupon bonds. Three participants do not understand defensive stocks, derivatives, and 403(b) retirement plans. All participants have a good understanding of blue-chip stocks, certificates of deposit, mutual funds, hedge funds, and index funds. No other investing options were mentioned by the 10 participants.

Questionnaire Question 6

"Which of the following terms do you not understand?" Table 12 illustrates terms that are not understood by participants.

Table 12

Terms

	Option	Responses
a.	Assets	0
b.	Liabilities	0
c.	Annuities	1
d.	What is a bond	1
e.	What is a stock	0
f.	Price to earnings ratio	0
g.	Prospectus	0
h.	Balance sheet	1
i.	Profit and loss statement	1
j.	S&P 500	0
l.	Other _____	0

P5 did not understand annuities, bonds, balance sheets, and profit and loss statements. P5 could benefit from learning these terms because they are basic terms that should be understood when making investment decisions. The remaining nine participants understood all the terms. No other additional terms were mentioned by the ten participants.

Interview Question 8

"What three things about investing would you like to better understand in order to make better informed decisions when it comes to investing." Table 13 illustrates other aspects about investing that they would like to learn more about.

Table 13

Investing Decisions

Participant	Response
P1	Looking at pharmaceuticals, FDA rules better, ratios, accounting terms.
P3	The four financial statements - balance sheet, income statement, statement of stockholders' equity, and cash flow statement.
P4	Technical chart analysis, better trend analysis, analyze stocks - stock beta market.
P5	Being better at reading stock charts, understanding Fibonacci retracements, discipline.
P6	Predicting what they are doing, trends of stock.
P7	Research, new or emerging industry, operational analysis, and disclosures.
P9	Nothing comes to mind
P10	I don't know

Six out of the eight participants tried to come up with at least three things they would like to learn more about so they can make better-informed decisions when it comes to their investing. The only participants who could not come up with more than three things to learn about to make better investment choices were P9 and P10. P4 identified a different investing technique called technical chart analysis. Technical chart analysis, "is a tool or method, to predict the probable future price movement of a security – such as a stock or currency pair – based on market data" (Technical Analysis, 2019). P5 also identified a different investing technique called Fibonacci retracements. Fibonacci retracement is based on the mathematician Leonardo Fibonacci who lived in the 13th century and "is created by taking two extreme points (usually a peak and a trough) on a stock chart and dividing the vertical distance by the key Fibonacci ratios of 23.6%, 38.2%, 50%, 61.8%, and 100%" (Murphy, 2020). Therefore, there are ample learning opportunities for these participants to espouse their investment knowledge.

Interview Question 9

"What do you find the most confusing when trying to choose from the available options, such as, types of stocks, dividends, types of bonds, etc., when it comes investing?" Table 14 illustrates what participants find most confusing when making investment choices.

Table 14

Investing Options

Participant	Response
P1	Does not look at financial statements, different bond yields, dividends, payout. earnings, bonds.
P3	Income, valuation, growth, blend, sector industry, foreign industry, mutual funds, types of bonds, and emerging markets.
P4	Well verse nothing confusing.
P5	Bonds, because I've never invested in them or researched them.
P6	Future, what benefits now.
P7	Proxy, Board, Ramifications impacts on financial statements, too many funds, how long they will last.
P9	For me personally, it became much less confusing as an investor when I learned to rely more on the technicals of what the charts were telling me at any given moment about the true price of a stock, rather than relying on fundamentals to interpret a good stock to invest in for the long run.
P10	I don't find the choices that confusing

P4 and P10 did not find the choices of investment options confusing. The remaining participants had various choices of investment options that they found confusing. P3 provided the most investment options choices that were confusing, which are "income, valuation, growth,

blend, sector industry, foreign industry, mutual funds, types of bonds, and emerging markets". P1 provided more additional investment confusing choices which are "does not look at financial statements, different bond yields, dividends, payout. earnings, bonds." P5 only provided one additional investment choice as confusing: "bonds, because I've never invested in them or researched them." P9 provided a way he has made it less confusing about investment options by "learning to rely more on the technicals of what the charts were telling me at any given moment about the true price of a stock, rather than relying on fundamentals to interpret a good stock to invest in for the long run."

Themes for Research Question 3

- Most of the participants do not understand Series EE bonds, and Series I bonds, and Zero-coupon bonds.
- Most of the participants came up with at least three personal preference resources such as stock charts, trends of a stock, and analyzing stocks for better understanding so they can make better-informed decisions when it comes to investing.
- Most of the participants provided different choices that were confusing to them from the available options, such as, types of stocks, dividends, types of bonds, etc., when it comes to investing.
- Participants could benefit from stock analysis to identify trends in stock, forecasting, stock data evaluation of past and current data, sector analysis, and market analysis for better understanding so they can make better-informed decisions when it comes to investing.

Research Question 4

What do investors perceive as their needs to make better investment decisions?

Questionnaire Question 7

"What type of educational offerings would help you to make better investment choices?" Table 15 illustrates what participants is needed to help them make better investment choices.

Table 15

Educational Offerings

Participant	Response
P1	If I was playing biotech stocks, the education about the drugs would be handy. Mostly, I stick with companies that I can relate to.
P3	Applying Technical Analysis to companies found to be fundamentally sound – Using TA to decide entry or exit points.
P4	Seminars on various fundamental investment theories and strategies, tax planning, withdrawal strategies, methods to reduce costs.
P5	Webinar/online courses
P6	How to understand a P&L statement, and review an annual report
P7	I think a good summary anticipated performance of overall market segments would be useful to me. It probably exists already, but I'm thinking of a summarized segment prospectus that takes market trends

	and indicates risk with less sophisticated vocabulary. From time-to-time I will view pre-recorded sessions by Charles Schwab or ETrade to learn more about new investment opportunities as well as strategies. I have not tried any courses using online platforms such as LinkedIn Learning, but am considering them.
P8	Macroeconomics.
P9	Though I understand bonds in a general way, having a better understanding of how they work and how to include them in my overall portfolio would be helpful.
P10	Info about ETFs

All 10 participants provided various educational opportunities not only for themselves but also for any investor to make better investment choices. P4 provided the most educational offerings: seminars on various fundamental investment theories and strategies, tax planning, withdrawal strategies, and methods to reduce costs. The educational offerings provided by the other nine participants were biotech stocks related to drugs, technical analysis, webinars, online courses, P&L statement, annual report, market segments summary, segment prospectus, macroeconomics, knowledge of bonds, and knowledge of ETFs. It is apparent from the participants that more educational opportunities are needed to help investors make better investment choices.

Questionnaire Question 8

"Do you have any other needs about financial advisers, information, terms—anything—that would make it easier for you to choose good investments." Table 16 illustrates what participants other needs are to make it easier for them to choose good investments.

Table 16

Other Needs

Participant	Response
P1	I do not.
P3	No.
P4	How to find advisers that charge in varied ways, how to best utilize an adviser's Form ADV, how to determine the "best fit" for an adviser and a particular investor.
P7	I am hesitant to hand over the keys to my portfolio and let an adviser do the work for me. By me doing the little bit of research I do, I feel that helps me more in the long run to become more knowledgeable. There is obviously risk and reward to both options.
P8	For the advisor to have a better understanding of options.
P9	Not really.
P10	No.

P1, P3, P9, and P10 did not have any other needs about financial advisers, information, or terms that would make it easier for them to choose good investments. P4, P7, and P8 mentioned other needs about financial advisors. P7 was reluctant to use a financial advisor: “I am hesitant to hand over the keys to my portfolio and let an adviser do the work for me. By me doing the little bit of research I do, I feel that helps me more in the long run to become more knowledgeable. There is obviously risk and reward to both options.” P4 needed help on finding a financial advisor and how to use a financial advisor for investing. He commented about “how to find advisers that charge in varied ways, how to best utilize an adviser’s Form ADV, how to determine the ‘best fit’ for an adviser and a particular investor.” The participants might be reluctant to use a financial advisor, but with better research about them and how they provide their investment services might change their minds to help them choose good investments.

Interview Question 10

“How does emotional intelligence (skill in perceiving, understanding, and managing emotions and feelings) affect an investor's investment decision making?” Table 17 illustrates the emotional intelligence affects into an investor’s investment decision making.

Table 17

Emotional Intelligence

Participant	Response
P1	Good emotional intelligence awareness helps avoid taking bigger risks due to optimistic feelings that emerge during research.
P3	Unfortunately, emotions sometimes govern one's thinking, Irrational decisions are sometimes made.
P4	Emotions do enter into decisions as they relate to: Affinity to a particular investment or sponsor - For example, mutual funds or stocks that are either "original investments" or have been held for a long time may often be retained even though performance or objectives may have not been met when compared to other, newer or less familiar investments. Many mutual funds have catchy names for marketing purposes which do not accurately define the investment objectives. A "balanced" fund may hold more

	than 90% stocks and little fixed income, to bring in money from investors. If the investor does not "look inside" by reading the financial information, they may be led to believe that the investment is less risky than it really is. In other situations, a desire to be "friendly" to the environment, people or other worthy causes may lead one to invest in an instrument that performs poorly. One could invest for better performance and take the money that is made and donate it directly to the cause that the investor has high regard and, in the end, both parties will be ahead.
P5	A huge amount. This can be the difference in being a successful investor or not.
P6	I think that emotional intelligence can affect decisions, by using objective information rather than subjective responses. by using facts rather than feelings.
P7	I think emotional intelligence plays an important role. I would imagine that investors some investors who have set time-based goals

	will be more emotionally driven by market fluctuations.
P9	The more an investor can manage his or her emotions and feelings when it comes to investing and trading, the better they will do. I am reminded of something Larry Williams said many years ago, and I quote “to make money as a trader, you have to not care. As soon as you start caring, you have emotional attachment. it’s counterintuitive. the more you care, the less you make. The more you are clinically dispassionate and less attached to your trades, the more you will make. It’s really quite simple, but very hard to accept.” For me, I started with a year of paper trading followed by very small trade positions and investments where I didn’t care if I lost a small amount of money or not. Once I proved myself at that level, I incrementally increased my investments over time, slowly gaining confidence and a measure of success along the way.

P10	Investors, including me, react to negatively to panic in the market and positively to euphoria.

Each participant understood how emotional intelligence affects an investor's investment decision making. P4 and P9 provided reflections on emotional intelligence. P4 stated:

> Emotions do enter into decisions as they relate to: Affinity to a particular investment or sponsor - For example, mutual funds or stocks that are either 'original investments' or have been held for a long time may often be retained even though performance or objectives may have not been met when compared to other, newer or less familiar investments. Many mutual funds have catchy names for marketing purposes which do not accurately define the investment objectives. A "balanced" fund may hold more than 90% stocks and little fixed income, to bring in money from investors. If the investor does not "look inside" by reading the financial information, they may be led to believe that the investment is less risky than it really is. In other situations, a desire to be "friendly" to the environment, people or other worthy causes may lead one to invest in an instrument that performs poorly. One could invest for better performance and take the money that is made and donate it directly to the cause that the investor has high regard and, in the end, both parties will be ahead."

P9 stated:

> The more an investor can manage his or her emotions and feelings when it comes to investing and trading, the better they will do. I am reminded of something Larry Williams said many years ago, and I quote "to make money as a trader, you have to not care. As

soon as you start caring, you have emotional attachment. It's counterintuitive. the more you care, the less you make. The more you are clinically dispassionate and less attached to your trades, the more you will make. It's really quite simple, but very hard to accept." For me, I started with a year of paper trading followed by very small trade positions and investments where I didn't care if I lost a small amount of money or not. Once I proved to myself at that level, I incrementally increased my investments over time, slowly gaining confidence and a measure of success along the way.

An overall summary from the participant's responses is that emotional intelligence can affect an investor's investment decision making and an investor's investment decision making can affect emotional intelligence.

Interview Question 11

"How has COVID-19 impact your investment decision-making?" Table 18 illustrates the impact of COVID-19 on the participants on their investment decision-making.

Table 18

COVID-19

Participant	Response
P1	Yes, it has. It has influenced to look at companies like ZOOM and TDOC. It also influenced my decision to invest in MRNA, and JNJ m PFE, because they were coming up with a vaccine.
P3	I am aware of companies that are affected by Covid-19. Some have been affected generously while others have negative results.
P4	COVID has resulted in more attention to the market due to swings and increased volatility. After the recovery from the short-term large downturn, increased trading has been the result to take advantage of large changes in the value of certain asset classes to lock in profits and better prepare for future downturn. The end result has been to rebalance to better reflect Asset allocation overall models that were "out of whack".

P5	I think it has helped, since I'm able to spend more time researching thanks to the added free time I have.
P6	I think Covid has made me a little more of certain investments based on how it has affected different sectors.
P7	COVID-19 has had no impact on my family's investment decisions. We have awhile until retirement, so we continue to invest in the same vehicles as we did prior to the pandemic.
P9	Favorably in general. by not relying on the news and staying focused on the markets and what the charts are telling me, COVID-19 hasn't bothered me in my decision-making process.
P10	At this point no effect.

Two participants, P7 and P10, stated that COVID-19 had no impact on their investment decisions. P7 discussed why COVID-19 had no impact by saying, "We have awhile until retirement, so we continue to invest in the same vehicles as we did prior to the pandemic." P5, P6, and P9 said COVID-19 has had a favorable impact on their investment decisions. P5 stated, "I think it has helped, since I'm able to spend more time researching thanks to the added free

time I have." P6 stated, "I think Covid has made me a little more aware of certain investments based on how it has affected different sectors." P9 stated, "Favorably in general. By not relying on the news and staying focused on the markets and what the charts are telling me, COVID-19 hasn't bothered me in my decision-making process." The importance for any investor during a national crisis such as COVID-19 is to have an emergency investment strategy plan in place to protect their investments.

Interview Question 12

"Do you let your emotions dictate your trading or investing behavior?" Table 19 illustrates what emotions participants if any they experience that dictates their trading or investing behavior.

Table 19

Emotions

Participant	Response
P1	Sometimes it does.
P3	Try not to, selling
P4	No
P5	I would like to say I don't, but I'm sure emotions play a larger role that I realize.
P6	Fluctuation.
P7	No
P9	A lot less than I use to. I just follow the trend using multiple timeframes to have a sense of confidence in my trade that helps me keep my emotions in check.
P10	Sometimes

P4 and P7 were the only two participants who did not let their emotions dictate their trading or investing behavior. The remaining six participants stated that emotions in some way dictated their trading or investing behavior. P5 provided an interesting comment about his emotions on trading or investing behavior: “I would like to say I don’t, but I’m sure emotions play a larger role that I realize.” P9’s emotions affecting his investment decisions have subsided as he stated:

> A lot less than I used to. I just follow the trend using multiple timeframes to have a sense of confidence in my trade that helps me keep my emotions in check. Emotions are like an investor’s love story when it comes to investing, either you love what you have (returns on investments) or worry about the fact as to whether to keep the investments because it is not meeting their investing expectations.

Interview Question 13

“Do you typically follow 'the herd' into investing situations? Or are you more independent?” Table 20 illustrates what participants either follow the herd or are independent into their investing situations.

Table 20

Herd or Independent

Participant	Response
P1	Follows the herd.
P3	More independent
P4	More independent
P5	I probably follow the herd to some extent since I do tend to follow hot sectors.
P6	More independent.
P7	Follows the herd.
P9	No, I avoid the herd at all costs. or are you more independent? Yes, again, I let the scanner identify possible investing ideas based on my predetermined criteria. Chaikin does an excellent job with this.
P10	I try to be independent but sometime follow the herd.

P3, P4, P6, and P9 are independent and avoid the herd in their investing situations. P9 stated, "No, I avoid 'the herd' at all costs. Or are you more independent? Yes, again, I let the scanner identify possible investing ideas based on my predetermined criteria. Chaikin does an excellent job with this." P1 and P7 follow "the herd" in their investing situations. What does it

mean to follow “the herd” when it comes to investing situations? “The herd” means that investors follow similar investors’ investing methods. Two participants, P5 and P10, were either following “the herd” or independent depending upon their investing situation. P5 stated, “I probably follow the herd to some extent because I do tend to follow hot sectors.” P10 stated, “I try to be independent but sometime follow the herd. As an investor, think of it this way, if you had, say $5,000 to invest is to ask yourself do I want to follow ‘the herd’ not knowingly what returns those investors got if any or do you want to be independent by achieving your own individual investment goals.”

Themes for Research Question 4

- Emotional intelligence (skill in perceiving, understanding, and managing emotions and feelings) affects an investor's investment decision-making.
- COVID-19 had little impact on participant investing decisions.
- Participants let their emotions dictate their trading or investing behavior.
- Participants do not use the “herd” mentality for investing but rather prefer to be independent thinkers in their investing situations.

Summary of Themes by Research Question

Table 21

Summary of Themes

Research Questions	Themes
What are factors that influence individual investors when deciding upon an investment option?	• Participants divided up their investment portfolio using various investing options such as stocks, ETF's, companies, and cash when doing asset allocation. • Participants use a variety of personal options such as sectors, company, and too much debt in what to choose among the investing options when it comes to investing. • Participants provided different personal methods such as weekly, anywhere from two to five years and factors such as losses and becomes sour when changing their investments. • Participants could benefit from portfolio management when it comes to asset allocation.

	• Participants could benefit from investment management when it comes to selecting an investment and when it may be necessary to change their investments.
What sources of information do individual investors use when making investment decisions?	• 70% of the participants use the history of the company's finances and profits resource when making an investment decision. • Less than half of participants mentioned some form of holdings such as holdings performance when reviewing their monthly/quarterly/semiannual/annual statements for investments. • Over half of the participants have knowledge about the four financial statements. • 75% of the participants found the financial statements to be challenging for various personal preferences such as analyzing them and the prospectus when it comes to investing.

	• 75 % of the participants do not use a financial advisor when making an investment decision. • Participants could benefit from a basic accounting course with emphasis on a company's annual report.
What investment options do investors do not understand?	• Most of participants do not understand Series EE bonds, and Series I bonds, and Zero-coupon bonds. • Most of the participants came up with at least three personal preference resources such as stock charts, trends of stock, and analyzing stocks for better understanding so they can make better informed decisions when it comes to investing. • Most of the participants provided different choices that were confusing to them from the available options, such as, types of stocks, dividends, types of bonds, etc., when it comes investing.

	• Participants could benefit from stock analysis to identify trends in stock, forecasting, stock data evaluation of past and current data, sector analysis, and market analysis for better understanding so they can make better informed decisions when it comes to investing.
What do investors perceive as their needs to make better investment decisions?	• Emotional intelligence (skill in perceiving, understanding, and managing emotions and feelings) affects an investor's investment decision making. • COVID-19 had little impact on participant investing decisions. • Participants let their emotions dictate your trading or investing behavior. • Participants do not use the “herd” mentality for investing but rather prefer to be independent thinkers in their investing situations.

Summary

This qualitative case study was an exploration of the process individual investors use to decide on investment options, the basic principles of investing those individual investors understand, and those they do not understand, as well as what they view their needs are to improve their investment performance. The participants, from two investor groups, Cleveland and Cincinnati, were provided a questionnaire, and the researcher conducted interviews using ZOOM. The interviews used a semistructured method. Each interview was recorded, and responses were verified, coded, and analyzed. Several themes were developed from the participants' responses, such as investors need further education about the four financial statements as well as annual reports, investors need to learn more about analyzing stocks, and investors need to learn how to deal with their emotional intelligence that factors into their investment decision-making. Chapter 5 encompasses an introduction, interpretations and conclusions, implications for theory, implications for practice, recommendations for further research, and concluding statement.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this qualitative case study was to explore the process individual investors use to decide on investment options, the basic principles of investing those individual investors understand, and those they do not understand, as well as what they view their needs are to improve their investment performance. The results from the research indicated the investors need better investment management, accounting acumen to interpret the data in the financial statements with an emphasis on the annual report, benefit from stock analysis to identify trends in stock, forecasting, stock data evaluation of past and current data, sector analysis, and market analysis, and learning how to control their emotional intelligence. The results were provided by a sample of 10 investors from the Cleveland and Cincinnati investor groups. The results indicate that inventors do have needs when making their personal investment decisions. The following sections outline the results which are interpretations and conclusions, implications for theory, implications for practice, recommendations for further research, significance of the study, and concluding statement.

Interpretation of Results

The results from the research will be interpreted by research question and the themes for each research question.

Research Question 1: What are factors that influence individual investors when deciding upon an investment option?

Five themes were derived from the questionnaire and interview questions related to Research Question 1:

Theme 1

Participants divided up their investment portfolio using various investing options such as stocks, ETF's, companies, and cash when doing asset allocation.

The results showed that nine investors differed in their asset allocations when diversifying their investment portfolio. This indicates each investor had an individual preference in diversifying their investment portfolio. They diversify using different stocks, companies, sectors, EFTs, and cash. Gautam and Holani (2019) stated that a critical factor in investment decisions is diversification, which is what the participants believe is important in investing. Diversification relates to asset allocation and means not put all your "eggs in one basket." For an investor this means dividing their investment portfolio up based on their asset allocation of choosing different asset classes to minimize risk such as different types of stocks and bonds as an example.

Theme 2

Participants use a variety of personal options such as sectors, company, and too much debt in what to choose among the investing options when it comes to investing.

The investors' results on investing options are limited when it comes to investing. Some of their choices were stocks, EFTs, options, rebalance, blend, sectors, and companies. Sahi

(2017) stated there are more investment opportunities than there were a decade ago, which makes it difficult for an investor to evaluate all these opportunities when investing. Sahi differs from the results of this study in that the participants seem to be missing out on all the investing opportunities available to them so they can possibly get a better return on their investment. One reason for this disagreement may be that the investors have individual preferences when it comes to their investments based on their financial needs. Taking this into account, there must be better education on all the investing options and opportunities associated with them to help the individual investor find the best investment out of the many options available to them to meet their individual goals.

Theme 3

Participants provided different personal methods such as weekly, anywhere from two to five years and factors such as losses and becomes sour when changing their investments.

Most of the investors changed their investments on a weekly basis up to five years, depending on how their investments are doing. Some of the reasons the investors change their investments are losses, becomes sour, need cash, and performance comparison. Forbes and Kara (2010) stated that for participants (investors) to achieve long-term investment goals, the effect of investment knowledge, even at 57% knowledge, was related to confidence, and the investors' own knowledge relates to their current investment knowledge in predicting investing self-efficacy. Because investors are changing on a short-term basis, they might not be able to achieve their long-term investment goals because they do not know the ramifications of the impact of changing their investments. Therefore, the investors might be lacking in investment knowledge to be confident that their initial investment would achieve their long-term investment goals. Therefore, investment education is needed at the beginning to know the risks involved with the

investment options so investors can make informed decisions in meeting their goals on a long-term basis.

Theme 4

Participants could benefit from portfolio management when it comes to asset allocation.

The investors could benefit from portfolio management when it comes to asset allocation because the results showed them changing their investments weekly up to every five years. Portfolio management is putting together and managing investments so that investors can meet their long-term financial goals based on risk tolerance (Hayes, 2021). Asset allocation is a key component of portfolio management. Nguyen et al. (2016) found risk tolerance to intervene in the relationship between decision-making and financial literacy, which suggested that clients who are not very financially literate are less risk-tolerant tend to more than likely invest their money in risky assets to a less degree. Nguyen et al. would disagree with the results of this study based on the financial literacy of the investors to make informed decisions becuse they change their investments due to losses, becoming sour, needing cash, and performance comparison, which makes it look like they are more risk tolerant. One reason for the disagreement could be that the investor's financial literacy when putting together and managing their investments may not have all the information needed to make informed decisions indicates they are more risk-tolerant, even though they thought it would meet their long-term financial goals. Therefore, investors could benefit from portfolio management when it comes to asset allocation.

Theme 5

Participants could benefit from investment management when it comes to selecting an investment and when it may be necessary to change their investments.

Investment management involves three phases: selecting an investment or selecting investments, monitoring, and changing if necessary. When it comes to selecting investments, investors should do their homework through extensive research from online investing resources, trade magazines, annual reports, 10K reports, and other sources. Once investments are found, the investor needs to determine risk tolerance, growth rate, and calculations from the numbers and what they mean. Next is for the investor to monitor and manage their investment(s) by setting an expectation of how much of a return on the investment is required to meet their financial goals and check to see if the asset allocations are performing to their expectations. Finally, if the financial goals are not being met and the asset allocations are underperforming, it may be time to think about changing the investments.

Research Question 2: What sources of information do individual investors use when making investment decisions?

Six themes were derived from the questionnaire and interview questions related to Research Question 2:

Theme 1

Seventy percent of the participants used the history of the company's finances and profits resource when making an investment decision.

Even though 70% of the participants used the history of the company's finances and profits resource when making an investment decision, they did combine other investment resources such as business magazines, newspapers, what the product the companies make, balance sheets, and profit and loss statements. But the true value for the investor's choice of investment resources is based on financial analysis. Financial analysis involves analyzing this

financial information to get the reasons behind the numbers in the accounting ratios. Once the accounting ratios are analyzed, it is important to use these results to look at trends based on the history of the company's finances and profits when making an investment decision. Here is a need for further education about the investor's decision-making process when choosing investment resources and doing financial analysis.

Theme 2

Less than half of participants mentioned some form of holdings such as holdings performance when reviewing their monthly/quarterly/semiannual/annual statements for investments.

Only three participants mentioned some form of holdings. Holdings are an investor's investment portfolio that could contain a combination of any of the following: stocks, bonds, mutual funds, index funds, savings, children's education, and retirement plans. The participants did not mention what their investment portfolios consisted of, but provided a comparison of low growth, high growth, peers, benchmark, returns, and value. Širůček and Křen (2015) emphasized for an investor who selects low-beta stocks and does not select a portfolio using random picking, the investor should participate in capital market returns, but they will find it difficult to monitor market trends and events from companies' financial statements for long-term investments. Therefore, without knowing what the participant's investment portfolio consists of when they are reviewing their monthly/quarterly/semiannual/annual statements for investments, they should see if their holdings are meeting their investment goals. Further research into holdings would be to monitor them when comparing to market trends and events from companies' financial statements for long-term investments.

Theme 3

Over half of the participants have knowledge about the four financial statements.

Most participants knew the four financial statements—the balance sheet, income statement, statement of stockholder's equity, and cash flow statement—and use them when making investing decisions. The balance sheet lists the assets, liabilities, and stockholder's equity sections. The income statement shows revenue and expenses. The stockholder's equity section consists of common and preferred stock, treasury stock, retained earnings, and additional paid-in-capital. The statement of cash flows has two methods: indirect and direct. The indirect method shows the change in cash flow based on operating, financing, and investing activities. The direct method provides the inflows and outflows of cash during a month. It is important for investors to not only have knowledge of these four financial statements but to have knowledge of how to analyze them to make informed decisions when choosing investments or maintaining them to achieve their investing goals.

Theme 4

Seventy-five percent of the participants found the financial statements to be challenging for various personal preferences such as analyzing them and the prospectus when it comes to investing.

For most investors, if they are not an accountant or have some knowledge of accounting, it will be challenging to analyze financial statements and understand a prospectus without some outside assistance like a financial advisor. Investors need to be familiar with ratio analysis—liquidity, solvency, profitability, efficiency, coverage, and market prospect—to identify trends and comparisons to other companies. In addition to the ratios, horizontal and vertical analysis of

the balance sheet and income statement also can identify trends and comparisons to other companies. A prospectus is a legal disclosure document required to be filed with the Securities and Exchange Commission (SEC) providing investment offering information to the public ("Prospectus," 2019). The prospectus is comprised of company history and overview, services or products the company provides, the profile of management, ownership structure, proceeds, offering of securities, financial information, and risks. Because most participants find the financial statements and prospectus challenging, it would benefit investors to seek a financial analyst, financial advisor, and take a basic accounting course.

Theme 5

Seventy-five percent of the participants do not use a financial advisor when making an investment decision.

The participants prefer not to use a financial advisor. The reasons for not using a financial advisor include that they lost money, enjoy investing by themselves, and advisors are not worth much. Nguyen et al. (2016) suggested that more research is needed to study casual relationships among key constructs such as risk perceptions as well as conducting dyadic research for both advisers and clients so that it can help regulators in the industry and financial advisors to understand investor risk and its impact on their investment decision-making. The key for any investor when making investment decisions is whether they really trust themselves enough with their own money to reach their investing goals or if they prefer to risk it with a financial advisor.

Theme 6

Participants could benefit from a basic accounting course with emphasis on a company's annual report.

A basic accounting course with emphasis on a company's annual report will help investors to identify trends and compare financial results to other companies and industries. The main aspect of accounting is the accounting cycle. The accounting cycle involves learning how to identify transactions, recording journal entries, posting journal entries, recording adjusting entries, preparing an adjusted trial balance, preparing financial statements, recording closing entries, and preparing a closing trial balance. None of the accounting cycle steps are used by investors when looking at the annual reports; emphasis is only on the results. The analysis of the financial statements with emphasis on the annual report is done by learning how to do ratios and horizontal and vertical analysis. Not all investors consider taking an accounting course. However, the independent investor may find it rewarding to take an accounting course so they can make better investment decisions.

Research Question 3: What investment options do investors not understand?

Four themes were derived from the questionnaire and interview questions related to Research Question 3:

Theme 1

Most of participants do not understand Series EE bonds and Series I bonds and Zero-coupon bonds.

Participants should recognize that these bonds are sources of money for the federal government to use for various initiatives and are very safe investments. The Treasury Securities and Programs provide an understanding of Series EE bonds and Series I bonds. Treasury Securities and Programs defines Series EE bonds as low-risk savings products that pay interest until they reach 30 years or when cashed, whichever comes first. However, the advantage to the series bonds is that they are state tax-free, but not federal tax-free. The interest rate for Series EE

bonds is either fixed or variable, has no penalty for redemption after 5 years, and investors must own it for at least 1 year and earn an annual fixed rate of 0.10%. Treasury Securities and Programs define Series I bonds as a savings bond that earns interest based on combining a fixed rate and an inflation rate. Series I bonds interest rate is either fixed or variable and interest is compounded semiannually, earned once a month, cashed out receive the principal plus interest and a composite rate of 1.06%. A zero-coupon bond pays no interest (Zero-Coupon Bond, n.d.). Corporate Financial Institute provides a background for investors on zero-coupon bonds as follows:

- Trades at a discount to its face value.
- Purchases the bond today, must be compensated at a higher future value.
- The face value of a bond is $1,000.
- Computing the price of the bond can be calculated by compounded annually or semi-annually.
- Interest rate risk is a risk where the bond declines in value from interest rate fluctuations.

The investor needs to understand both series bonds and zero-coupon bonds of the risk involved if they sell them before they mature.

Theme 2

Most of the participants came up with at least three personal preference resources such as stock charts, trends of stock, and analyzing stocks for better understanding so they can make better-informed decisions when it comes to investing.

The participants indicated a need to learn stock charts, stock trends, and stock analysis so they can better understand to make sound informed decisions when it comes to investing.

Corporate Financial Institute provides the acquired learning on how to read stock charts, trend analysis, and analyzing stock as follows:

- Stock charts construction contains either lines, bars, or candlesticks.
- Volume appears on every stock chart - shows trading volume, blue bars are buying volume and red bars are selling volume.
- Four basic volume patterns - high volume trading on up days, low volume trading on down days, high volume trading on down days, and low volume trading on up days.
- Use technical indicators to identify trends and analyze stocks.
- Most technical indicator used is the moving average: 20-day, 50-day, and 200-day.
- Analyzing trends consists of asking three questions: How long has trend been in place, how does a stock tend to trade, and are there signs of a possible trend reversal?

Here is an opportunity for further research after they have learned about these concepts and see how well they do on reading a stock chart, identifying trends from the stock chart, and providing a stock analysis summary from the stock chart.

Theme 3

Most of the participants provided different choices that were confusing to them from the available options, such as types of stocks, dividends, and types of bonds, when it comes investing.

About half of the participants found bonds confusing. The bond confusion is due to the different types of bonds in general and different bond yields. Fontinelle (2021) stated that investors are confused by the complexity of the market and the terminology related to bonds. He stated that bonds are simple debt instruments. Fontinelle's statement supports the responses of

the participants because they do find bonds confusing. There are three types of bonds, which are corporate, high-yield, and municipal. Bonds can create a win-win for the investor such as steady income stream, principal returned after maturity, offset losses from stocks, and companies, governments, and municipalities such as cash flow, debt financing, and capital investments.

Theme 4

Participants could benefit from stock analysis to identify trends in stock, forecasting, stock data evaluation of past and current data, sector analysis, and market analysis for better understanding so they can make better informed decisions when it comes to investing.

Participants cited a need for helping to analyze stocks. There are two types of stock analysis - fundamental and technical that could benefit an investor to identify trends in stock, forecasting, stock data evaluation of past and current data, sector analysis, and market analysis for better understanding so they can make better-informed decisions when it comes to investing. Fundamental analysis uses various components: firm's economic standing and yearly report, employees, financial status, the board of directors, income reports, balance sheets, political data, and unnatural and natural disasters to predict future stock and useful for long-term stock-price movement but not short-term (Nti et al., 2020). Barla and Prasad (2021) defined technical analysis as a practice of anticipating the price changes of financial instruments (like shares) by analyzing prior price changes and searching for patterns and relationships in the price history. Technical analysis is best used for studying the short-term behavior of a stock. Therefore, an investor has a choice of whether to identify stock patterns, either long-term (fundamental analysis) or short-term (technical analysis).

Research Question 4: What do investors perceive as their needs to make better investment decisions?

Four themes were derived from the questionnaire and interview questions related to Research Question 4:

Theme 1

Emotional intelligence (skill in perceiving, understanding, and managing emotions and feelings) affects an investor's investment decision making.

Chitra and Ramya Sreedevi (2011) found that investors base their decisions on emotions and information-seeking before deciding. They stated that every investor must control their emotions in making decisions to avoid the loss of money. Chitra and Ramya Sreedevi (2011) agreed with participants, as emotional intelligence does impact their investing decisions. The participants thought that emotional intelligence affects investing decisions by using subjective information rather than subjective responses. Johnsi and Sunitha (2019) also found that the emotional intelligence competencies of an individual, such as possessing self-awareness and social skills, exhibit more behavioral biases. Behavioral biases such as emotions are based on intuition or impulse and could affect an investor's decision on investments. Johnsi and Sunitha (2019) agreed with the participants do impact their investing decisions based on impulse. The participants think they react negatively to panic in the market and positively to euphoria. Abdillah et al. (2019) stated emotional intelligence and locus of control have a positive effect on digital risk investment intention, but risk aversion and financial literacy have a negative effect. Their findings are explained as follows:

- An individual with high emotional intelligence makes it easy to make risky investments.

- Locus of control is where an individual's control over decisions increases digital investment intention.
- Risk aversion is where an individual's attitude to avoid risk in a state of uncertainty will make the lower intention to invest.
- Financial literacy is where individuals have high literacy rates that can prevent a person's intentions for digital risky investments.

Abdillah et al.'s (2019) research supports participants, as emotional intelligence does impact their investing decisions based on risk. The participants believed by not looking inside when reading the financial information, the investments are less risky than they were.

Theme 2

COVID-19 had little impact on participant investing decisions.

Centers for Disease Control and Prevention defines COVID-19 as a dangerous disease caused by a virus discovered in December 2019 in Wuhan, China. Gurbaxani and Gupte (2021) stated there was a significant association found between measures taken to prevent the spread of COVID-19 (such as lockdown and travel restrictions) and individual income; such preventive measures directly impacted savings and investment behaviour. Gurbaxani and Gupte (2021) believed that COVID-19 impacted investing decisions due to decreased household income, stock market crash, and investor preferences shifting towards more secure investment options like bank deposits. Gurbaxani and Gupte (2021) do not agree with the participants who stated COVID-19 had little impact on investing decisions, as they continue to invest in the same vehicles as they did before the pandemic. Naseem et al. (2021) also found the following from their study of COVID-19:

Their observation showed a downward trend in stock markets and the COVID-19 pandemic's negative impact on investor sentiment.

- They confirmed that the behavior of almost every nation fighting COVID-19 and investor financial behavior is the same across China and other developed countries.
- The health crises and psychological disorders among the general public from COVID-19 affected the economic condition and financial position of individual and global investors.

Naseem et al. (2021) disagreed with with the participants who responded that COVID-19 had little impact on their decision making. The participants found that having more time available allowed them to focus more on their investments compared to those investors who let COVID-19 be a distraction on their investments.

Theme 3

Participants let emotions dictate their trading or investing behavior.

Johnsi and Sunitha (2019) found that motivation and managing emotions were negatively associated with cognitive dissonance and locus of control. Investors' behavior is affected by their own beliefs that emotions do not dictate their trading. Tanvir et al. (2016) also found that comparing Goleman's five components of emotional intelligence, namely openness, conscientiousness, extraversion, agreeableness, and neuroticism with investors' decision making helps them to understand their emotions when making their investments. Both Johnsi and Sunitha (2019) and Tanvir et al. (2016) supported the participants' views that emotions dictate investor trading or investing behavior.

Theme 4

Participants do not use the "herd" mentality for investing but rather prefer to be independent thinkers in their investing situations.

Dalgıç et al. (2021) defined herding in financial markets as the behavioral tendency of investors to imitate the trading activities of others while abandoning their private information and beliefs. Dalgıç et al. (2021) found that those nonprofessional investors (brokerage houses and domestic funds) tend to herd on large (small) stocks; their herding behavior mostly exhibits a U shape (an inverse U shape) during the day. Dalgıç et al. (2021) disagreed with the participants' responses that they do use the "herd" mentality. Because the researchers mentioned that the investors are nonprofessional and may lack investing experience could mean that they would prefer to follow the "herd" when investing compared to experienced investors who act more independently.

Implications for Theory

The theories used for this study were modern portfolio theory, prospect theory, and emotional intelligence theory. Modern portfolio theory is supported in this study based on asset allocations. The participants divided their investment portfolio using various investing options such as stocks, ETF's, companies, and cash when doing asset allocation. Modern portfolio theory is also supported by two analysis tools, namely, modern portfolio theory (MPT) statistical analysis and capital asset pricing model (CAPM). These tools help the participants when making investing decisions to maximize their investment portfolio when doing asset allocations. MPT statistical analysis uses 12 pillars or factors scored from 1 to 7 (7 being the highest) that influence portfolio choices. They are institutions, infrastructure, macroeconomic environment,

health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, market size, business sophistication, and innovation to analyze a company's competitiveness. The capital asset pricing model (CAPM) is used to set up an optimal portfolio (portfolio of low-beta stocks, portfolio of high beta stocks, and portfolio using a random stock picking) from all stocks included in the index. Therefore, using modern portfolio theory was relevant to this study based on the participant's asset allocations responses and would also be helpful to any investor making investment decisions. Corporate Financial Institute defined prospect theory as "a psychology theory that describes how people make decisions when presented with alternatives that involve risk, probability, and uncertainty". The theory has two phases, namely editing and evaluation in the choice process: editing which consists of coding (gains and losses), combination (probabilities with identical outcomes), segregation (segregating riskless component from risk component), and cancellation (discarding of components), and evaluation is developed after editing (Kahneman & Tversky, 1979, p. 274). Most participants used the essence of the prospect theory by using the history of the company's finances and profits resource but found the financial statements to be challenging for various personal preferences, such as analyzing them and the prospectus when making an investment decision. Therefore, the prospect theory was relevant to this study based on the risk and probability outcomes discussed by participants using the history of the company's finances and profits resource, and the uncertainty of analyzing the financial statements and interpreting the prospectus. There are two emotional intelligence theories: Goleman's five components of emotional intelligence are self-awareness, self-regulation, motivation, empathy for others, and social skills (Ovans, 2015) and John Mayer and Peter Salovey's four-branch model consists of perceived emotion, facilitate emotion in thought,

understanding emotions, and managing emotions (Mayer et al., 2004). All participants were emotionally challenged when it comes to making investing decisions. However, emotional intelligence theory was relevant to the study as the participants came to an understanding of their emotions when making investing decisions. Any investor who wants to understand their emotions when making their investments is to do an emotional intelligence questionnaire which consists of Goleman's emotional intelligence definition as well as Goleman's five components of emotional intelligence which are: self-awareness, self-regulation, motivation, empathy for others, and social skills. The questionnaire will test any investor on the areas of emotional intelligence, self-awareness, self-regulation (management), motivation, empathy, and social skills (relationship-management) whether any of these components have an impact on their investing decisions.

Results of this study could be considered by other investors as they seek to improve their investing skills. Also, other investors could look at the theories that are related to the current study as another source for improving their investment decision-making.

Implications for Practice

The results provided implications for practice for the participants and other investors when making investing decisions. The evidence indicated the participants are emotionally challenged when making investing decisions. The participants and other investors could benefit on how to channel their emotions when making investing decisions from the beginning, during, and selling processes. The way participants and investors can manage and channel their emotions is the mnemonic code p.r.o.t.e.c.t. P is for planning out the investments. R is for rationalizing the investment choices that will meet the goals. O is not to overthink investing decisions. T is to think and not overreact to the market. E is to keep emotions in check. C is to keep calm if

investments are underperforming. T is to tune out emotions when making investing decisions from the beginning, during, and selling processes. Therefore, investors protect the investment instead of them being emotionally involved in it. The participants indicated that they do not understand the financial statements, prospectus, and stock analysis when it comes to making investing decisions because they find them confusing. The participants, investors, and financial advisors could benefit from taking a personal finance, investment, or an accounting course. The courses can be taken either in-person or online. The benefit from taking one of these courses is to understand the meaning behind the financial numbers since they are not provided by any company's 10K or annual report. The Corporate Financial Institute also provides online courses tailored to learning financial information. The participants indicated that they prefer not to use a financial advisor. They and any investor may benefit using an investment advisor. The benefit of using an investment advisor is that they solely focus on investments where a financial advisor focuses more on money.

Recommendations for Further Research

The following are recommendations for further research:

- In this study, the participants were all male. Further research is needed to include a sample of women to note if the results would be any different.
- The participants for this study were from investment groups. Further research is needed to use individual investors who are not part of an investment group by seeing if the results would be any different.
- Further research is needed to observe whether younger investors or investors with little investing experience are more apt to use a financial adviser.

- Research could be performed to see whether investors who use a financial adviser are prone to have emotional intelligence dictate their investment choices.
- The study revealed that the participants have some knowledge of financial information. Further research is needed to see if after taking a basic personal finance, investing, or accounting course if their financial information improved to make better investing decisions.
- Very little was mentioned of risks by the participants when making investment decisions. Additional studies could include the following:
    - types of investors as to whether they are risk-averse, risk-seeking, and neither risk-averse nor risk-seeking and how impacts them when making investment choices.
    - investor's behavior choices of risky investments.
    - investor's emotional intelligence when it comes to risk on how it impacts their investing decisions.
    - COVID-19 impact on investor's decision making.

Significance of the Study

The results of the study are beneficial not only to the participants but to other investors and financial planners. Participants are individualized in their own investing decisions even though they might use similar resources to make those decisions. The results will benefit any investor about learning how to better manage their investments by looking for significant changes when monitoring them more regularly or seek advice from an investment advisor when making investing decisions in deciding to change investments to avoid suffering losses or dissatisfied returns. Investors and investment advisors could benefit from an accounting course

to learn how to analyze financial information so they can make better-investing decisions. Investment advisors and investors could benefit from an investment course to learn how to understand stocks, stock trends, and sector and market analysis. Investors could also benefit from a behavior management course to learn how to control emotions when making investing decisions.

Concluding Statement

Investors have a problem making investing decisions as to where they can invest their money due to so many viable options that are not clearly explained or understood by the investor. There was a difference amongst the participants in their asset allocations when diversifying their investment portfolio. Some participants use the history of the company's finances and profits as well as other financial information when making an investment decision. Stock analysis was confusing to the participants when deciding on types of stock, identifying trends, and researching the market and sector. Participants' emotions impact their investing decisions. These results can be useful to both investors and financial planners. The findings from these results provide a great learning opportunity for investors from portfolio management, accounting acumen, stock analysis, and emotional intelligence management. For financial advisors, it provides them an opportunity to be more investor-focused to create a win-win approach with investors to make better informed investing decisions.

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APPENDIX A

QUESTIONAIRE - CLOSED ENDED

Instructions: Please complete this questionnaire and return to me, Michael Haws, the researcher, at mhaws01@baker.edu, prior to the interview. Thank you.

Demographics

Gender: male____ female____

Age: 18-25___ 26-35___ 36-45___ 46-55___ 56 and over___

Number of years investing: less than 5___5-9___ 10-14___ 15-19___ 20 and over____

Use of financial adviser: yes___ no___

Questions

1. What factors do you consider when doing asset allocation for your investment portfolio.
2. Check which of the following items influence your investment decisions:

_____ a. gut feeling

_____ b. cash flow needs

_____ c. type of company to invest in like a technology company, or financial, etc.

_____ d. what friends, relatives, or coworkers are investing in

_____ e. suggestions of your banker

_____ f. planning for retirement

_____ g. the ups and downs of the market

h. other_____

3. Check which of the following resources do you use when making an investment decision:

_____ a. Balance Sheet

_____ b. Profit & Loss statement

_____ c. Stockholder equity statement

_____ d. Business magazines, newspaper

_____ e. Prospectus of a company

_____ f. Product the company makes

_____ g. History of the company's finances and profits

h. Other_____

4. What factors do you look for when reviewing your monthly/quarterly/semiannual/annual statements for your investments.

5. Check which of the following options for investing do you not understand:

_____ a. Blue chip stocks

_____ b. Defensive stocks

_____ c. Growth stocks

_____ d. Preferred stock

_____ e. Treasury bonds

_____ f. Corporate bonds

_____ g. Municipal bonds

_____ h. Series EE bonds and Series I bonds

_____ i. Zero coupon bonds

_____ j. Certificate of deposit

_____ k. Mutual funds

_____ l. Traditional IRAs

_____ m. Roth IRAs

_____ n. Hedge funds

_____ o. Index funds

_____ p. Commodities such as corn, wheat, gold, etc.

_____ q. Derivatives

_____ r. 401(K) retirement plans

_____ s. 403(b) retirement plans

t. Other _____

6. Check which of the following terms do you not understand?

_____ a. Assets

_____ b. Liabilities

_____ c. Annuities

_____ d. What is a bond

_____ e. What is a stock

_____ f. Price to Earnings ratio

_____ g. Prospectus

_____ h. Balance sheet

_____ i. Profit and Loss statement

_____ j. S&P 500

_____ k. Stock market pages in the newspaper

l. Other_____

7. What type of educational offerings would help you to make better investment choices?

8. Do you have any other needs about financial advisers, information, terms—anything—that would make it easier for you to choose good investments.

APPENDIX B

INTERVIEW QUESTIONS - OPEN ENDED

Demographics

Gender: male____ female____

Age: 18-25___ 26-35___ 36-45___ 46-55___ 56 and over___

Number of years investing: less than 5___5-9___ 10-14___ 15-19___ 20 and over____

Use of financial adviser: yes___ no___

Interview Questions

1. How do you know what to choose from the available options, such as, types of stocks, dividends, types of bonds, etc., when it comes investing?
2. Describe the process you go through when selecting an investment.
3. How do you invest - choices - gut feeling, need additional cash flow, spur of the moment, or because of the company?
4. How often do you change your investments and what factors prompt this change?
5. What do you know about the four financial statements (balance sheet, income statement, statement of stockholder's equity)?
6. What do you find the most challenging when analyzing the financial statements when it comes to investing and why?
7. Do you use a financial adviser when making an investment decision? If so, how do you choose one. If not, why not.

8. What three things about investing would you like to better understand in order to make better informed decisions when it comes to investing.
9. What do you find the most confusing when trying to choose from the available options, such as, types of stocks, dividends, types of bonds, etc., when it comes investing?
10. How does emotional intelligence (skill in perceiving, understanding, and managing emotions and feelings) affect an investor's investment decision making?
11. How has COVID-19 impact your investment decision-making?
12. Do you let your emotions dictate your trading or investing behavior?
13. Do you typically follow 'the herd' into investing situations? Or are you more independent?

APPENDIX C

REQUEST TO PARTICIPATE

Dear Participant:

My name is Michael Haws, I am doctoral student at Baker College Online, Flint Michigan. I am graciously asking your participation in a doctoral research study that I will be doing called: Investor Investment Choices for Better Decision-Making Among Investment Options.

The purpose of this qualitative case study is to explore the process individual investors use to decide on investment options, the basic principles of investing those individual investors understand and those they don't understand, as well as what they view their needs are to improve their investment performances. Entrop et. al. (2016) suggests the problems with individual investing are not benefiting from financial innovation, making poor choices of structured product investments, and prone to the disposition effect.

If you would like to partake in this research study, a questionnaire along with an Informed Consent will be sent to your email. The questionnaire should be returned to me at mhaws01@baker.edu prior to the interview. An interview will be scheduled at your convenience. The interview will be conducted via ZOOM and will not take longer than 45 minutes. The results will be shared upon completion of the degree requirements. Please note that your participation in the study is completely anonymous.

The participation you provide for this research study will benefit investors so that they can make better informed decisions when choosing from many investment options.

Thank you for your participation in this research study.

Sincerely,

Michael Haws

Enclosure

APPENDIX D

PARTICIPANT CONSENT FORM

INFORMED CONSENT FORMS

Project Title: Investor Investment Choices for Better Decision-making amongst Investment Options

Investigator: Michael Kenneth Haws, Finance/Accounting, Phone (513) 403-4785 email: mhaws01@baker.edu

You are being asked to participate in a research project conducted through Baker College (and, if applicable—any other cooperating institution). The College requires that you give your signed agreement to participate in this project.

The investigator will explain to you in detail the purpose of the project, the procedures to be used, the expected duration or frequency of your participation, and the potential benefits and possible risks of participation. You may ask him/her any questions you have to help you understand the project. A basic explanation of the project is written below. Please read this explanation and discuss with the researcher any questions you may have.

If you decide to participate in the project, please sign on the last page of this form in the presence of the person who explained the project to you. You will be given a copy of this form to keep.

Refusal to participate in this study will have no effect on any future services you may be entitled to from the College. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty.

1. **Nature and Purpose of the Project: The purpose of this study is to have insight into investor choices when making investment decisions.**
2. **Explanation of Procedures: None**
3. **Identification of Any Experimental Medical Treatments or Procedures: None**
4. **Discomfort and Risks: None**
5. **Benefits: To help investors make better informed decisions from the many investment options available to them.**
6. **Confidentiality: No information regarding your identity will not be published in the study with your confidentiality being held in the highest regard.**
7. **Explanation of compensation, if any: No compensations will be rewarded to the participants of this study.**
8. **Name of person to contact in case of research-related injury: Michael Haws, email mhaws01@baker.edu, Dr. John Vinton, john.vinton@baker.edu**
9. **Name of person to contact in case of questions about your rights as a research participant: If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects' Institutional Review Board at IRB@baker.edu**

I have read this form and I understand it. I understand that if at any time I become uncomfortable with this project I am free to stop my participation. I understand also that it is not possible to identify all potential risks in an experimental procedure, and I believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.

Signature of Participant *Date*

Signature of Researcher *Date*