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A Case Study of Blue-Collar Worker Retirement Investment Decisions

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College of Management and Technology

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Mark Griffin

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Walden University
2015

Abstract

A Case Study of Blue-Collar Worker Retirement Investment Decisions

by

Mark Griffin

MBA, TUI University, 2010

BS, Park University, 2006

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

May 2015

Abstract

The finances of blue-collar workers were the most acutely impacted as these workers lost their jobs during the Great Recession of 2007 through 2009. The literature revealed a minimal understanding of how blue-collar workers allocated funds for their retirement, and what their investments might be when they invested. To address this problem, the current qualitative study addressed (a) how blue-collar workers chose to invest or not invest for retirement and (b) how blue-collar workers diversified their portfolio if they chose to invest. Theoretical foundations of the study were based on regret theory and prospect theory. A nonrandom purposeful sample of 10 blue-collar worker participants answered 19 open-ended questions. Data from these questions were analyzed inductively. Findings revealed that, as participants reached the age of 30, they started to consider investing for their retirement. Participants under the age of 30 were not as likely to invest. Only one person over the age of 30 did not invest for retirement. The factors that contributed to these blue-collar workers' investment decisions for retirement were based on an employer-provided retirement accounts, the fear of running out of money later in life during retirement, and the addition of new family members. One of the most popular retirement investment products for the participant group, which included mechanics, laborers, and material movers, was the U.S. Treasury Bonds. Other popular investments were mutual funds, 401(k)s, and IRAs. These findings may inform researchers who are conducting a study on the investment decisions of blue-collar workers. The findings can also be beneficial for other blue-collar workers by showing them that other blue-collar workers do invest, and by revealing their rationales in doing so.

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Finally, I want to say thank you to the faculty and staff here at Walden University for all of their help and guidance throughout the lengthy process of conferring my PhD. Specifically, I would like to think Dr. Steven Tippins for his guidance and patience with me throughout this process. Had it not been for the guidance that he had provided me I would not have made it this far. I would also like to say thank you to Dr. William Brent for his help and guidance throughout the process. Both Dr.'s Tippins and Brent also spent a fair amount of time speaking with me over the phone trying to help me out as well, and I can never say thank you enough to them for that. I would also like to say thank you to Dr. David Banner for his help as well, and I especially want to say thank you to him for stepping in near the end of the dissertation process. I really appreciate that.

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Chapter 1: Introduction to the Study

Nearly thirty-five percent of U.S. households indicated that saving for their retirement was their most important savings goal, and in 2008 roughly fifty million American workers were actively investing in their 401(k) plan (Holden & VanDerhei, 2010, p. 76). At the end of 2008, 401(k)s were valued at approximately $2.3 trillion, represented sixteen percent of all retirement assets, and they equaled about 6% of the U.S. households' financial assets (Holden & VanDerhei). As the economy recovered from the recession of 2007 through 2009, many workers found themselves unemployed, underemployed, or categorized under other forms of labor underutilization (Sum, Khatiwada, McLaughlin & Palma, 2010) likely made it increasingly difficult to allocate funds for their retirement. At the heart of the ranks of the unemployed were blue-collar workers, and this group was unevenly made up of both men and women workers. From the periods that covered November through December of 2007 to January through February of 2010, the male employment declined by 5.67 million or 7.2% versus a drop of 2.17 million or 3.2% among women (Sum et al, 2010, p. 20-21). This loss of blue-collar employment would account for eighty-one percent of the decline in jobs for men during this period (Sum et al, 2010, p. 20).

Although not all blue-collar workers found themselves unemployed, they were subject to the overall purchasing decisions made by people in the global and U.S. economy. The sentiments, attitudes, financial capacity, and subsequent behaviors of consumers represented a substantial part of the U.S. national economy (Cutler, 2013, p. 19). Many of the products that were purchased by people were previously made by factory workers and laborers, and other people fell into the blue-collar category, were created either with the helped of technology or manufactured entirely through the use of machines (Brown, 2012). This included the manufacturing positions that were held at one time by these workers became automated.

While there was an abundance of literature (Ryack, 2011; Pillay, Kelly & Tones, 2010, Levanon & Cheng, 2011) that discussed the ramifications of the recession of 2007 through 2009, little research had been conducted to see if the subsequent recovery had affected the investment behaviors of blue-collar workers. There was only one study (Goetzmann & Kumar, 2008) found that spoke specifically to blue-collar worker investment portfolio diversification, and they found that blue-collar workers were in the category possessing the least-diversified portfolio.

This study addressed this gap in the literature to determine what facets these workers deemed to be necessary to be in place before they allocated resources, including their levels of investment, for their retirement. The information gained from the study could provide useful insights into these facets which could be used by society to have a better understanding of the decision-making process used by blue-collar workers. This could led to a constructive impact on both blue-collar workers and the society they live in, which could led to positive social changes in both the fields of finance and academia. Included in this chapter were a background of the study, research problem, purpose of the study, research questions, theoretical framework, nature of the study, definitions of terms, assumptions, scope and delimitations, limitations, significance and summary.

Background of the Study

When blue-collar workers considered retirement, family members generally participated in the decision-making process (Ryack, 2011). This included whether to invest or not, how much money would be invested, and built into this decision was the desire to be risk averse (Ryack, 2011). If the decision was made to invest, there were concerns about which retirement products were right for a person or a couple and what decisions couples should make themselves as they age (Tannahill, 2012). Regardless of age, health risks were a cause for concern as it threatened both the financial survival and the ability of workers to work through the retirement years in the event it became necessary (Caban-Martinez, Lee, Fleming, Tancredi, Arheart, LeBlanc & Muennig, 2011). As workers aged and remained in the workforce, they also became increasingly aware of the need to overcome age discrimination as they risked feeling increased levels being tired and burned out (Gellert & Kuipers, 2008).

Part of the decision-making process to retire included delaying retirement until later in life. These delays in the decision to retire had implications on the unemployment rates within the economy as new workers were unable to enter as easily as a result of older workers remaining in the workforce (Levanon & Cheng, 2011). One side effect for both younger and older workers, who were unable to find jobs or transition into new careers, was that they were sometimes at risk of entering into early retirement (Pillay, Kelly & Tones, 2010). The decision to retire or invest for retirement was also negatively affected by the economic impacts of the recession of 2007 through 2009, as blue-collar workers had severe hardships based on the decline in their employment status (Sum et al, 2010).

Technology also had a role in the employment status of workers who fell into the blue-collar category (Brown, 2012). Tasks that used to be completed by these workers, such as cutting a piece of metal or managing a warehouse, were embedded in a machine through the use of software. In many cases this eliminated workers or reduced the amount of skill and pay needed to fill a job. Since the 1970s, the inflation adjusted median income of working age households had been slowing.

One gap in the knowledge was based on the investment behaviors of blue-collar workers. Little research had been conducted on these workers to explain their current financial plans and preparations for retirement. This included the facets that were necessary to determine their levels of investment. Very little was known about the process that these workers used to made their investment plans. This study addressed this gap in knowledge. The necessity of the study stemmed from the need to understand the circumstances surrounding the decision of blue-collar workers to determine their level of investment for their retirement, and with that information in hand society as a whole could had a more in-depth understanding of an under-studied aspect of the life of these workers.

Problem Statement

The significant problem the research addressed was the minimal understanding, which included a gap in the area of finance-based research of blue-collar workers, of the facets that these workers deemed necessary to be in place for them to allocated funds for their retirement. Many reasons existed for people to refrain from investing and saving for their retirement, and as previously mentioned there was a gap in the knowledge base where investing literature generally stopped short of extensively covering the investment behaviors of blue-collar workers. As a result of this, there were economic consequences to the job market recovery. There were also macroeconomic implications of individuals who delayed their retirement, and some of them were mixed which led to the delaying of the retirement decision (Levanon & Cheng, 2011). The financial risk tolerance (FRT) of males and females varies, whereby males had more tolerance than women, and people potentially sought out mates who had a similar FRT (Ryack, 2011). It may have also been possible that spousal FRTs converged over time. These tolerances increased in college students who had financial education incorporated in the curriculum in high school

(Ryack, 2011), but this did not provide long-term evidence that families would had FRT that were similar going forward. However, one could also present the argument that it was likely that not all families had both spouses working so the tolerance for investment could be significantly reduced as a result especially if resources were limited.

Purpose of the Study

The purpose of this case study was to discover the factors that contributed to the decision by blue-collar workers to allocated funds for retirement. This also included the levels of funding should they decide to invest. Since these workers fell into various employment circumstances, and as a result of the economic downturn and slow recovery, there were a wide variety of reasons that were unknown for making or not making these investments (Sum et al, 2010). This study used prospect theory (Kahneman & Tversky, 1979) and regret theory (Loomes & Sugden, 1982) as a theoretical basis for the research to uncover these reasons. Prospect theory was a theory based on behavioral economics describing ways people made choices based on losses and gains versus the final outcome, and it asserted that people evaluated losses and gains using heuristics (Kahneman & Tversky, 1979). Regret theory implied that if people made a wrong choice, they remembered this choice the next time they made another decision under a similar set of circumstances (Loomes & Sugden, 1982). These theories are covered later in this chapter, and a more in-depth presentation was provided detail in Chapter 2.

Research Questions

These were the central research questions of the study:

1. What factors contributed to the decision by blue-collar workers to invest or not invest for retirement?
2. How did blue-collar workers diversify their portfolio if they chose to invest?

These were the sub-questions of the study:

1. How much financial education did blue-collar workers feet they needed before investing?
2. In what ways did a blue-collar worker's level of academic education affect their levels of investing?
3. In what ways did economic conditions in the local area where blue-collar workers were employed cause them to create their overall investment strategy?
4. In what ways did a blue-collar worker's age and gender affect their retirement planning?
5. What were the different categories, and how much of each category, of investments blue-collar workers allocated their money to?

Theoretical Foundation

The theoretical framework for this study was based on Kahneman and Tversky's (1979) prospect theory and Loomes and Sugden's (1982) regret theory. Since prospect theory and regret theory address ways people weigh monetary outcomes, they had been used extensively in many aspects of personal finance. The case study approach, in concurrence with the prospect theory and regret theory, was able to provide the details that covered the facets that blue-collar workers felt were necessary to be in place before they allocated funds for their retirement. This decision, or series of steps that led to a decision, was based on their preferences for the diversification of their funds. Additional research and application of the prospect theory and regret theory offered ways to determine how people made decisions with imprecise information as part of the dissertation process (Özerol & Karasakal, 2008).

Prospect theory was a behavioral economic theory forwarded by Daniel Kahneman and Amos Tversky in 1979, and it described the choices made by individuals as ones that were chosen based on the potential value of losses and gains rather than the final outcome (Kahneman

& Tversky, 1979). It was developed as a descriptive model of decision making under risk and was created as an alternative model to expected utility theory, which was based partly on lotteries and gambling. Expected utility theory was alleged to have exhibited several pervasive effects that were inconsistent with the choices made by risky prospects (Kahneman & Tversky, 1979). People would tend to underweight the outcomes that were probable in comparison to outcomes that would be viewed as certain. This would result in what was known to be dubbed the certainty effect, which contributed to risk aversion and choices that would had otherwise involve sure gains into seeking risks and choices involving sure losses (Kahneman & Tversky, 1979).

Based on two fundamental assumptions, regret theory was created by Graham Loomes and Robert Sugden, and it was introduced as an alternative to prospect theory in the December of 1982 edition of The Economic Journal as an explanation of gambling choices (Loomes & Sugden, 1982). The first assumption was based on the notion that many people experienced sensations of regret and rejoice, and the second one was based on the notion that when people made decisions that they were not certain about, they tried to anticipate and take account of those sensations (Loomes & Sugden, 1982, p. 820).

Loomes and Sugden also had deep-seated arguments for the reasoning behind these assertions that would be the underlying basis for the construction of their theory: "In relation to the first assumption, it seemed to us that psychological experiences of regret and rejoicing could not properly be described in terms of the concept of rationality: a choice may be rational or irrational, but an experience was just an experience. As far as the second assumption was concerned, if an individual did experience such feelings, we could not see how he could be deemed irrational for consistently taking those feelings into account" (Loomes & Sugden, 1982,

p. 820). The theory had also been used in the decision sciences to understand how choices were made with respect to avoiding a wrong decision or regretting the failure to take an action after an occurrence had transpired (Tsalatsanis, Hozo, Vickers & Djulbegovic, 2010). Chapter 2 covered these theories and their uses in the study in more detail.

Nature of the Study

The nature of this study was based on qualitative inquiry with a focus on the case study method. Case studies allow for the study of the a single case, within the site of the location of the research, and focused on the decisions made by blue-collar workers as they chose whether or not to invest and their levels of investment should they chose to invest. Qualitative research was consistent with understanding how blue-collar workers factored in the different facets of the decision-making process of allocating funds for their retirement in that it allowed for direct initial and follow-up communication with respondents in a way that permitted them to provide open and in-depth responses to questions.

To determine what these facets were, qualitative analysis assisted in identifying what these facets were from the beginning to the end of the research. The initial intention was as follows: As part of the case study, a group of blue-collar workers in the Inland Northwest and the Midwest were asked to take part in an interview via Skype or in person depending on how far they were away from me. I ended up calling each of the participants over the phone, and four out of 10 allowed me to record the phone call.

As it will be discussed later, since I was transcribing their answers from phone calls that were recorded and writing notes down from the phone calls that were not recorded, it would not have made sense to use NVivo to generate codes and look for themes since the data was recorded in two different ways. Another change to the research that caused this to happen was the inability to gather participants from an organization that would allow me to come into the work place and recruit participants. Instead, I used the snowball sampling technique, and the answers to the questions were compiled into two separate tables and placed into categories listed primarily by age. This was done in order to show how the responses varied in a way that was logical at the time of the writing of this dissertation. It also allowed for the trend of choosing to invest based on the proximity to retirement between the participants, which was not necessarily how they viewed their own retirement investment decisions throughout the interviews. This will also be explained later.

However, these changes ended up producing the goal of ten participants, and the limitations to the findings of the study will also be explained later in this document. This procedure was in line with the changes that had to be made to the research and was approved by the chair of the dissertation prior to it happening. The questions were open-ended allowing for in-depth responses from the participants. A thank you card was mailed to them thanking them for completing the interview. Chapter 3 provides more details about the overall methodology.

Definitions

The field of finance included jargon where many terms had a specific meaning when used to describe the various elements of investing. Some of the terms that were used throughout the study were:

401 (k): A qualified plan established by employers to which eligible employees may make salary deferral (salary reduction) contributions on a post-tax and/or pretax basis (Internal Revenue Service, 2013).

Blue-collar worker: Blue-collar workers were generally defined consist primarily of four groups of occupations: construction and extraction occupations; installation/maintenance and repair crafts (electrical and electronic technicians, heating and air conditioning mechanics, auto repair technicians); production workers (machine operators, fabricators, assemblers); and transportation operatives, including truck and bus drivers and material movers (Sum et al, 2010, p. 9).

Broker: A party that arranges transactions between a buyer and a seller, and gets a commission when the deal is executed (Farlex, 2013).

Diversification: Reducing risk by investing in a variety of assets (Farlex, 2013).

Emergency Fund: Money that is set aside for emergencies to protect future income streams and to protect against unexpected income shocks (Scott et al, 2013). Examples of this included unexpected health expenses, unemployment, reductions in wages and disability.

Exchange Traded Fund (ETF): An investment vehicle traded on stock exchanges, much like stocks do, and they hold assets like stocks or bonds (Kothari & Kudal, 2012). They were usually designed to track an index, and they could combine the valuation feature of a mutual fund or a unit investment trust.

Mutual Fund: A mutual fund is a type of investment company that pools money from many investors and invests the money in stocks, bonds, money-market instruments, other securities, or even cash (U.S. Securities and Exchange Commission, 2010).

Prospect Theory: Decisions investors made in the presence of uncertainty were based on cognitive psychology rather than rationality (Kahneman & Tversky, 1979). There is a preference of investors to avoid losses over acquiring gains by judging gains and losses relative to a specific reference point like the purchase price of an asset (Hodnett & Heng-Hsing, 2012).

Regret Theory: People anticipate regret in the event they made a wrong decision, and they take this anticipation into consideration in their future decisions (Loomes & Sugden, 1982). Fear could cause a dissuasion or motivation to do something based on previous decisions.

Retirement Fund: A fund, or set of funds, that house investment products for one's retirement (Scott et al, 2013). An example of such a fund may be a mutual fund.

Risk Tolerance: An investor's ability or willingness to accept declines in the prices of investments while waiting for them to increase in value (Farlex, 2013).

Security: A security is a fungible, such as a stock, negotiable instrument representing financial value (Farlex, 2013). Securities were broadly categorized into debt securities (such as banknotes, bonds and debentures) and equity securities (common stocks). They also included derivative contracts, such as forwards, futures, options and swaps. The company or other entity issuing the security is called the issuer.

Stock Broker: A stock broker or stockbroker is a regulated professional broker who buys and sells shares and other securities through market orders or Agency Only Firms on behalf of investors (Farlex, 2013). A broker may be employed by a brokerage firm.

Underemployment: Individuals working part-time (under thirty-five hours per week) but desire full-time jobs and were available to work full time (Sum et al, 2010). This could also included individuals who had skill sets that their current employer is not using.

Unit Investment Trust: A U.S. investment company offering a fixed (unmanaged) portfolio of securities having a definite life (Farlex, 2013). They were assembled by a sponsor and sold through brokers to investors.

Assumptions

There were several assumptions that I had that I could not necessarily demonstrate to be true through the use of peer-reviewed journals. I assumed that blue-collar workers had not returned the levels of employment that existed prior to the great recession. This assumption was consistent with the levels of underemployment that blue-collar workers had experienced as a result of the 2007 through 2009 recession (Sum et al, 2010). I also assumed these workers were likely under investing for their retirement as a result of their employment. It was necessary for this assumption to be included in the study because these workers were likely going to have difficulties investing money for their retirement if they had either a limited stream of income or no income at all.

Scope and Delimitations

The specific aspects of the research problem addressed in the study and research questions that were meant to determine the overall factors that contributed to the decision by blue-collar workers which affect their level of investments for their retirement comprised the overall scope of the study. In order to determine their level of investments, there was an attempt to discover the ideas, concepts, decisions and other attributes that helped blue-collar workers arrive at this decision in the event they chose to invest. This included an attempt to determine if an individual’s financial education affected the way they invest with respect to allocating funds for their retirement. Since there was a potential that an individual’s academic education affected their levels of investing (Ryack, 2011), there could be a connection with blue-collars’ worker investment behaviors. There was a possibility that economic uncertainties existed within the worker’s specific region in which they lived that could be tied to the U.S. recovery of the recession of 2007 through 2009, so there was an attempt to discover what aspects affected their decision to invest. As people age, and as their financial education increases, their investment behaviors change (Tannahill, 2012). A person's gender could also affect their FRT (Tannahill, 2012), which could potentially have an effect on their long-term investment choices. I categorized the responses from the research questions in order to answer the questions.

The boundaries of the study included how it was constrained in terms of time, participants, and processes (Creswell, 2013). The constraints of the study were limited in different ways. Participants were limited to blue-collar workers who were employees in the Inland Northwest and the Midwest. They had two weeks to answer the questions of the study.

There were other theories which were related to blue-collar workers that were not used in this study. One such example is the programme theory, and it was constructed based on two main components that included the impact theory and process theory (Durand, Berthelette, Loisel & Imbeau, 2012, p. 496). The impacts were represented in the form of cause and effect linkages between activities and expected outcomes. The process theory was based on activities that a given program was expected to carry out and the resources necessary to do it. One particular use for the programme theory was to determine ways to rehabilitate injured workers, mainly blue-collar workers, and get them back to work. The reason that these three theories were not used was because although the health of a worker could be a part of the reason they were working or were not working, it was not the focal point of the study. They were also not directly relevant since the study was meant to discover the facets necessary for blue-collar workers to invest and their levels of investment if they did chose to invest, including their diversification methods.

The process of the case study presented a constraint because it was going to be limited to a singular case study. However, since there was only one case study there was an opportunity to obtain more in-depth findings from the research. These findings offered the possibility of being transferred to other studies, and since the economic recovery from the severe U.S. recession of 2007 through 2009 was likely going to take many years to be realized, researchers were likely going to see opportunities to explore vast areas of the overall economy. The workers who were deemed to be hit the hardest by the recession, which were the blue-collar workers (Sum et al, 2010), are likely going to be the focus of many research inquiries in the future. The findings of this study could prove to be useful to them as these researchers embark on their journey to answer their questions, which allowed for several positive social impacts to society to be realized.

Limitations

A case study researcher had to be able to decide the bounded system in which to study, which would mean recognizing that several maybe possible candidates for selection and the case itself, or several cases located within the overall study, had to be worthy of study (Creswell, 2013). This included studying a single case or multiple cases. It was possible that studying more than one case could dilute the findings of the overall analysis since the more cases one studies meant a potential reduction in the depth of any single case. Even with a singular case there could be the possibility of a reduction in the ability to generalize the findings. One particular reason for this was because, unlike quantitative-based research where variables could be tested, it may be difficult for another researcher to take a similar given set of circumstances and reproduce similar results since qualitative variables were explained instead of being tested.

Since the study took place in the Inland Northwest and the Midwest, it may be difficult to reproduce similar results in another part of the United States. The participants were also limited to employees located in that region. There were several major biases that I could identify prior going into the study. One such bias was my own personal experience with blue-collar workers. I had several family members including myself who were blue-collar workers at one point or another. My first job was actually as a blue-collar worker where I worked at Midas helping the mechanics as a parts-runner along with other duties in the shop. This bias towards blue-collar workers was what led me to choose them for the study. The other biases were based on the assumptions below.

Some of the reasonable steps that I was taking to address these biases included being objective with the findings of the research, which meant removing my personal feelings and opinions from the overall research process.

Significance of the Study

Significance to Practice

There are three over arcing areas to the professional practice and finance that could be improved upon based on the outcome of the research. Quality research, as one could argue, should be able to provide assistance to the field in which it attempts to serve. It is, after all, the duty of academia to educate future leaders. In this case, it was the intention to add to the existing literature base so that there would be a chance for practitioners to find it. The first is the potential to understand the process that goes into investment decision-making choices that are made by the group of blue-collar workers that will have participated in the study. It is not yet known what would have to be in place, such as secure employment or a favorable local labor environment, which the blue-collar workers would deem to be necessary in order to invest for his or her retirement. As was previously stated, there is very limited information in the existing literature that could point to a more conclusive answer here. However, this will be discussed in more depth in Chapter 2.

Secondly, with the findings in hand, the field of finance could potentially develop a more creative financial education and literacy product that could be potentially crafted for the blue-collar worker category. One could also argue that other categories of workers outside of the blue-collar community would also benefit from this. Finally, the opportunity for feedback from the blue-collar community as a whole at a later date could also potentially provide useful information for researchers and practitioners alike that could lead to an increased level of understanding of how well the blue-collar workers who would be using the newly developed financial education and literacy seem to understand the information that they are getting as well as ways that this information can be improved upon.

Significance to Theory

In order to understand how the research had a positive effect on the two theories used in the study, it is important to revisit the portions of these theories that are at the heart of the work. Since prospect theory and regret theory address ways people weigh monetary outcomes, they had been used extensively in many aspects of personal finance. Prospect theory is a behavioral economic theory forwarded by Daniel Kahneman and Amos Tversky in 1979, and it describes the choices made by individuals as ones that were chosen based on the potential value of losses and gains rather than the final outcome (Kahneman & Tversky, 1979). It was developed as a descriptive model of decision making under risk and was created as an alternative model to expected utility theory, which was based partly on lotteries and gambling. Expected utility theory was alleged to have exhibited several pervasive effects that were inconsistent with the choices made by risky prospects (Kahneman & Tversky, 1979). People would tend to underweight the outcomes that were probable in comparison to outcomes that would be viewed as certain. This would result in what was known to be dubbed the certainty effect, which contributed to risk aversion and choices that would had otherwise involve sure gains into seeking risks and choices involving sure losses (Kahneman & Tversky, 1979).

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The study added to academic literature, and reinforced the two existing theories that were used in the study, as it discovered what the reasons were that added to the factors surrounding the decision made by blue-collar workers to contribute funds to their retirement. The general circumstances surrounding these workers, in general, was also worthy of noting. There was a depression in many blue-collar labor markets, and it would not be solved by a modest recovery of the U.S. economy over a short period of time (Sum et al, 2010). This allowed for increased understandings of the real impact to individual retirement, perhaps even on larger portions of the overall economy, which could be broadly viewed based on the new findings as part of the inquiry and could open up new opportunities for further inquiry. As a result of the inquiry, the data could be used to increase awareness within both the investment community and society as a whole allowing for opportunities for new ideas to potentially be created to helped people allocated funds for their retirement.

Significance to Social Change

One of the most challenging parts of affecting a positive change to society is by finding a way to let the people in which the research serves speak for themselves. This study allowed such a change to take place through the use of qualitative inquiry, which, as will be explained, allows for in-depth answers by research participants that allows for the researcher to adequately explain what was being communicated by the group. The qualitative inquiry was used as the main methodology for the research inquiry, and the case study method that was chosen had the ability to provide meaningful results, because there were a number of gaps in the literature and one could argue that society as a whole could gain from in the event that these holes were at least partially closed.

Positive social change comes in many forms, and the blue-collar worker was arguably one of the major categories of workers that made up the backbone of the United States. Merely reviewing quantitative-based data would not be appropriate in this case because, in many circumstances, as we had seen above, questions could only be answered by communicating directly with individual study participants in a way that allowed them to provide their own personal in-depth responses to open-ended questions, which was not typical of quantitative research.

The findings of the study could be used by a wide variety of people including blue-collar workers in general, institutional investors, and academicians. The findings would likely be used by these groups to address their current practice, and this would especially be true for institutional investors. There would be a high likelihood that they could use the findings to create suitable low-cost investment products that could be ideal for blue-collar workers. This could bring about positive social change for these workers as they would be able to understand their own investment behaviors more clearly in a way that allows them to confidently allocated funds for their retirement going forward. These changes would be limited to the findings of this study as they were presented, but they would also enhance the existing knowledge. This would mean an increased possibility for other researchers to take the findings of this study and expand on it in a variety of ways that could create positive social change in the finance field and perhaps in other academic and professional practice fields.

Social change that can affect the positive relationships between the academia and practitioners was also one of the goals of this work. One can argue that there is generally a difference between the ways something is taught versus the way it is practiced professionally. This causes poor distinctions of facts between the effectiveness of higher education and the communities in which they serve. In general, any research that can bridge these gaps is generally welcomed by the two groups. So the potential for social change becomes closer to being realized when participants are allowed to share their opinions on why they do something, or why they do not, and sometimes their words say one thing and their actions say something else.

This study also allows for this distinction to be elaborated on in a manner that is sometimes realized with research conducted, perhaps even by the most seasoned of researchers, in a way that makes sense to the readers. In order for social change to be as positive as it can be, it has to be presented in such a way that people can actually see what happened and why with respect to what changed. When a group of workers, such as the blue-collar workers that were researched here, get an opportunity to shed light on some of their decisions that are personal to them and their families and share it with the world then there is a chance that others will see the results in an unbiased way that allows for a meaningful sharing of ideas between the author and the audience. That was the intention of this research inquiry, and by shedding some light on these workers and their investment decisions there is the potential that people may see that investing for their retirement is necessary so that they do not run out of resources as they age, perhaps even as they age to a point where they are no longer able to work.

Summary and Transition

As the economy recovered from the recession of 2007 through 2009, many workers found themselves unemployed, underemployed, or in being categorized under other forms of labor underutilization (Sum et al, 2010) likely making it increasingly difficult to allocated funds for their retirement. When blue-collar workers were considering retirement, family members generally participated in the decision-making process (Ryack, 2011). This included whether to invest, how much money would be invested, and built into this decision was the desire to be risk averse (Ryack, 2011). The significant problem the research addressed is the minimal understanding, including a gap in the areas of finance-based research of blue-collar workers, of the facets that had to be in place for these workers to allocated funds for their retirement. The purpose of this case study was to discover the factors that contributed to the decision by blue-collar workers to allocated funds for retirement. The theoretical framework for this study was based on Kahneman and Tversky's (1979) prospect theory and Loomes and Sugden's (1982) regret theory. The nature of this study was based on qualitative inquiry with a focus on the case study method. The specific aspects of the research problem addressed in the study and research questions were meant to determine the overall factors that contributed to the decision by blue-collar workers which affect their level of investments for their retirement comprised the overall scope of the study. The study added to the academic literature by discovering what the current reasons were that added to the factors surrounding the decision made by blue-collar workers to contributed funds to their retirement. The literature review covered these topics in higher levels of detail by expanding on concepts and theories that related to the study, as well as a more in-depth background of blue-collar workers and their earnings power.

Chapter 2: Literature Review

The significant problem the research addressed was the minimal understanding, including a gap in the areas of finance-based research of blue-collar workers and the facets that had to be in place for these workers to allocated funds for their retirement. The purpose of this case study was to discover the factors that contributed to the decision by blue-collar workers to allocated funds for retirement. This also included the levels of funding should they decide to invest. Since these workers fell into various employment circumstances, and as a result of the economic downturn and slow recovery, there were a wide variety of reasons that were unknown for making or not making these investments (Sum et al, 2010). Many reasons existed for people refraining from investing and saving for their retirement. As a result of this, there were economic consequences to the job market recovery. One of the biggest reasons, arguably, that had implications on these economic consequences to the job market recovery was job security. For example, a study (Bargain, Immervoll, Peichl, & Siegloch, 2012, p. 136) found that low-skilled and nonstandard workers faced above-average risks of earnings losses, in particular if they worked in the manufacturing sector where output reductions were very large. Another reason included the choice of the location of a potential employer, because this had an effect on employment opportunities of workers in the labor market. A study by Eriksson and Lagerström (2012) used data from the Internet-based CV database called My CV sponsored by the Swedish Public Employment Service to investigate if women were more restrictive than men and their choice of search area, and the study also sought to determine if this was of importance to the early stages of the hiring process. They discovered that women were more restrictive in some cases than men, which could perhaps shed light on potential employment trends here in the U.S. Eriksson and Lagerström also posited that women were less likely to search for employment in metropolitan areas or areas that were far away from where they currently live. The study also indicated that female searchers got fewer firm contacts, and this was explained by their more restrictive search area. The conclusions indicated that when controls for the search were used, the negative gender effect disappeared (Eriksson & Lagerström, 2012).

Finally, politics could be swayed since public policy could be influenced by voters, and workers cast their vote on labor market regulation depending on the past payoffs that they accrued when one of two competing parties with different labor market policy platforms was in power (Martin & Neugart, 2009). However, Lafontaine and Sivadasan (2009) argue that they found some evidence that labor costs were less responsive to sales revenue in more highly regulated markets, which provided strong evidence that labor regulations dampen the responses to demand and supply shocks.

There were also macroeconomic implications of individuals delaying their retirement, and some of them were mixed which led to the delaying of the retirement decision (Levanon & Cheng, 2011). The first implication could be indirectly based on trends in the labor market. Silvia and Iqbal (2011) conducted a study which posited that since the 1970s, the employment growth rate had been experiencing a decreasing pattern. The most noticeable increase was found to be from the decade that covered 2000 through 2009 (Silvia & Iqbal, 2011; Figura & Wascher, 2010). Although studies (Belz, 2013; Dong, Mitchell, Lee, Holtom & Hinkin, 2012; Fouad, Cotter, Carter, Bernfeld & Liu, 2012; Nash & Church, 2012; Sanders & McCready, 2009) later in this chapter discuss workers being forced into early retirement or unable to find work for various reasons, a second implication could be based on the work by Figura and Wascher (2010) that found relative declines in demand rather than technological innovations as the key drivers of the elevated levels of job destruction and permanent layoffs in the affected industries, which included machinery and furniture manufacturing, textiles, metals, and nonmetallic mineral product manufacturing. Finally, Graves (2011) asserted that the rate of introduction and market penetration of new goods, sometimes referred to as product innovation, through technological advance for existing goods, sometimes referred to as process innovation, importantly affected the labor supply decision. Graves also posited that a relatively rapid influx of new goods would generally increase labor supply, while relatively more technological advance for existing goods would reduce labor supply to the market. The risk, if any, which a worker was willing to take with their investments, also played a crucial role in their funding of their retirement.

The financial risk tolerance (FRT) of males and females varies, whereby males had more tolerance than women, also potentially explains why people potentially seek out mates who had a similar FRT (Ryack, 2011). It may also be possible that spousal FRTs converge over time. These tolerances increased in college students who had financial education incorporated in the curriculum in high school (Ryack, 2011), but this did not provide long-term evidence that families had FRT that were similar going forward. However, one could also present the argument that was likely that not all families had both spouses working. So the tolerance for investing could be significantly reduced as a result, especially if resources were limited.

Another potential argument, such as the one brought forth in this study regarding blue-collar workers, was that financial risk tolerances (FRT) could be a determining factor in whether or not an individual or couple would ultimately make the decision to allocate funding for their retirement. Although one study (Gibson, Michayluk & Van de Venter, 2013) found no significant relationship between FRT and marital status, education or wealth, there were others (Ryack, 2011; Duasa & Yusof, 2013) that did. Larkin, Lucey, and Mulholland (2013) argued that there was no one-size-fits-all quantitative approach to measure FRT. However, Gibson

Michayluk and Van de Venter asserted that there was a statistically significant positive relationship between financial risk tolerance and income, while financial risk tolerance was lower for females and older individuals. They concluded that individuals, who perceive the stock market to be riskier today, compared to two years ago, had lower average risk tolerances and higher FRTs were found for individuals with positive future stock market performance expectations. Their study also concluded that while males exhibited higher levels of subjective investment knowledge compared to females, for both genders higher levels of investment knowledge were associated with higher levels of financial risk tolerance. Other underlying facets of FRT were presented in a study by Sages and Grable (2010) found individuals who exhibited the lowest level of financial risk tolerance tended to be the least competent in terms of financial matters, had the lowest subjective evaluations of net worth, and experienced the least satisfaction with their financial management skills.

The purpose of this case study was to discover the factors that contributed to the decision by blue-collar workers to allocate funds for retirement. This also included the levels of funding should they decide to invest. Since these workers fell into various employment circumstances, and as a result of the economic downturn and slow recovery, there were a wide variety of reasons that were unknown for making or not making these investments (Sum et al, 2010). This study used prospect theory (Kahneman & Tversky, 1979) and regret theory (Loomes & Sugden, 1982) as a theoretical basis for the research to uncover these reasons.

This chapter covered the major underpinnings of the study, which included the literature search strategy, why people save, in-depth coverage of both prospect theory and regret theory, including recent research that had used these theories along with the rationale for choosing them. An explanation of the over arcing research questions of the study, to included the sub questions and variables used in the study, were also reviewed. The research questions are also explained again, in more detail with respect to how they fit in with the study and how they were used, in Chapter 3.

Literature Search Strategy

A literature search was conducted using the Walden University Library, and the search engines in the library used were EBSCOHost, ProQuest, ScienceDirect and Sage Premier. Keywords and key terms included *retire, prospect theory, regret theory, blue-collar workers, manufacturing, laborer, line item operator, construction, qualitative study, case study, financial education, financial literacy, economic uncertainty, fiscal uncertainty, invest, gamble, economic consequences, labor markets, why people save, isolation effect, social security, social safety net, unemployment benefits, member checking* and *heuristics*. Social science websites in general were also searched, as were Google Scholar, Google, Bloomberg, Yahoo Finance and CNNMoney.

The topic of blue-collar workers and their investment habits and behaviors was not thoroughly discussed in the available journals, so anecdotal evidence in the mainstream media that discussed these workers and environmental issues that could potentially affect their financial decision-making choices were used to supplement peer-reviewed journal article findings. However, even the mainstream media and local media outlets did not conclusively discuss the topics this study covered. Further information regarding the use of both scholarly and social media is covered later in the chapter.

A research inquiry will only be as good as its literature review, because in order for the inquiry to be complete it must have a sound base in which the research is founded on (Goodman, Gary, & Wood, 2014). Previous research that used these theories was incorporated to demonstrate previous uses with other research inquiries to demonstrate how they might be useful here. There were also alternate theories that were not used whose relevance was close to this case study, but the prospect theory and regret theory was chosen based on a closer tie to personal finance. The two theories that were used here were chosen based on their relevance on personal investing.

Theoretical Foundation

The Blue-Collar Worker

Blue-collar workers have been underserved throughout the years by the research community as a whole (Mcleod, Lavis, MacNab, & Hertzman, 2012; Nielsen & Abildgaard, 2012; Strandholm, Schatzel, & Callahan, 2013). At the time of the writing of this dissertation there were no examples of the theories that are about to be explained that were based on work done with the blue-collar worker community. Very few research attempts were made, as will be explained later in more detail, which discussed the blue-collar workers and their retirement decisions.

Blue-Collar Worker Severance Packages

One such example was the study (Strandholm et al, 2013) where the company would attempt to offer four different severance packages to its blue-collar workers, based on a variety of variables to include age and length of employment with the current company, in order to determine which workers would pick a given package and their reasoning behind their choice. The first choice was based on a retirement-eligibility incentive where the employee was offered a bonus. The second option was based on a paid retirement furlough for those employees who were within two years of retirement. The third option was a bit more specific and its detail. It was offered to employees who were a minimum of fifty-five years or older with at least ten years of credited service, whereby these employees were offered their accrued pension benefits along with other temporary benefits that would be payable to them until the age of sixty-two. Since the years of service were truncated, these individuals would not get their full retirement pensions as part of the reduced benefit. The final option, which was extended to all employees, was a lump sum payment in exchange for being terminated from the company.

Blue-Collar Worker Unemployment and Mortality Rates

Another example of research (Mcleod, Lavis, MacNab, & Hertzman, 2012) looked at the unemployment rates and mortality rates of workers that in either the United States or Germany, and one group of people that was part of the research were blue-collar workers that were employed. The researchers examined the relationship between unemployment and morality in Germany, which they considered to be a coordinated market economy, and the United States, in which they viewed as a liberal market economy. They found that there was an unemployment morality association among American employees but not among the German employees.

Theoretical Framework

The theoretical framework for this study was based on Kahneman and Tversky's (1979) prospect theory and Loomes and Sugden's (1982) regret theory. These two theories will be explained in great detail later in this chapter, but the general notion of prospect theory is based on the choice of two or more given options whereby the person views the outcome as something that might happen versus what could actually happen as a result of the given choice (Kahneman & Tversky, 1979). Regret theory is based on a person making or not making a choice between two or more options based on a previous experience with respect to the outcome of a prior decision (Loomes & Sugden, 1982).

Personal Finance

There are a variety of research inquiries (Xi, Scholer, & Higgins, 2014; Burman, Coe, Pierce, & Liu, 2014; Marucci-Wellman, Willetts, Tin-Chi, Brennan, & Verma, 2014) that explore why people save in the first place, and this is likely to be one of the most important aspects of the research. Regardless of which category of worker was researched, the chance of making it through an economic downturn, or even the time from leaving one employer and finding suitable employment elsewhere, is much higher if a person has adequate savings to meet their obligations. Such obligations would normally include paying normal every day bills, such as the utilities bill, water, car payments and any mortgage and/or rent payments that are due. Maintaining the lifestyle that one had between jobs is arguably going to be more of a challenge since the stress of the loss of earned income will make it more likely that a reasonable person will have a hard time justifying things like going to a movie or eating out for dinner.

This in turn creates pent-up demand for the worker when they begin to earn an income that was close to what they had previously earned. One way to begin understanding how an individual might respond to the opportunity of putting themselves and a more financially secure position is to understand how this has been accomplished in the past. Previous research (Ülkümen & Cheema, 2011; Burman, Coe, Pierce, & Liu, 2014; Marucci-Wellman, Willetts, Tin-Chi, Brennan, & Verma, 2014) has shown that when people save they feel more confident in their future than those who do not save.

Since prospect theory and regret theory address ways people weigh monetary outcomes, they have been used extensively in many aspects of personal finance. The case study approach, in concurrence with the prospect theory and regret theory, was able to provide the details that covered the facets that blue-collar workers felt were necessary to be in place before they allocated funds for their retirement. This decision, or series of steps that led to a decision, was based on their preferences for the diversification of their funds. Additional research and application of the prospect theory and regret theory offered ways to determine how people made decisions with imprecise information as part of the dissertation process (Özerol & Karasakal, 2008).

Why People Save

Personal Savings

In order to begin the literature review, it was appropriate to provide a better understanding of why people save, it was important to understand that many of these reasons overlap. One reason, which is not always on the forefront of the mind of someone who is planning for the future, is to plan on paying for their children to go to college (Kim, Huang, & Sherraden, 2014; Friedline & Rauktis, 2014). It would also be difficult to compartmentalize them. Instead, each of these three primary topics was presented together. Saving money takes many forms, and it did this for a variety of reasons (Xi, Scholer, & Higgins, 2014; Burman, Coe, Pierce, & Liu, 2014; Marucci-Wellman, Willetts, Tin-Chi, Brennan, & Verma, 2014). These reasons were based on things such as the fulfillment of personal savings goals, the avoidance of having to borrow money to pay for things in the event of an emergency, and even to prevent financial hardships arising from the loss of income stemming from unemployment or retirement (Soman & Cheema, 2011; Xi, Scholer, & Higgins, 2014; Burman, Coe, Pierce, & Liu, 2014; Marucci-Wellman, Willetts, Tin-Chi, Brennan, & Verma, 2014).

According to Soman and Cheema (2011), who studied the effects of earmarking money on savings by low-income consumers, creating a savings goal and posting it in a visible are served as a positive visual reminder and increased the propensity for saving. Soman and Cheema also found that people saved more when earmarked money was partitioned into two accounts than when it is pooled into one account.

The way goals were framed also had an effect on how people saved, and according to four studies conducted by Ülkümen and Cheema (2011) savings could be increased or decreased merely by changing the way people think about their savings goals. This was accomplished by either specifying or not specifying an exact amount to save, and savers would focus on either how or why to save (Ülkümen & Cheema, 2011; Burman, Coe, Pierce, & Liu, 2014; Marucci-Wellman, Willetts, Tin-Chi, Brennan, & Verma, 2014). The levels of savings had also been on the rise as part of the recovery of the Great Recession of 2007 through 2009 (Walden, 2012; Burman, Coe, Pierce, & Liu, 2014; Marucci-Wellman, Willetts, Tin-Chi, Brennan, & Verma, 2014), but there was limited evidence of this being a trend for blue-collar workers.

For blue-collar workers specifically, it was difficult to account for specific reasons for the decisions to have a personal savings. One reason for this was the low wages that blue-collar workers earn, which had continued to be reduced over time as their jobs were outsourced to foreign competitors adding to a rise in wage difference between educated and non-educated workers (Kosteas, 2008). Risk of losing a job or missing out on a promotion also plays a role in how people save (Xi, Scholer, & Higgins, 2014; Marucci-Wellman, Willetts, Tin-Chi, Brennan, & Verma, 2014).

Retirement

According to apRoberts (2009), the retirement system in the United States was made up of two main components, which was the federal Social Security system and a myriad of occupational pension plans for employees. This did not account for individual broker accounts, where people could buy individual stocks, bonds, and other investment products themselves since apRoberts did not included them. Instead, previous research was more likely to discuss the two more broad and well-known portions of the retirement system.

One such example was how occupational pension plans covered a large part of full-time employees in the public sector, but these plans had dropped in coverage in the private sector. At their height, pension plans covered forty percent of private sector employees, whereas, at the time of the writing of this dissertation, the current amount was approximately twenty percent (apRoberts, 2009). “It should be noted that, whereas only about 17 per cent of employees work in the public sector, public sector pension plans provide practically as much retirement income as private sector pension plans: 8.7 per cent of the total as compared to 8.8 per cent” (apRoberts, 2009, p.620). apRoberts also argued that pensions may dwindle as a result of potential cutbacks in Social Security and the decline of occupational pensions.

This could lead to older people working more in order to maintain their retirement incomes, but the recent financial crisis tends to discourage attempts to save more for their retirement (apRoberts, 2009). Instead, it tends to promote people saving money in the event that they lose their job. This money that was saved would be used to maintain a certain lifestyle and pay for expenses, as previously mentioned earlier on. There is also another side effect of this. In the event that the parent company was refraining from hiring new employees, existing employees would have a higher workload since additional staff would likely not be brought on to assist with taking care of those tasks. It would also likely hinder promotions that would normally be seen as employees move from one company to another.

Social Safety Nets

As a result of the near depletion of the reserves allocated for Social Security in the 1980s, and the potential future depletion of the reserves again around the year 2037 (apRoberts, 2009, p.

622), there is a growing concern about the health and safety of the ability of Social Security to be an effective safety net (Brown, Coronado & Fullerton, 2009; Marucci-Wellman, Willetts, Tin-Chi, Brennan, & Verma, 2014). There were also public concerns that future entitlement reforms may reduce the amount of Social Security benefits that people would be eligible to receive, and this causes concern among potential and existing recipients that they may not be able to avoid such cuts (Etzioni, 2011).

One such explanation that was a basis for concern was that the Social Security system was the largest government program in the United States (Brown et al, 2009, p. 37-8). It accounted for about a quarter of all federal revenue, and it was a major tax on working individuals. A progressive retirement benefit schedule replacing higher fractions of past earnings for those with low earnings, it was the most important source of income for the elderly. This is because, as it constituted approximately forty percent of all income going to individuals aged sixty-five and over, and it was designed to essentially be part of the social safety net.

With the aforementioned topic presented, there was a reasonable argument that could be made that people generally question whether or not Social Security would available for them at retirement. This study, however, did not intend to cover this issue in its entirety. Instead the issue of the safety net was necessary to raise the point that individuals may adjust their saving habits over time with the intentions of supporting themselves through retirement. This topic did apply to blue-collar workers, and it was presented later as evidence of existing literature with respect to blue-collar workers entering retirement early. There was limited literature, if any (since none was easily found), however, which suggested blue-collar workers retire early and subsequently draw Social Security.

Unemployment benefits were also categorized as a social safety net (Bitler & Hoynes, 2010). Prior to the unprecedented increase of unemployment insurance benefits to ninety-nine weeks, resulting from the 2007 through 2009 recession and economic downturn, an individual would only expect to receive about twenty-six weeks of unemployment payments (Schwartz, 2013, p. 680). There were also lifetime limits to the individuals in the United States, where they would only be able to expect prolonged unemployment benefits during periods of economic downturn whereas other countries provide benefits that insure the unemployed for long periods of time regardless of the economy (Schwartz, 2013, p. 700).

It was also difficult to determine whether or not blue-collar workers use unemployment benefits since income was often misreported in household surveys, especially among the most disadvantaged households, with only half of food stamp and welfare dollars being reported in mainstream surveys (Bitler & Hoynes, 2010, p. 138). This also made it difficult to understand rates and levels of savings by blue-collar workers.

Prospect Theory

Theoretical Propositions

Prospect theory was a behavioral economic theory forwarded by Daniel Kahneman and Amos Tversky in 1979, and it described the choices made by individuals as ones that were chosen based on the potential value of losses and gains rather than the final outcome (Kahneman & Tversky, 1979). It was developed as a descriptive model of decision making under risk and was created as an alternative model to expected utility theory, which was based partly on lotteries and gambling.

Expected utility theory was alleged to have exhibited several pervasive effects that were inconsistent with the choices made by risky prospects (Kahneman & Tversky, 1979). People would tend to underweight the outcomes that were probable in comparison to outcomes that would be viewed as certain. This would result in what was known to be dubbed the certainty effect, which contributed to risk aversion and choices that would had otherwise involve sure gains into seeking risks and choices involving sure losses (Kahneman & Tversky, 1979).

Additionally, people would discharge components shared by all prospects under consideration (Kahneman & Tversky, 1979; McKinley, Latham, & Bruan, 2014). This would result in an isolation effect, which led to inconsistency in preferences as the same choice was presented in a variety of forms. In response to these inconsistencies, choices that had value were assigned to gains and losses instead of final assets and probabilities were replaced by decision weights (Kahneman & Tversky, 1979;McKinley, Latham, & Bruan, 2014).

Decision weights would be lower than the corresponding probabilities, with the exception of a range of low probabilities, as an overweight of low probabilities could contribute to the attractiveness of both insurance and gambling. Perhaps as a result of assigning weights to the gambling, investors would soon assign the same weights to investing behaviors. This would deal primarily with portfolio formation with respect to the adaptation of what would be dubbed ordered weighted averaging algorithms that since had been used to select assets for investors who had to narrow down the number of assets they wished to invest in (Singh, Sahu & Bharadwaj, 2010, p. 75).

The isolation effect, and in essence the weights involved in the creation of the prospect theory attempts to resolve isolation effects stemming from individuals inclination to often isolate consecutive probabilities instead of treating them together, and this was in contrast to individuals using expected utility theory where in the evaluation phase individuals behave as if they would compute a value based on the potential outcomes and their respective probabilities and a choice was made on the option with the highest utility (Abdellaoui, Bleichrodt, & Paraschiv, 2007). This also meant that people did not focus on the parts of two choices that were similar in nature, which could lead to inconsistent choice preferences because a set of decisions or prospects that could be decomposed into similar parts in more than one way where the different compositions sometimes led to different preferences thereby isolating the decision process between facets that may or may not be ideally used in the overall decision-making process (Abdellaoui et al, 2007). These inconsistent choice preferences, arguably, could produce inconsistent results under various given sets of circumstances that were similar in nature (Abdellaoui et al, 2007).

Prospect Theory

Previous Research

There were a number of research inquiries completed within the last five years that related to this study. They were broken down by the major topic of the study below. Each section briefly described how prospect theory was used in the study. The literature often times used other theories to describe the underlying basis of the study, and there were occurrences where prospect theory was used as a minor portion of the study while other instances demonstrate a more thorough use of it.

Capital Market Theories

According to Hodnett and Heng-Hsing (2012) capital market theories were developed based on market efficiency, and this included the capital asset pricing model, the efficient market hypothesis, the expectation theory, modern portfolio theory and its implications in the decisions of asset allocations, and the development of the arbitrage pricing theory. The underlying premise of the expectation theory was that investors were rational if they made their decisions based on the probability concept of outcomes (Hodnett & Heng-Hsing, 2012). In behavioral finance, there was a suggestion that investors were often irrational and influenced by psychological biases when making decisions. The study also asserted that prospect theory brought forth arguments against some of the underlying principles of the expectation theory (Hodnett & Heng-Hsing, 2012).

Hodnett and Heng-Hsing (2012) argued that behavioral biases led investors to violate some of the basic underlying principles of traditional finance, which meant decisions were based on heuristics versus the underlying fundamentals of a given financial instrument. Part of this argument was the assertion that the expectation theory utilizes the function of diminishing marginal utility emphasized the risk aversion by investors, whereas prospect theory showed investors being risk averse for gains while exhibiting diminished marginal disutility for losses (Hodnett & Heng-Hsing, 2012; Barton, Berns, & Brooks, 2014). Prospect theory also brought forth the idea of loss avoidance, which was a suggestion that the extent of disutility resulting from losses were greater than the utility derived from an equal amount of gains (Barton, Berns, & Brooks, 2014).

Disposition Effect

Hens and Vlcek (2011) articulate the disposition effect as being based on the observation that investors tend to realize more gains than they do losses, which they say was not easily explained by traditional finance theories (Barton, Berns, & Brooks, 2014) that also seemingly used prospect theory. Studies by both Hens and Vlcek (2011) and Kaustia (2010) found that prospect theory was unlikely able to explain the disposition effect. One ordinary explanation for the disposition effect was referenced to prospect theory, with respect to risk aversion, where investors were risk-averse when faced with gains and risk-pursuing when faced with losses (Hens & Vlcek, 2011).

Kaustia (2010) noted that patterns of realized returns did not often result from optimal after-tax portfolio rebalancing, which was a belief in mean reverting returns, or investors acting on target prices. Trading data from the study demonstrated the propensity to sell when a security rises in price at a zero return, but it was generally constant over a broad range of losses and increased, or was constant, over a wide range of gains (Kaustia, 2010). When combined with exogenous liquidity shocks, prospect theory predicts that more gains were realized than losses: however, it also predicts that the propensity to sell would decline as stock prices moved away in either direction from the purchase price, which was a prediction that was rejected by the data (Kaustia, 2010).

Employee Satisfaction and Turnover

A study by Dong, Mitchell, Lee, Holtom and Hinkin (2012) was conducted to examine how relationships between employee job satisfaction trajectory and subsequent turnover may change depending on employee unit (department) job satisfaction trajectory and its dispersion. The analysis was composed of data collected from over five thousand employees and one hundred and seventy-five business units of a hospitality company (Dong et al, 2012). Prospect theory, in the context of the study, suggested that the further away a gain or loss was from a person's initial job satisfaction the more salient the change would be to that person.

The conservation of resources theory was also used in the study to determine that individuals were motivated to conserve their critical resources and would generally react to a decline in job satisfaction. The study alternately found that growth in an individual employee's job satisfaction was not likely to prevent him or her from leaving merely because job satisfaction was uniformly decreasing in the workplace, which meant the employee was out of step with the rest of the coworkers (Dong et al, 2012). The study also found that even if an employee did not necessarily like the job they were doing, if the work place overall enjoys a uniform job satisfaction, there was an increased possibility in which the unsatisfied employee would be in step with coworkers over time (Dong et al, 2012). As a result, the job satisfaction based on the unit-level workplace had an effect on the overall turnover rate within a given unit.

Preference Foundations

A study by Kothiyal, Spinu, and Wakker (2011) asserted that prior to prospect theory, the common thought process had been built upon the notion that irrational behavior was too chaotic to be modeled, which meant that models of rational choices were the best descriptive approximation of irrational behavior. The study also posited that preference foundations provided the necessary conditions for decision models, which was also known as the preference relation (Kothiyal et al, 2011).

Kothiyal et al (2011) pointed to three problems with prospect theory that would be discussed in the study. "First, there were some theoretical problems in the way it implemented non-additive probabilities. Second, it deals only with risk (known probabilities). Third, within risk it deals only with a limited set of prospects (only two nonzero outcomes)" (Kothiyal et al, 2011, p. 196). Prospect theory was used in the context of the study to examine complex prospects in normal and lognormal distributions. In summation of the study, preference foundations for special cases of prospect theory required countable additivity (Kothiyal et al, 2011, p. 196). The paper also supported applications of prospect theory for the use of complex uncertainties, as seen in applications in finance and health, and it demonstrated methods that could be used to assign weights under such uncertainties (Kothiyal et al, 2011, p. 196).

Student Academic Decision-Making Choices

A study by Mowrer and Davidson (2011) used experiments to apply prospect theory to decision-making in academic situations while focusing on risk-seeking portions of a fourfold pattern. “The fourfold pattern predicts that people were risk-seeking over low probability gains, risk-averse over high probability gains, risk-averse over low probability losses, and risk-seeking over high probability losses” (Mowrer & Davidson, 2011, p. 298-9). The study asserted that there was a continuous interplay in higher educational settings of courses in school policies and student preferences and decisions. Mowrer and Davidson also posited that prospect theory could be used in the application of events that take place in higher education enabling administrators, professors, and students to operate more effectively by considering subjective valuations that influence student decisions.

Another similar study by Zhengyi (2013) used prospect theory to determine whether or not academic experience in economics would result in reduced risk aversion and irrationality. The study used expected utility theory to measure rationality based on behavioral deviations posited by the theory, and it used prospect theory to measure adherence to cognitive limitations. “A gambling experiment survey with monetary incentives was conducted to elicit risk profile and adherence to PT [prospect theory] from Occidental College students with various training levels in economics. Economics majors were found to be less risk averse, and this is due to self-selection, rather than learning in economics. Learning effect, however, was observed among non-economics students” (Zhengyi, 2013, p. 13). It was also noted that the learning effect among non-economics majors could be biased due to their abilities to switch majors or chose economics classes.

Regret Theory

Theoretical Propositions

Based on two fundamental assumptions, regret theory was created by Graham Loomes and Robert Sugden, and it was introduced as an alternative to prospect theory in the December of 1982 edition of The Economic Journal as an explanation of gambling choices (Loomes & Sugden, 1982). The first assumption was based on the notion that many people experienced sensations of regret and rejoice, and the second one was based on the notion that when people made decisions that they were not certain about, they tried to anticipate and take account of those sensations (Loomes & Sugden, 1982, p. 820).

Loomes and Sugden also had deep-seated arguments for the reasoning behind these assertions that would be the underlying basis for the construction of their theory (Loomes & Sugden, 1982, p. 820). In relation to the first assumption, it seemed to us that psychological experiences of regret and rejoicing could not properly be described in terms of the concept of rationality. A choice may be rational or irrational, but an experience was just an experience. As far as the second assumption was concerned, if an individual did experience such feelings, they could not see how he could be deemed irrational for consistently taking those feelings into account. The theory had also been used in the decision sciences to understand how choices were made with respect to avoiding a wrong decision or regretting the failure to take an action after an occurrence had transpired (Tsalatsanis, Hozo, Vickers & Djulbegovic, 2010).

Regret Theory

Previous Research

There were a number of research inquiries completed within the last five years that related to this study. They were broken down by the major topic of the study below. Each section below briefly describes how regret theory was used in the study. The literature often times uses other theories to describe the underlying basis of the study, and there were occurrences where regret theory was used as a minor portion of the study while other instances demonstrate a more thorough use of it.

Perceived Unfairness

A study by Tang and Jianmin (2008) used regret theory to discover that consumers who realize they had been involved in a transaction that they later felt to be unfair, such as a perceived unfair pricing practice, could be an experience filled with shock and regret, and such an experience could drive this given customer to refrain from any further transactions with the company. Tang and Jianmin also argued that both fairness and regret involve a comparison standard, and that perceived unfairness may lead to regret independent of the outcome or a discrepancy in the outcome. Regret can also come from comparison with either an imagined or forgone outcome, while fairness typically comes from comparison with a socially comparable outcome (Tang & Jianmin, 2008, p. 750).

Tang and Jianmin (2008) emphasized more than just the notion that the relationship of regret and unfairness as being both outcome dependent and outcome discrepancy dependent. They also argue that, "In addition, it questions the assumption that regret is experienced only when a foregone outcome is better than that of the chosen option. The data also suggested that the influences of social comparison on satisfaction and repurchase intention were fully mediated by fairness and regret. Satisfaction is mainly driven by perceived fairness; repurchase intention is mainly driven by experienced regret" (Tang & Jianmin, 2008, p. 750).

Return Shipping Policies of Online Retailers

Bower and Maxham (2012) conducted two field studies over a period of four years that used two surveys and actual consumer spending data. They found that some online retailers would attempt to limit costs associated with product returns by instituting return policies that required customers to pay to return products if a retailer determined that the customer was at fault, but if the retailer was deemed to be at fault then the retailer would pay for the return shipping.

The findings indicated that if customers had to pay for their own return shipping after making an online purchase, they decreased their spending with the retailer by seventy-five to one hundred percent over a period of two years (Bower & Maxham, 2012, p. 110). However, it was also found that customers who did not have to pay for return shipping spent one hundred and fifty-eight to four hundred and fifty-seven percent more than they did prior to the return (Bower & Maxham, 2012, p. 110). Bower and Maxham also suggested that online retailers should consider instituting a policy of free returns or at least examine consumer data to determine consumer response to fee-based returns.

Decision Curve Analysis

One study (Tsalatsanis et al, 2010) researched the effects of physicians using regret theory as an alternative to the decision curve analysis in their daily medical practices. The decision curve analysis is used in the medical field as an alternative method for the evaluation of diagnostic testing, prediction models, and molecular markets (Tsalatsanis et al, 2010, p. 1). However, the decision curve analysis is primarily based on expected utility theory and was often violated by decision makers (Tsalatsanis et al, 2010). The study also concluded that decision-making was governed by analysis and intuition, which was part of a deliberative process, which meant that rational decision-making should reflect both of these facets (Tsalatsanis et al, 2010). As a result of the study, a dual visual analog scale was developed to (a) describe the relationship between regret associated with failing to treat a patient versus treating a patient unnecessarily and (b) develop the decision maker's preferences as expressed in terms of threshold probability (Tsalatsanis et al, 2010).

Reason-Based Choices

Connolly and Reb (2012) examined the moderating role of regret aversion in the reason-based choice decision process based on regret theory. As part of the introduction to their research, they introduced an event where individuals had ownership of a given stock (Connolly & Reb, 2012, p. 36). One group of people began the study owning the stock of one company (Stock A), and the other group owned a different company (Stock B), who then sold it and bought Stock A. As part of the study, each group owning Stock A would lose money. Each of the two groups were questioned to see which group felt more regret, and it was discovered that the group of people who had switched over to the stock, from Stock B to Stock A, were the ones who felt the higher levels of regret (Connolly & Reb, 2012).

The study also concluded that, based on the common decision justification, reason-based choice effects were associated to regret aversion. Manipulation of regret salience had the possibility to reduce the decoy effect, which was a well-known reason-based choice effect and the effect of regret salience had a tendency to vary in theory relevant to ways from one reason-based choice effect to another (Connolly & Reb, 2012). In psychology, the research on regret theory had a heavy reliance on self-report measures of expected emotional reactions to hypothetical events (Connolly & Reb, 2012, p. 36).

Following the Heart

Crotty and Thompson (2009) explored decision-making implications of regrets of the heart versus regrets of the head in economic decision-making in three studies. The overall findings from the studies demonstrated that people who were asked to recall a time in which they regretted not following their heart were more likely to recall circumstances where they experienced a loss or a missed opportunity compared to the people who recalled a time when they regretted not following their head (Crotty & Thompson, 2009, p. 315). The study found that there was no overriding maximum that pervaded lay psychological wisdom when it came to following one's heart or head, because people impulsively used one or the other as their inner guide depending on the circumstances of a given situation (Crotty & Thompson, 2009, p. 316).

Crotty and Thompson (2009) found that when considering regret with respect to matters of the heart, the implication was built on the notion that if an individual had followed their heart a chance might not had been lost. With matters of the head, the person might recall a time where an action resulted in a bad outcome perhaps because of a failure to restrain allowed inner voice or intuition (Crotty & Thompson, 2009).

The study also found that in the negotiation context sellers could be more cautious and less aggressive during the negotiation process if they felt they were going to lose the item they were selling if they made errors, and this lack of self interest could manifest itself into lower profits (Crotty & Thompson, 2009). A focus on emotions also had the capability to prompt them to pay more attention to the other party's outcomes, perhaps with the inclusion of seeking more equal allocation of resources, which could had again reduced their profit margin.

Post-Purchase Regret

Das and Kerr (2010) conducted a study on a television commercial that was alleged to use using regret theory. The study asserted that if people understand what exactly they regretted when they experienced the emotion, then it would be possible for them to control their feelings when they started to arise. “Campbell Soup Company ran an advertisement for its V8 vegetable soup stating, ‘WOW, I could have had a V8.’ In doing so, the company probably tried to make their consumers realize that their decision to buy another brand would result in an unfavorable experience compared to the V8 brand” (Das & Kerr, 2010, p. 178). The point of the advertising was to convey a notion to the consumer that had they chosen the Campbell’s product, then a better product would have been purchased (Das & Kerr, 2010).

The objective of the research was to introduce the perception of regret that comes from two different sources of the decision sources, and these two were made up of the actual decision-making process adopted and the product chosen as they result of this process along with the possibility that individuals may misattribute the source of regret if the sources of regret were measured (Das & Kerr, 2010).

Rationale for the Choice of Theories

Relevance

The rationale for choosing prospect theory was based on the notion that some people viewed investing as a gamble (Chapman & Getzen, 2011), but there was also tendency for some people to invest based on simple heuristics (Benartzi & Thaler, 2007). These heuristics, or rules that people used in their judgments to made decisions, could be accurate but could also lead to systematic biases (Benartzi & Thaler, 2007). “Saving for retirement is a difficult problem, and most employees had little training upon which to draw in making the relevant decisions. Perhaps as a result, investors were relatively passive. They were slow to join advantageous plans; they made infrequent changes; and they adopt naive diversification strategies" (Benartzi & Thaler, 2007, p. 102).

The basis for using regret theory was based on its assertion that people experienced regret if they invest in something and they were later unhappy with the investment due to a variety of reasons, such as buying the stock of a company and it subsequently dropped sharply in price (Kwak & Park, 2012). The opposite was true if a given person was given information about a stock and they did not purchase shares of it and it subsequently rose in price (Kwak & Park, 2012).

The economic environment in which one lives and could also be a factored that influences the investment decision-making. Some people exhibited strong tendencies to save money in a pessimistic environment, whereas in an opportunistic environment more money would likely be used for investment (Xiao, Wang & Liu, 2009, p. 1302). Investors who were neutral may show less willingness to invest in the event of an economic crisis or severe downturn (Xiao et al, 2009).

Relationship with the Study

Prospect theory (Kahneman & Tversky, 1979) and regret theory (Loomes & Sugden, 1982) were used as the theoretical basis for the research for reasons that overlap one another. Prospect theory (Kahneman & Tversky, 1979), in short, had the relationship of a potential investor seeking an opportunity to invest in a given asset class based on what he or she thinks would happen with price movement relative to the entry point. One could argue that this investor, perhaps a blue-collar worker, may have been in a position where he or she felt comfortable investing. With an idea in mind of how much could make in the end, they may decide to go ahead and invest in either a singular asset or a group of assets (Xiao et al, 2009).

This person might have even approached someone that they know who had recently invested, and this person may have provided them with advice on which asset class to chose or perhaps even a specific company. The investor could now encounter a scenario in which they had a decision to make that could cause feelings of regret later, which was where regret theory came into play (Loomes & Sugden, 1982). In the event that the investor took the investment advice of their friend, they could have found that the asset or assets that they bought subsequently dropped in value that led them to regret both listening to their friend and acquiring the asset (Loomes & Sugden, 1982). However, in the event that that person did not listen to their friend and the asset gained value, there could be a feeling of regret for not acting on the advice (Loomes & Sugden, 1982).

Relationship of the Research Questions

The research questions were meant to build on the existing prospect and regret theories with respect to blue-collar workers and their investment behaviors, and they were also based partially on the existing literature in some cases. The central focus of the research was based on discovering the factors that contributed to their decision-making process on whether or not investing was appropriate for them, along with their choices to diversify their portfolio in the event they do chose to invest. In order to add depth to the topic, there were several aspects of these decisions that needed to be explored. As described in Chapter 1, and in the literature review above, the amount of financial education that an individual had could be a determining factor in whether or not they invest and how much they do invest in the event they chose to (Ryack, 2011). It was also possible that a person's level of academic education could affect their investing habits as well (Ryack, 2011).

There were additional questions that were considered that were not necessarily found in the current research: (a) How much financial education did blue-collar workers feel they needed before investing?, (b) In what ways did a blue-collar worker's level of academic education affect their levels of investing?, (c) In what ways did economic conditions in the local area where blue-collar workers were employed cause them to create their overall investment strategy?, (d) In what ways did a blue-collar worker's age and gender affect their retirement planning?, and (e) What were the different categories, and how much of each category, of investments blue-collar workers allocated their money to? The reason that these questions were asked was because one could argue that in an economy that had contracted, was in the middle of contracting, or the economy was recovering from a severe recession, a given person may not have felt comfortable investing because they may had fears relating to the strength of their job security (such as whether or not they may lose their job).

A person might have had different investing behaviors depending on their age, because the older a person gets the less risk tolerant they may become and vice versa (Tannahill, 2012), but that did not necessarily guarantee that everyone had similar investment behaviors just because they were of a certain age or gender.

Gaps in the Literature

In order to achieve the appropriate levels of depth, there was a need to fill gaps in the literature in several places that one could argue was seemingly difficult to fill. One such gap that was difficult to fill in literature was based on the opinions of a group of people, because it was difficult to generalize the opinions of people in one portion of the United States with the opinions of someone else in a different part of the country. One reason for this was based on the possibility of an uneven recovery since some parts of the country tried to recover from the recession in a way that allowed for blue-collar workers to feel comfortable doing things such as investing, buying a house, and perhaps even buying a new car.

In other parts of the country, blue-collar workers might have still been unemployed because the recovery in their area was weak or potentially even non-existent because it had not started yet. In order to develop credible findings, a researcher should go directly to the source and ask. There was also a need to fill the gap in the literature that involves the saving habits of blue-collar workers, because there was literature (Soman & Cheema, 2011; Borsch-Supan & Ludwig, 2009) that covered the saving habits of people in general. It did not, however, specifically cover blue-collar workers. There was only one study (Goetzmann & Kumar, 2008) found that spoke specifically to blue-collar worker investment portfolio diversification, and they found that blue-collar workers were in the category possessing the least-diversified portfolio.

Literature Review Related to Key Variables

Studies Related to the Constructs of Interest Methodology

This section addressed studies that had covered regret theory, prospect theory, and blue-collar workers investing their money. At the time of this writing, the working class individuals had been relatively ignored in past research compared to individuals from higher socioeconomic statuses (Fouad et al, 2012, p. 287). There was an attempt made to work around this issue to find literature that closely relates to the aforementioned studies. Although I was unable to find any case studies that these three broad topics simultaneously, I was able to find various studies that covered how each topic was studied.

Several studies in the academic literature (Wiltermuth & Gino, 2013; Bower & Maxham, 2012; Tang & Jianmin, 2008; Lankton & Luft, 2008) seemed to support the notion that when researchers want to study regret theory, they want results that were based on both consumer behavior and empirical data, because the majority of the studies in existence did not seem to use the case study approach or qualitative inquiry in general. One might also have gone as far as to argue that researchers might have been doing studies on regret theory with the intentions on being able to solidify their findings in quantitative data in order for it to be more credible, which would also seemingly made it easier for another researcher to take the findings from the research and replicate it in order to expand on it.

However, societal issues such as the ones incorporated in this study could allow researchers to view similar problems through a different set of spectacles. It was also the intention of this study to fill the gap in the literature between the findings of quantitative studies and the very few studies based on blue-collar workers investment behaviors using qualitative methodologies.

A study conducted by Liao, Liu, C., Liu, Y., To and Lin (2011) that was relative to the field of finance was designed to determine customer regret in an e-commerce environment. It examined the roles that information quality, system quality, and service quality played in determining customer regret and satisfaction. Using regret theory, the study found that poor evaluations of website quality could influence buyer regret, which meant that the success of the website largely depended on the value of the information. If consumers were dissatisfied with the content, they would leave the site and abandon the actions they were undertaking or turn to other websites (Liao et al, 2011). This study also found that business-to-business relationships were an important aspect of the website performance with respect to delivering product and service information, because if products were not delivered as promised it could place a strain on the relationships between the parent company, the vendors and the consumers. A powerful search engine was also important, because if customers could not easily search the website they were likely to leave (Liao et al, 2011).

A case study using prospect theory was conducted by Wood (2009) in response to the chronic excess capacity in the small competitive industry of clay brick manufacturing. The study found that exit barriers produced a free-rider problem, where only smaller and lower quality brick plants were shut when the efficient solution demanded major closures (Wood, 2009, p. 25). It was found that in order to reduce the sheer volume of manufacturers, mergers and acquisitions between large companies and smaller companies would end up having to take place, which resulted in the parent firm cutting sizable portions in capacity mainly in the acquired plants in order to increase efficiency and reduce costs (Wood, 2009, p. 41). The reason for this taking place was based on a period of low demand. Most of this would happen three full years after the collapse of the market, and it would be highly-condensed over a period of six months (Wood, 2009, p. 41).

Two case studies (Boris, 2010; Sanders & McCready, 2009) regarding blue-collar workers were found to be relevant to not only addressing the overall study, but to addressed age and gender sub questions that was covered later in the study. There were a number of issues that faced blue-collar workers when it came to gaining suitable employment, making a decision on whether or not to allocated funds for their retirement, and how they would diversify these funds. One such issue was the concern about equal treatment (Boris, 2010). Unlike government employees who were less likely to be arbitrarily fired for being a lesbian, gay, bisexual, or transgender (LGBT), private companies did not always extend the same protections (Boris, 2010,

p. 158). However, the study concluded with the United Auto Workers Union, who represent Ford, General Motors, and Chrysler, receiving praise for taking steps to ensure that language in the contracts, at all levels of the hiring process, protects employees by making sure they were treated fairly and equally regardless of sexual orientation. This included pay, medical benefits, and other benefits, as well as the other contracts throughout the employees' career (Boris, 2010, p. 175).

Sanders and McCready's (2009) study addressed by which two older blue-collar workers adapted to their physically demanding jobs without ADA (Americans with Disabilities Act) accommodations or changes to their job descriptions despite having endured medical conditions commonly associated with older age. Although the study concluded by recommending that older workers do more intellectually-based jobs, such as ones that led project teams, the ultimate take-away from the study was the assertion of a concept that was based directly on this study, and this included comments made by interviewees:

> The process of bringing personal concerns and medical issues into the workplace is not unique to older workers. However, the thought of retirement, which constantly looms over them, was core to their work and broader life focus. Steve was quick to say that retirement benefits and medical insurance were the primarily reasons that he worked. "I gotta make a living and get benefits. I made 17.63/hour. . . It's a job, I'm not happy with it. . . I look forward to retirement". Steve planned on working part-time for his daughter's deli "to keep busy . . . to talk to people. . . to do different things". Tony, however, described retirement as "scary." It's a difficult situation. I don't know what I'm going to do. Most of us didn't make enough to retire. I had 100k – that won't last long. I wanted at least 5 good years of retirement before. . . you know. But I can't pay for medical. I don't know where I'll live.

> What happens when you want to retire? No one tells you what to do. I don't know how it will happen and it's scary. (Sanders & McCready, 2009, p. 118).

Approaches to the Problem

Previous Attempts, Strengths and Weaknesses

As noted previously, little research had been conducted in the field of finance to discuss all three of the major concepts of this study, which were built upon regret theory, prospect theory, and blue-collar workers. However, there were two studies conducted within the past five years that were the closest to this study with respect to relevance. The closest research that could be found was conducted by Sanders and McCready (2009), and the strengths of the study were based on the approach which enabled an in-depth examination of how the context of the work environment, job position, and life stage influenced older workers' perceptions of the job.

The limitations of the study were based on the inherent nature of case study research, which present outcomes that were difficult to generalize from one population to another since case samples were small and selected for specific attributes (Sanders & McCready, 2009, p. 121). The strength of the research was based on addressing financial concerns that were brought forward by the participants, which alluded to the notion that blue-collar workers may not have had higher levels of financial education.

The second-closest study was conducted by Boris (2010) and it addressed LGBT issues, including equal benefits, but did not include all three of the primary issues that this case study addressed. The reason this one was not as close as the Sanders and McCready (2009) study was because it lacked documented interviews with blue-collar workers being produced in the literature.

One strength of the study, however, was based on the work that the union had done for the workers of the big three automotive companies, but one of the limitations of the study was that it was very difficult for the researcher to do meaningful interviews because many UAW leaders refuse to be interviewed. The study also pointed out the long-term successes employees had in recent years in obtaining fair and equal pay and benefits, which included medical and retirement benefits, regardless of their sexual orientation or gender.

Justification for Selection of Variables

It was appropriate to restate an important point presented earlier regarding the justification for the selection of variables used in the study. As of the time of this writing, working class individuals had been relatively ignored in past research compared to individuals from higher socioeconomic statuses (Fouad et al, 2012, p. 287). So it was very difficult to find articles that specifically, or even adequately, discussed the point of understanding the contributing factors that led to the level of investment for retirement and portfolio diversification by blue-collar workers since very little literature existed in this area, and it was the attempt of the study to close some of those gaps in the literature. There was anecdotal evidence in the mainstream media that discussed these workers and current environmental issues that potentially had an effect on their financial decision-making choices. However, even the mainstream media and local media outlets did not conclusively discuss the topics this study covered.

Review and Synthesis of Key Concepts

Bloomberg news reporters Nash and Church (2012) discussed a finance issue in San Bernardino, California, which had a population of about two hundred thousand residents, and its court-imposed deadline for an austerity budget known as a pendency plan. This blue-collar community was under the watchful eye of a U.S. Bankruptcy Court judge that was determining whether or not the city should remain under bankruptcy protection. The article presented the position of the city, with respect to making progress on the pendency plan, in order to stay in bankruptcy using the temporary court-ordered budget. This included a procedural debate over whether a council committee needed to consider bankruptcy related cuts to police and fire services. The article also reported that tax revenue fell by approximately $12 million, which was a 9 percent reduction between the years of 2007 to 2011. Pensions were forecast to consume fifteen percent of the city's budget in 2015, which was up from 9 percent in 2007. This came as a result of the city lowering retirement ages to boost pensions for police and firefighters.

Bloomberg news reporters Braun and Selway (2012) discussed the City of Chelmsford, Massachusetts, who outsourced their facility-management duties to Aramark Corporation, which was based out of Philadelphia, Pennsylvania, for a fee of $841,000 annually, which was $400,000 less than the custodians' union would previously cost. After the transition, union workers were offered their jobs back at $8.25 to $8.75 an hour, when they were previously making twenty dollars an hour.

Massachusetts and thirty-six other state and local retirement funds committed over $5 billion to the four private equity investment pools that acquired Aramark in 2007 (Braun & Selway, 2012). The beneficiaries of this pension system had reaped returns of as much as fifteen percent annually from the funds at the expense of other public employees who had lost their jobs to Aramark (Braun & Selway, 2012). The article also reported that less attention had been given to key backers of the private equity industry, which were public employee pension funds (Braun & Selway, 2012). Deals like the one seen with Aramark were also used to pay benefits for workers retiring in coming decades (Braun & Selway, 2012).

Bloomberg news reporters Shenn, Gullo, and Gittelsohn (2013) completed a report on Richmond, California, which had a population of about a hundred and six thousand residents situated north of San Francisco and was largely a blue-collar city. The city considered the enactment of eminent domain, which was the right of the government to take private property for the public good while providing fair compensation to the owner, except some of these homes were worth far less than the mortgage on them (Shenn et al, 2013). The initiative had targeted mostly loans by borrowers who were current on their payments. Other communities, such as El Monte, California, North Las Vegas, Nevada, and Irvington, New Jersey, had considered this in the past, and after consideration they decided against the plan. It was not clear how this move by local governments would affect the members of its community, nor was it clear how it would affect blue-collar workers. What was clear was that in the event eminent domain were to proceed in a predominantly blue-collar community, there could likely be negative effects to blue-collar residents who happen to live in a house that had a higher-priced mortgage than the value of the house.

StarTribune news reporter Belz (2013) completed a report on local blue-collar workers, mainly on pipefitters, oil workers, roofers, factory workers, and concrete workers, in the local economy of Minneapolis, Minnesota. The report (Belz, 2013) discussed how blue-collar Americans could use extra income, but as they got older many of them were forced into retirement, some were forced into early retirement, and end up collecting a significantly smaller pension than they would had otherwise collected had they remained in the workforce. One concrete worker was forced into retirement because of his physical disabilities at the age of fifty-four. Many of these local blue-collar workers enroll early for Social Security, or they shift to lower-paying work or stop working altogether. Several of these workers that were interviewed were also physically unable to work, and they lived on a fixed income.

What Remains to be Studied

There was a gap in the literature that did not completely discuss the contributing factors that led to the level of investment for retirement and portfolio diversification by blue-collar workers that used both prospect theory (Kahneman & Tversky, 1979) and regret theory (Loomes & Sugden, 1982) as the underpinnings of a case study. So far this literature review has shown relevant studies (Sanders & McCready, 2009; Boris, 2010) that had come close, but many of the underlying factors that still needed to be studied were not covered in the literature conclusively. These factors included whether or not blue-collar workers in a financial position to invest, how much money they allocated if they could invest, how they diversify their portfolio, and if they had an emergency fund established so they did not have to withdraw their retirement funds.

This information was not found in the literature, and in order to obtain higher levels of accurate information this information should be gathered directly from the study participants. The reason there was a need for this to be gathered from research participants was because it may have been controversial to speculate on what the individual circumstances would be prior to the study, and it could have also been controversial to assume that blue-collar respondents from other studies (Sanders & McCready, 2009; Boris, 2010) speak for all of the other participants who would be in this study.

Studies Related to the Research Questions

The amount of financial education that an individual had could be a determining factor in whether or not they invest and how much they do invest in the event they chose to (Ryack, 2011). It was also possible that a person's level of academic education could affect their investing habits as well (Ryack, 2011). A study by Hadar, Sood and Fox (2013) proposed that attempts to increase consumers' objective knowledge of financial instruments could deter willingness to invest when these attempts diminish their subjective knowledge.

This study (Hadar et al, 2013) also addresses the sub questions this case study, with respect to financial education and literacy. Some of the most important decisions that consumers made involved financial products, and these ranged from the choice of a retirement savings portfolio to buying a home or leasing or purchasing a vehicle (Hadar et al, 2013). Over time an increased amount of new and complex financial products had been made available to consumers, and unfortunately many consumers lack the financial literacy to evaluate these products adequately and chose among them the ones they were interested in (Hadar et al, 2013).

As part of the research by Hadar et al (2013), four studies were conducted using different subjective knowledge manipulations and investment products to show that investment decisions were influenced by subjective knowledge. The study had four major findings: (a) participant willingness to pursue a risky investment increased when subjective knowledge levels were higher, (b) participants willingness to enroll in their retirement savings program was enhanced by asking consumers an easy question about finance, which also increased their subjective knowledge, (c) technically elaborating on information about mutual funds diminished subjective knowledge regarding that investment and decreased the choice of that fund, and (d) consumers invested less money in funds when missing information was made salient (Hadar et al, 2013, p. 303).

For questions of the study that pertained to a respondent's age, with respect to how it affected their retirement planning, a study by Kornrich and Furstenberg (2013) found that age was not always closely related to investment horizons, because these proxies for investment and financial sophistication were significant for stockholding. A study by Dow (2009) found that investors who had children would invest in them throughout their lifetime, and the outcomes of the investments were based on monetary inputs over time. Higher income parents who had children were at a greater advantage because these parents spend more on child care, preschool, and the growing costs of post secondary education (Dow, 2009, p. 21). Parents also had been found to invest equally in their children in recent times, whereas this was not always the case in the past (Dow, 2009, p. 5).

Wang (2011) also asserted that younger generations also face challenges stemming from economic circumstances, such as the housing bubble and the rapid changing demographics in the United States. The study concluded that gender, income, knowledge, and experience emerged as important personal and social influences on younger generations' investing behaviors (Wang, 2011, p. 21). So one could argue that a given investor could chose to hold stocks later in their life, and the amount of stocks that they do hold could depend on their income and number of children, which could affect the levels of their investment in the event that they chose to invest.

For questions of this study concerning the gender of an investor, there were studies (Mittal & Vyas, 2011; Nofsinger & Varma, 2009) positing women were more risk averse than men were, while other research (Wang, 2011) would demonstrate inconclusive findings regarding the correlation between gender and financial behavior. However, men and women did not differ in their information processing and accumulation styles when it came to deciding on their investment behaviors (Mittal & Vyas, 2011, p. 45). One reason for this may have been because women had learned from their mothers' generation about the financial difficulties arising from sudden widowhood or divorce (Mittal & Vyas, 2011, p. 57). Kathuria and Singhania (2012) also conducted a study which regarded the differences in gender with respect to investing and where individual investors got their information, and they found that both male and females used magazines, the Internet, and television as the three most important sources of awareness.

Qualitative inquiry that was used the case study method had the ability to provide meaningful results, because there were a number of gaps in the literature and one could argue that society as a whole could gain from in the event that these holes were at least partially closed. Positive social change comes in many forms, and the blue-collar worker was arguably one of the major categories of workers that made up the backbone of the United States. Merely reviewing quantitative-based data would not be appropriate in this case because, in many circumstances, as we had seen above, questions could only be answered by communicating directly with individual study participants in a way that allowed them to provide their own personal in-depth responses to open-ended questions, which was not typical of quantitative research.

Summary and Conclusions

Saving money took many forms, and it did this for a variety of reasons. These reasons were based on things such as the fulfillment of personal savings goals, the avoidance of having to borrow money to pay for things in the event of an emergency, and even to prevent financial hardships arising from the loss of income stemming from unemployment or retirement (Soman & Cheema, 2011). The way goals were framed also had an effect on how people save, and according to four studies conducted by Ülkümen and Cheema (2011) savings could be increased or decreased merely by changing the way people think about their savings goals.

According to apRoberts (2009), the retirement system in the United States was made up of two main components, which was the federal Social Security system and a myriad of occupational pension plans for employees. As a result of the near depletion of the reserves allocated for Social Security in the 1980s, and the potential future depletion of the reserves again around the year 2037 (apRoberts, 2009, p. 622), there was a growing concern about the health and safety of the ability of Social Security to be an effective safety net (Brown et al, 2009). There were also public concerns that entitlement reforms may reduce the amount of Social Security benefits that people would be eligible to receive, and this caused concern among potential and existing recipients that they may not be able to avoid such cuts (Etzioni, 2011).

Unemployment benefits were also categorized as a social safety net (Bitler & Hoynes, 2010). Prior to the unprecedented increase of unemployment insurance benefits to ninety-nine weeks, resulting from the 2007 through 2009 recession and economic downturn, an individual would only expect to receive about twenty-six weeks of unemployment payments (Schwartz, 2013, p. 680).

Prospect theory was a behavioral economic theory created by Daniel Kahneman and Amos Tversky that debuted in the academic journal Econometrica in March of 1979, and it described the choices made by individuals as ones that were chosen on the potential value of losses and gains rather than final outcome (Kahneman & Tversky, 1979). The rationale for choosing prospect theory was based on the notion that some people viewed investing as a gamble (Chapman & Getzen, 2011), but there was also tendency for some people to invest based on simple heuristics (Benartzi & Thaler, 2007). These heuristics, or rules that people use in their judgments to make decisions, could be accurate but could also lead to systematic biases (Benartzi & Thaler, 2007). According to Hodnett and Heng-Hsing (2012) capital market theories were developed based on market efficiency, and this included the capital asset pricing model, the efficient market hypothesis, the expectation theory, modern portfolio theory and its implications in the decisions of asset allocations, and the development of the arbitrage pricing theory.

In behavioral finance, there was a suggestion that investors were often irrational and influenced by psychological biases when decisions were made (Hodnett & Heng-Hsing, 2012). Prospect theory also brought forth the idea of loss avoidance, which was a suggestion that the extent of disutility resulting from losses was greater than the utility derived from an equal amount of gains. Hens and Vlcek (2011) articulated the disposition effect as being based on the observation that investors tend to realize more gains than they do losses, which the authors assert was not easily explained by traditional finance theories.

Employees of companies were also affected by economic occurrences. A study by Dong, Mitchell, Lee, Holtom, and Hinkin (2012) was conducted to examine how relationships between employee job satisfaction trajectory and subsequent turnover may change depending on the employee's unit job satisfaction trajectory and its dispersion. Prospect theory, in the context of the study, suggested that the further a gain or loss was from a person's initial job satisfaction the more salient the change was to that person (Dong et al, 2012).

Based on two fundamental assumptions, regret theory was created by Graham Loomes and Robert Sugden, and it was introduced as an alternative to prospect theory in the December of 1982 edition of The Economic Journal as an explanation of gambling choices (Loomes & Sugden, 1982). The first assumption was based on the notion that many people experienced sensations of regret and rejoice, and the second one was based on the notion that when people made decisions that they were not certain about, they tried to anticipate and take account of those sensations (Loomes & Sugden, 1982, p. 820). The rationale for regret theory was based on its assertion that people experienced regret if they invested in something and were later unhappy with the investment due to a variety of reasons, such as buying the stock of a company and it subsequently dropped sharply in price (Kwak & Park, 2012).

Tang and Jianmin (2008) used regret theory to find that consumers who realized they had been involved in a transaction they later felt to be unfair, that it could be an experience filled with shock and regret, and such an experience could drive this given customer to refrain from any further transactions with such a company. Through the use of regret theory, Bower and Maxham (2012) found that some online retailers would attempt to limit costs associated with product returns by instituting return policies that would require customers to pay to return products if a retailer determined that the customer was at fault, but if the retailer was deemed to be at fault then the retailer would pay for the return shipping. Finally, Tsalatsanis, Hozo, Vickers, and Djulbegovic (2010) researched the effects of physicians using regret theory as an alternative to the decision curve analysis in their daily medical practices.

This literature review had shown relevant studies (Sanders & McCready, 2009; Boris, 2010) that had come close, but many of the underlying factors that still needed to be studied were not covered in the literature conclusively. These factors included whether or not blue-collar workers were in a financial position to invest, how much money they allocated if they could invest, how they diversified their portfolio, and if they had an emergency fund established so they did not have to withdraw money from their retirement funds. These were the gaps in the literature that this study closed. This information was not found in the literature, and in order to obtain higher levels of accurate information this information was gathered directly from the study participants.

The reason this information was gathered from research participants was because it could have been controversial to speculate on what the individual circumstances would have been prior to the study, and it could have also been controversial to assume that blue-collar respondents from other studies (Sanders & McCready, 2009; Boris, 2010) speak for all of the other participants who would be in this study. In order to articulate the process by which this study took place, Chapter 3 covered how qualitative inquiry was used in conjunction with the proposed case study method.

Chapter 3: Research Method

Research Design and Rationale

These were the central research questions that were used in the study:

1. What factors contributed to the decision by blue-collar workers to invest or not invest for retirement?
2. How did blue-collar workers diversify their portfolio if they chose to invest?

These were the sub-questions that were used in the study:

1. How much financial education did blue-collar workers feel they needed before investing?
2. In what ways did a blue-collar worker's level of academic education affect their levels of investing?
3. In what ways did economic conditions in the local area blue-collar workers were employed cause them to create their overall investment strategy?
4. In what ways did a blue-collar worker's age and gender affect their retirement planning?
5. What were the different categories, and how much of each category of investments, did blue-collar workers allocate their money?

The theoretical framework for this study was based on Kahneman and Tversky's (1979) prospect theory and Loomes and Sugden's (1982) regret theory. Since prospect theory and regret theory addressed ways people weigh monetary outcomes, they had been used extensively in many aspects of personal finance. The case study approach, in concurrence with the prospect theory and regret theory, was able to provide the details that covered the facets blue-collar workers felt were necessary to be in place before they allocated funds for their retirement. This decision, or series of steps that led to a decision, was based on their preferences for the diversification of their funds. Additional research and application of the prospect theory and regret theory offered ways to determine ways people made decisions with imprecise information as part of the dissertation process (Özerol & Karasakal, 2008). Chapter 2 covered these theories and their uses in the study in more detail.

As previously mentioned, little research had been conducted in the field of finance to discuss all three of the major concepts of this study, which were built upon regret theory, prospect theory, and blue-collar workers. This was one of the reasons why this case study was conducted in the first place, and it was also why these two theories were chosen. However, there were two studies conducted within the past five years that were the closest to this study with respect to relevance. The closest research that could be found was conducted by Sanders and McCready (2009), and the strengths of the study were based on the approach which enabled an in-depth examination of how the context of the work environment, job position, and life stage influenced older workers' perceptions of the job.

The limitations of the study were based on the inherent nature of case study research, which present outcomes that were difficult to generalize from one population to another since case samples were small and selected for specific attributes (Sanders & McCready, 2009, p. 121). The strength of the research was based on addressing financial concerns that were brought forward by the participants, which alluded to the notion that blue-collar workers may not have had higher levels of financial education.

The second-closest study was conducted by Boris (2010) and it addressed LGBT issues, including equal benefits, but did not include all three of the primary issues that this case study addressed. The reason this one was not as close as the Sanders and McCready (2009) study was because it lacked documented interviews with blue-collar workers being produced in the literature.

One strength of the study, however, was based on the work that the union had done for the workers of the big three automotive companies, but one of the limitations of the study was that it was very difficult for the researcher to do meaningful interviews because many UAW leaders refuse to be interviewed. The study also pointed out the long-term successes employees had in recent years in obtaining fair and equal pay and benefits, which included medical and retirement benefits, regardless of their sexual orientation or gender.

In accordance with the tradition of qualitative inquiry, this study was based on a single instrumental case study method. Instrumental case studies allow for the study of a single case, within the site of the location of the research (Creswell, 2013), and focus on the blue-collar workers with respect to whether or not they invest their money and how they spread it around within their portfolio. Qualitative research was consistent with understanding how blue-collar workers factored in the different facets of the decision-making process of allocating funds for their retirement in that it allowed for direct initial and follow-up communication with respondents in a way that permitted them to provide open and in-depth responses to interview questions asked in an interview conducted either at their place of business, over the phone or via Skype.

The goal of this research was in part to apply formal procedures that would allow me to make casual inferences in a manner that was analogous to what would have otherwise been restricted to a qualitative inquiry, such as the case study method used here. In the event that the participants, along with the data that would have otherwise been collected, would have been on a much larger scale then I would not have to work with such limited information in which to draw conclusions from. One such assumption that this study was based on was that if people had the money to invest, then there would be a higher likelihood that they would invest.

As we will see later on in Chapter 4, this was simply not the case. However, this assumption did not interfere with the way questions were asked nor did it interfere with the original set of questions that were crafted. Perhaps in the future a phenomenological study could be used to help understand why it is that the blue-collar workers essentially do not seem to invest until they reach the age of thirty.

One assumption that could be made in advance would be that people in general do not seem to be very interested in investing for their retirement until they realize that they are actually becoming older or they realize that they are closer to retirement then they thought they were for one reason or another. This could be the realization of an unforeseen medical condition, or it could be an injury at work that prevents one from doing the kind of work that they used to do and they find it difficult to work at all. This was also discussed in the literature review in Chapter 2.

Role of the Researcher

My role was to make contact with the leaders of the blue-collar community in which I plan to conduct the case study, and if they were willing I would have had a person gather email addresses of people who were willing to participate and provide them to me in an email. I took the email addresses and email the questions to the potential participants, and if they were willing to participate in the interview then I would schedule a time and a place to do it, or it was conducted via Skype or on the phone. I also did not have any personal or professional relationships with the participants other than working in the same geographical location as they do. I had also never supervised any of the participants.

As a former blue-collar worker, and as someone who had blue-collar family members, I was aware of the bias that is in place. The email contact was also brief, and I ensured that the topics of conversation, if any arose, were strictly limited to the research. Due to the sensitive nature of the participants that were going to be interviewed, I did not specifically identify who they were and where they were located. They were not identified in any compromising way in Chapters 4 or 5. As for other ethical issues, I did not experience any. If there was an issue that could be perceived as an ethical violation, or could potentially create such a violation, I would have notified my committee immediately and explained the circumstances of the issue(s) and I would have requested guidance on how to handle such an issue.

It was also my role as the researcher to see what influences there were of a given blue-collar worker's decision to invest with respect to how they invest if they did invest. Part of the findings of the study insinuated that a probabilistic approach was used in order to evaluate the evidence for the two theoretical perspectives that were used throughout the study. This was done in deterministic terms, whereby I attended to determine whether or not a participant's age had anything to do with it along with the other factors that were researched. One of the serious problems that a person can realize in the social sciences is the ability to measure findings and deal with measurement errors, especially with respect to conducting a case study with such a limited group of people to work with. This can mean that it is possible that a given set of data could deviate from a hypothesized pattern without a hypothesis being wrong, even though the study did not use one. The reason for this is one would attempt to use deductive methods when working with a hypothesis, whereas here I was using an inductive method which is completely different. The inductive method that I attempted to use was meant to allow for the information that would be necessary to understand what was going on in the data would be able to be shown in such a way to where the evidence found would lead me to a conclusion. So it was my role to allow that information to naturally show up on its own in a way that could be presented in a logical manner. As a result, the findings of this study were rigorous enough even though there was a smaller participant group used.

Methodology

Participant Selection Logic

The participants were blue-collar workers located in the Inland Northwest and Midwest regions of the United States. In Chapter 4 I articulated which category of blue-collar workers, specifically, that were included in the study and from which region or state in the U.S. that they were located in. They came from a variety of blue-collar worker categories, including, but not limited to, diesel mechanics, laborers, and truck drivers. There were also no people recommended to participate in the study that did not fall into the blue-collar worker category. This ensured that, even though there was such a small number of participants, the people who participated would add the maximum amount of credibility to the study as possible.

The research size was difficult to specify since I was not sure exactly which agency would ultimately allow me to complete my work. However, the goal was to interview at least 20 people or as many people as I could until the information being collected became redundant. When it comes to qualitative inquiry, one would expect to see approximately 20 participants at a minimum. However, this is not always feasible depending on the group that is targeted and whether or not there are 20 participants available or willing to participate.

One reason for this is because initially there is an attempt to saturate the potential participant group, with respect to gaining as many participants as possible for the research. Normally an organization, or group of participants, would be sought out that could offer this many participants. This was also the attempt of this research inquiry at the beginning, because the three different organizations that I chose had an excess of 20 people in which to choose from.

I would even argue that if I were allowed entry into these organizations that I would have ended up with well over 20 participants, but that was not the case.

According to Patton (2002), there were no set-in-stone rules for sample size in qualitative inquiry. Creswell (2013) also did not specify an exact number of participants that would be needed for a case study. Patton also asserted that in some qualitative inquiry samples were not used at all as part of purposeful selection, which was what this case study used. Qualitative research has been known to draw casual inferences when there is little more than a handful of people or organizations, sometimes even fewer, and they are compared with respect to the forces that tend to drive societal outcomes such as the ones that are presented here in the study.

One metric I used, for the purposes of specificity of saturation and the purposeful non-random sample size that was used, was this: when the information being collected from participants became redundant, then it would be fair to say that enough participants had participated. Ultimately I wanted no fewer than ten participants to participate in the study, and I did my best to ensure maximum participation. The intention was to get more than ten participants. It should also be known that the point of this case study was not to generalize the findings across a broader population, which would be seen in quantitative research (Maxwell, 2013). Instead, it was the intention of this inquiry to discover what responses could be retrieved from participants in order to answer the research questions. The information that was found in a qualitative case study, as part of a discovery process, could provide rich opportunities for further research that could perhaps be completed using quantitative inquiry.

The criterion for selecting participants was based on whether or not the applicants fell into the category of being a blue-collar worker. Blue-collar workers were generally defined as, but not limited to, workers in construction crafts, machinists, manufacturing, production, laborers, transportation operatives, and material movers (Sum et al, 2010). Individuals were identified locally by locating private companies or governmental agencies in the Inland Northwestern and Midwestern region, and I made contact with either the owner of the business, union representative or the senior ranking governmental official responsible for the workers, and I asked permission to interview to the blue-collar employees who volunteered to be a part of the study.

I initially tried to find workers from machinist’s workers, oil field workers or truck drivers. If I could not get anyone from those categories I would have sought out other workers in the blue-collar category. I used a formal letter that I crafted on my own, which included a copy of the consent forms that were emailed to the participants. Thank-you notes were given to the volunteers who participate in the study, and I paid for them myself.

Instrumentation

The data collection instrument that was used was Microsoft Word. I had a laptop available during the interviews to take notes as the respondents answer questions during the interview. The source of the questionnaire used in the interview was a combination of published surveys and questions that I had created based on the academic literature in peer-reviewed journals. No historical or legal documents were used as a source of data.

This study used parts of published data collection instruments. Two studies (Easaw & Heravi, 2009; Castro-González, 2014) conducted on household personal finance were used for the study. Easaw and Heravi (2009) conducted a personal finance household survey in Great Britain, based in part by the survey data from the Survey Research Center at the University of Michigan, and they argued that in order to understand the personal finances of the participants there was a need to ask two questions (1) related to how people think they was financially in a year from the time of the survey and (2) whether or not they were better off than a year prior. For the first question, “The respondent’s possible qualitative response is 1, 2 or 3, respectively” (Easaw & Heravi, 2009, p. 669).

For the second question, “As before, the qualitative response is either better off (1), worse off (2) or about the same (3)” (Easaw & Heravi, 2009, p. 669). The questions in the study were not specific about what would be referred to when people were asked to forecast or assess, ex post, their financial situation, and their personal finances would largely comprised their annual total income (Easaw & Heravi, 2009). This also included investment income, pensions and any other benefits (Easaw & Heravi, 2009). Easaw and Heravi (2009) also took age and gender into the account of their forecasts. Slight modifications of the second question were needed in order to avoid asking a question that would likely led a respondent to believe it was a yes or no question.

The other study (Castro-González, 2014) asserted that there was a need to ask basic questions about financial literacy and retirement matters as part of the research design to determine whether or not there was a family budget in place, and this would be relevant for both single workers and workers who had a significant other, partner or spouse. The location that Castro- González (2014) used the questions was Puerto Rico, and there were five main groups of employees separately target in the Puerto Rico retirement system, which were (a) employees of the University of Puerto Rico, (b) teachers working for the Department of Education of Puerto Rico, (c) employees working for the Justice Department, (d) employees working for the Electric Energy Authority, and (e) the rest of the government employees (p. 88).

The specific questions asked to participants were not readily available in the article. However, the article did generalize some of the questions that were asked. The specific question, relating to a family budget, was slightly modified to account for participants who were single without an immediate spouse or partner. The question was relevant and necessary to determine whether or not a budget had been put into place since Castro- González (2014) posited that it was necessary to know whether or not a budget was in place to understand how the personal finances of an individual or family invests.

As a matter of consideration for the participants who were taking part in the study, I did not assume they were financially literate. Based on this notion, I had attempted to phrase questions in such a way that the participants would know what I was talking about when I asked specific questions throughout the questionnaire. Without an understanding of their financial and/or academic education, it would be inappropriate to ask a question that had not been explained. As part of the participation agreement that the respondents signed, there was some clarifying information provided with respect retirement and portfolio diversification that the questionnaire I used to conduct the interview was attempting to ask.

This study also used data collection instruments that I created myself. Questions regarding diversification and why people saved money in the first place, such as what facets had to be in place for someone to invest, were generated as a part of the necessity to understand the piece of the study that covered what blue-collar workers invest in, with respect to portfolio diversification, in the event that they were investing in something for their retirement. Without that piece of data being collected, the questions in the study would not be completely answered and could potentially leave a gap within the study itself.

There was also literature that suggested the relevance of these questions, which suggested that there were reasons why people invested and perhaps what might have led to a certain level of diversification. These reasons were based on things such as the fulfillment of personal savings goals, the avoidance of the need to borrow money to pay for things in the event of an emergency, and even to prevent financial hardships which arose from the loss of income stemming from unemployment or retirement (Soman & Cheema, 2011). According to Soman and Cheema (2011), who studied the effects of earmarking money on savings by low-income consumers, creating a savings goal and posting it in a visible area could serve as a positive visual reminder and increased the propensity for saving. Soman and Cheema also found that people saved more when earmarked money was partitioned into two accounts than when it was pooled into one account.

There was only one study (Goetzmann & Kumar, 2008) found that spoke specifically to blue-collar worker investment portfolio diversification, and they found that blue-collar workers were in the category possessing the least-diversified portfolio. Another study (Hibbert, Lawrence & Prakash, 2012) conducted focused on whether or not investors who had learned about diversification by formal education were more likely to diversify within their equity portfolios, except the study was conducted on finance and English professors. So it was the attempt of this study to ask questions that attempt to assist in filling that gap in the literature.

Two case studies (Boris, 2010; Sanders & McCready, 2009) were found to be relevant to not only addressed the overall study, but addressed age and gender sub questions that were covered in the study. There were a number of issues that faced blue-collar workers when it came to gaining suitable employment, making a decision on whether or not to allocating funds for their retirement, and how they would diversify these funds. Another such issue was the concern about equal treatment (Boris, 2010).

Questions in this case study that pertained to economic circumstances were covered by research conducted by Sum (2013), which provided evidence for the questions of this study that involved economic uncertainties that caused investors to rethink their overall strategy. These economic uncertainties perceived by consumers and investors had negative impacts on the economic recovery and growth in the United States as it attempted to recover from the recession of 2007 through 2009. Consumers and investors were hesitant to spend money and invest when they sensed higher levels of uncertainty in the economy, which could ultimately result in firms delaying potential investment projects and a noticeable freeze in hiring along with a potential economic contraction (Sum, 2013). The same was true when there was uncertainty about future taxes, spending levels, regulations, and health care reform because consumers and businesses tended to delay investment and consumption in a higher interest rate environment (Sum, 2013, p. 98).

A person might have had different investing behaviors depending on their age, because the older a person gets the less risk tolerant they may become and vice versa, but that did not necessarily guarantee that everyone had similar investment behaviors just because they were of a certain age or gender (Tannahill, 2012; Cohen & Kudryavtsev, 2012).

The content validity of the instrument was established based on the aforementioned support of the literature. The sufficiency of data collection instruments to answer research questions was established based on the overarching research questions that needed to be answered and the relevant areas covered during the construction of the questions located within the questionnaire.

Procedures for Recruitment, Participation, and Data Collection

I first attempted to made contact with blue-collar workers who were aerospace machinists, oil field workers, tractor trailer drivers or mechanics. If I was unable to get participants from these groups, then I would have attempted to get participants from other blue-collar categories. The specific category or categories that participants were a part of is discussed in Chapter 4. Workers who volunteer to participate were given a copy of the consent form. The data was recorded and/or transcribed during the interview. The data was transferred either from Skype, a recording device, or a MS Word document into NVivo. If the recruitment process resulted in too few participants, then I would have recruited additional blue-collar employees in the Inland Northwest and the Midwest as previously mentioned. As part of the interview process, it was explained to participants that they would not need to be debriefed upon completion. Follow-up interviews may have been required as part of the study.

Data Analysis Plan

The questions located within the questionnaire were designed to answer the research sub questions, and each response by a participant was categorized under each of the sub questions in NVivo. These sub questions were designed to provide adequate answers to the two central research questions, which were designed to discover the answers to the overall case study. NVivo was initially going to be used to analyze the data, and it was also used to detect any themes that arose from the data collected. Codes were also going to be created once the data had been collected in order to reduce confusion during the coding and theme discovery process.

It was entirely possible that as the data was going to be analyzed, and that a series of codes would be formed and then changed later into different categories of codes, so a list was created of the codes that were generated and how they were changed throughout the process. This information might or might not have been relevant to the study, but if it was not included in the dissertation it was kept on file for five years. It should also be known that themes may or may not emerge as a result of this study. If there were any discrepant pieces of data that emerge in the research, they were presented in a section that separated this data from the other findings. They would have also been fully explained to the best of my ability, but they would not be removed from the findings.

Once the research began, it was incredibly difficult to find organizations that would allow me to come in and recruit participants for the research. So what ended up happening, once there were three different organizations that had declined to allow the research to move forward, was that an employee of one of those organizations agreed to work with me outside of his normal duty hours. Along with the concurrence of the chair of this dissertation, and with the permission of the university research reviewer, purposeful sampling was not used. Instead, the snowball sampling technique was employed whereby this particular individual would end up providing me references that would lead to a total of ten participants.

As previously discussed in the literature review, several studies in the academic literature (Wiltermuth & Gino, 2013; Bower & Maxham, 2012; Tang & Jianmin, 2008; Lankton & Luft, 2008) seemed to support the notion that when researchers want to study regret theory, they want results that were based on both consumer behavior and empirical data, because the majority of the studies in existence did not seem to use the case study approach or qualitative inquiry in general. One might also have gone as far as to argue that researchers might have been doing studies on regret theory with the intentions on being able to solidify their findings in quantitative data in order for it to be more credible, which would also seemingly made it easier for another researcher to take the findings from the research and replicate it in order to expand on it. However, societal issues such as the ones incorporated in this study could allow researchers to view similar problems through a different set of spectacles. It was also the intention of this study to fill the gap in the literature between the findings of quantitative studies and the very few studies based on blue-collar workers investment behaviors using qualitative methodologies. It would be beyond the scope of this research to speculate why exactly there are not more qualitative methodologies used in the existing literature; however, this ultimately ended up leaving a very large gap in the research because very little inductive research has been used in the past.

The intention with analyzing the data would be to break down the results by the individual components (i.e. age, gender, academic education, financial education, et cetera) in a way that would make sense and produce a logical flow of the results. Early on I did not know if it would be appropriate to break down the results by whether or not a blue-collar worker was investing and how they spread their investments around, or diversified their investments, because I did not know what they're answers would be. Once the interviews had been completed it would be easier to do this.

After the interviews were conducted, and after the answers given by the participants to the questions I was asking, it made more sense to see if there were some sort of logical pattern based on age with respect to whether or not a person regardless of their gender (or any of the other variables) were investing or not. This was not immediately obvious to me once I was done with the interviews, so the best way I could see a logical flow of information was to pick a variable, input the information into a table starting with that variable, and then determine if any logical sense was being made in a way that the reader could clearly understand the results. Once I did this, the best logical direction to take in order to break down the results seemed to be to do so by the central research question that was being answered. So there would in the up being two different tables, one per central research question, that would present the information. The information would be presented from the youngest participant to the oldest participant in order to see if any patterns of behavior emerged regardless of the reasons given by the participant for investing or not investing. Then the reasons for investing or not investing would be presented with in the table and explained after the table as appropriate.

More information about this is described in Chapters 4 and 5. Ultimately, not all participants were comfortable with being recorded. This meant that verbatim answers were not able to be processed through NVivo, and therefore codes and themes could not be created. This is because the reliability of the findings would likely be compromised based on verbatim answers not being included along with such a limited audience being found.

Issues of Trustworthiness

Credibility

In order to maintain the credibility of the study, I carefully implemented member checking with the results. Member checking, as described by Carlson (2010) was a way to allow participants of the study to review and approve particular aspects of the interpretation of the data that they provided. This did not mean I took raw data, such as specific transcripts, back to the participants. Instead, Creswell (2009) suggested taking the themes (if any become present) and the case analysis back to the participants in the form of a polished product. This was done in the form of a follow-up interview where I spoke with participants who were willing to meet with me so they could see what their responses were.

If participants were unable or unwilling to meet back up with me after they had submitted their responses, then I would have handled the situation through the peer review process of the dissertation committee that had already been scheduled to take place. Except when I presented the information to the committee, I would have explained what happened with the participants and I would have annotated this in the findings section.

Transferability

Transferability, according to Creswell (2009), was the ability for another researcher to take the findings of one study and implement them in another similar setting. In order for this to be insured an extremely detailed process of the case study was explained so that another researcher could find blue-collar workers in another area and replicate the study. However, since the study would not be able to generalize the entirety of the blue-collar community, it would not be able to be used in an exact manner somewhere else.

A copy of the interview questions was also provided in the appendix so that future researchers could have a higher chance of very close replication of the study. The findings of the study were also explained at length in order for future researchers to have more information to compare their results to as well, which would give them an idea of what their own findings might be. One would not expect for the results to be the same in such a study that were found here. However, it may be possible that a researcher in a different area that has a different economic circumstance could potentially find his or her way into an organization, or even perhaps a few different organizations, that would allow for more than ten participants to provide enough data through their responses in such a way that would allow for more in-depth information to be provided.

Perhaps a researcher could do a case study whereby there would be a few separate sub case studies conducted on three different organizations that have a higher number of employees so that the researcher could get may be 20+ participants to take part in the research. The researcher might even go one step further and attempt to make contact with the unemployment office that is located in area the area that the researcher resides to see if they can attempt to recruit unemployed former blue-collar workers. This would allow for the researcher to get the perspective of both the employed and unemployed blue-collar community. Also, it should be known that if a participant were able to answer the same questions that are presented here there may potentially be some similarities with some of the responses to some of the questions. However, I would not expect to see across the board similar responses to all of the questions.

Dependability

In order to ensure the dependability of the study, I maintained an explicit audit trail. According to Patton (2002) an audit trail should be established to verify the rigor of the fieldwork and confirmability of the data collected in order to minimize bias, maximize accuracy, and report impartiality since inaccuracy and bias were unacceptable in any case study. In order to achieve this, assumptions had been presented and biases had been elaborated upon. The information that was collected was presented as it was received without my own personal opinion being added to it. Essentially I allowed the data to speak for itself. This included an analysis of how the instruments used were created, how instruments were actually used, the research design itself, and processes undertaken to evaluate, manage, and describe the data. Any change in conditions that occurred was presented in Chapter 4.

One can easily make the argument that the dependability of the study could be reduced if another researcher could not come along and read the results and even potentially see how those results made sense based on the study that was conducted. And since there were several participants who declined to be recorded during the interviews, it is incredibly difficult for another researcher to come along and read the transcript notes that I made based on the interview and see with 100% certainty that the participant’s exact words were transcribed. Part of the reason for this is because I was unable to transcribed verbatim every word that came out of the participants mouth, because I did not want the participant to continue to repeat themselves throughout the conversation because that would cause an undue inconvenience to the participant and it would also cause them to be stressed out and even potentially stop the interview before it was even over. So what I did was I paraphrased what they said, and at the end of the interview I made sure that the responses I wrote down is what the participant was intending to say.

Confirmability

Creswell (2009) posited that confirmability was paralleled with subjectivity whereby another researcher should be able to read the contents in their entirety of a given study and arrive at the same conclusion. Therefore, it was my primary objective to present the data as it was found in order for someone else to come along and see the same exact thing that I saw and reach a similar conclusion. This was where the presentation of the facts objectively came into play, and this was done throughout the process of the data collection and presentation. This also meant being as specific as possible when presenting the methodology that was used in the case study, and every effort had been exhausted to ensure that was done here.

As mentioned earlier, the coding process would have taken place once the information had already been gathered. According to Patton (2002) developing some manageable classification or coding scheme was the first step of analysis. Based on the recommendations from Patton, at the beginning of the research I did not feel that it was appropriate to begin to identify codes prior to the beginning of the research. In order to avoid confusion with the analysis, codes would have been presented in a separate appendix along with an explanation of what each code meant. However, once the codes were to be created it could have been easier to determine if any patterns, or themes, had emerged in the findings of the case study. NVivo would have been helpful to find these patterns and develop the codes. I would have also explained in the appendix that was created for the section how each pattern or code was recognized, and I would have also presented the data that I retrieved from NVivo. For areas of coding that were not specifically mentioned here, and elaboration of the data and coding concerning the reliability of the findings would have also been presented in Chapter 4.

It is important to reiterate that the coding process did not happen throughout the research. This is because there were such a limited amount of participants that could be used for the research. As previously mentioned, this is because once I had tried to make contact with three different organizations and I had been told that I would not be allowed to use their organization to recruit participants for the research. So the decision to move forward with the snowballing technique was made and only ten participants could be found.

Ethical Procedures

Gaining access to the blue-collar workers in the Inland Northwest and the Midwest was possible. In order to ensure the study was ethical, the Institutional Review Board (IRB) granted permission to conduct the study and assigned the approval number of 06-30-14-0285622 and an expiration date of June 29, 2015. I managed materials relevant to gaining the permission of the participants to participate in the study, such as informed consent forms, and these documents were stored in an electronically locked document folder that could only be accessed with a password for a period of no less than five years.

Participants were permitted to participate in the study if they chose to, and they were also informed through the consent form that they may withdraw from the study at any time. I also asked them if I may record the session, and they were informed that the recording of the interview can be stopped at any time. I did not foresee any ethical concerns during the proposal phase. In the event that they arose, I would have explained to the participants that they did not have to participate in the study if they did not wish to. I would have also explained to the participants that they would not be looked at negatively at work for participating in the study, not participating in the study or for deciding to no longer participate. I emailed a copy of the informed consent form to participants, and I asked them to reply to the email and give me their consent to participate in the study. Participants were encouraged to review the informed consent form at any time that they liked throughout the study.

I provided protection of the participants throughout the study and thereafter. Participants were allowed to participate as much or as little as they wished, and they were also be allowed to withdraw from the study at any time without fear of reprisal or harm of any kind. I also informed participants that there may be minor anxiety or stress that would be experienced outside of the normal daily pursuit of their lives and work as a result from answering the questions in the interview. I notified the participants that there will not be any risk to their safety or well being as a result of participating in the study.

No additional IRB approval number was necessary other than the initial approval for the study. There were no ethical concerns related to recruitment materials and processes. There were also no predictable adverse events that led me to believe that participants would withdraw early from the study or refuse to answer any questions. In the event that a participant withdrew early from the study or refused to participate, they will still receive a thank you card for their participation and they will still be treated with dignity and respect. I also sought out additional participants by asking for more people to participate within the initial organization that was originally approached. If more people could not be gathered I would have approached another organization that fell into the same blue-collar worker category in the Inland Northwest, Midwest or other region within the Continental United States in order to gain a sufficient amount of participants.

Data collected was both anonymous and confidential, and there was no archival data used in this study. The interview responses were anonymous in order to protect the participants and their answers to questions. Recorded responses to answers asked in interviews were saved in a password-protected file on my computer that will be kept for a period of no less than five years. The confidential information, which included names and email addresses of participants, was scanned and kept in the same aforementioned password-protected file.

The original paper copies were shredded. Any other forms or documentation used throughout the course of the study were scanned and uploaded into the password-protected file, and the paper copies were shredded. There were no additional ethical issues that were applicable since I would not be doing the study in my own work environment, there was no conflict of interest or power differentials, and there were no incentives that were going to be used other than the thank you card that I was purchasing with my own money. Respondents would not receive any money or other monetary-equivalent benefits from the study.

Summary

The purpose of this case study was to discover the factors that contributed to the decision by blue-collar workers to allocate funds for retirement. This also included the levels of funding should they decide to invest. The theoretical framework for this study was based on Kahneman and Tversky's (1979) prospect theory and Loomes and Sugden's (1982) regret theory. Since prospect theory and regret theory addressed ways people weighed monetary outcomes, they had been used extensively in many aspects of personal finance. The case study approach, in concurrence with the prospect theory and regret theory, was able to provide the details that covered the facets that blue-collar workers felt were necessary to be in place before they allocated funds for their retirement.

In accordance with the tradition of qualitative inquiry, this study was based on a single instrumental case study method. Instrumental case studies allow for the study of a single case, within the site of the location of the research (Creswell, 2013), and focus on the blue-collar workers with respect to whether or not they invested their money and how they spread it around within their portfolio. My role was to make contact with the leaders of the blue-collar community in which I planned to conduct the case study, and if they were willing I would have had a person gather email addresses of people who were willing to participate and provide them to me in an email. The participants were blue-collar workers located in the Inland Northwest and Midwest region of the United States. The sample size was difficult to specify exactly. However, the intention was to conduct a singular case study and get at least twenty-five to fifty percent participation.

The study used both researcher-constructed data collection instruments and published data collection instruments. The data was collected during the interview using a recording device or MS Word. The questions located within the questionnaire were designed to answer the research sub questions, and each response by a participant was categorized under each of the sub questions in NVivo. In order to maintain the credibility of the study, I carefully implemented member checking with the results.

Transferability, according to Creswell (2009), was the ability for another researcher to take the findings of one study and implement them in another similar setting. Creswell (2009) posited that confirmability was paralleled with subjectivity whereby another researcher should have been able to read the contents in their entirety of a given study and arrive at the same conclusion. Therefore, it was my primary objective to present the data as it was found in order for someone else to come along and see the same exact thing that I saw and reach a similar conclusion. As mentioned earlier, the coding process began to take place once the information had already been gathered.

Gaining access to the blue-collar workers in the Inland Northwest and Midwest was possible. Participants were permitted to participate in the study if they chose to, and they were also informed through the consent form that they may withdraw from the study at any time. I did not foresee any ethical concerns prior to the beginning of the research process. I provided protection of the participants throughout the study and thereafter. Participants were allowed to participate as much or as little as they wished, and they were also be allowed to withdraw from the study at any time without fear of reprisal or harm of any kind. Data collected was both anonymous and confidential, and there was no archival data used in this study. The data collected during the case study was presented as findings in Chapter 4, and conclusions and recommendations for further research are presented in Chapter 5.

Chapter 4: Results

The purpose of this case study was to discover the factors that contributed to the decision by blue-collar workers to allocate funds for retirement. This also included the levels of funding should they decide to invest. Since these workers fell into various employment circumstances, and as a result of the economic downturn and slow recovery, there were a wide variety of reasons that were unknown for making or not making these investments (Sum et al, 2010).

This study used prospect theory (Kahneman & Tversky, 1979) and regret theory (Loomes & Sugden, 1982) as a theoretical basis for the research to uncover these reasons. Prospect theory is a theory based on behavioral economics describing ways people made choices based on losses and gains versus the final outcome, and it asserted that people evaluated losses and gains using heuristics (Kahneman & Tversky, 1979). Regret theory implies that if people made a wrong choice, they remembered this choice the next time they made another decision under a similar set of circumstances (Loomes & Sugden, 1982). These theories were covered in detail in Chapter 2.

The responses by the blue-collar workers did not seem to be overwhelmingly different than one might expect to see from people with in a different research category. The factors that contributed to the decision by blue-collar workers to invest or not invest for retirement was based on a couple of contribute in factors, including employer-provided retirement accounts, the fear of running out of money later in life during retirement, and the addition of new family members. In the event that blue-collar workers chose to invest for their retirement, one of the most popular investment products was the U.S. Treasury Bonds. Other popular investments were mutual funds, 401(k)s, and IRAs. The breakdown of these was indicated in the table above. An in-depth presentation of the interpretation of the findings of the study, along with the implications to positive social change, will be presented in Chapter 5.

Below the research questions are restated, where the two central research questions are listed first (questions one and two) followed by the sub-questions (three through seven):

1. What factors contributed to the decision by blue-collar workers to invest or not invest for retirement?
2. How did blue-collar workers diversify their portfolio if they chose to invest?
3. How much financial education did blue-collar did blue-collar workers feel they needed before investing?
4. In what ways did a blue-collar worker's level of academic education affect their levels of investing?
5. In what ways did economic conditions in the local area where blue-collar workers were employed cause them to create their overall investment strategy?
6. In what ways did a blue-collar worker's age and gender affect their retirement planning?
7. What were the different categories, and how much of each category, of investments blue-collar workers allocate their money to?

Research Setting

As I started to make contact with the three different organizations that I initially spoke with, there was no indication as I spoke with the representatives that there were any personal or organizational conditions that would have influenced the employees of their organizations. However, I was not able to be granted permission to speak with individual participants within the confines of these businesses and organizations. This will be discussed again later in the limitations section.

The participants of the study also did not mention any organizational conditions to me that influenced them in any way, or their experience with me, at the time of the study. For example, there were no changes in personnel, budget cuts or any other trauma that would influence the interpretation of the study results experienced by the participants. As of the time of the writing of this dissertation, I do not perceive any negative organizational influence that would have caused any issues of the interpretation of the study results since none were presented to me.

If there had been any organizational influences, which were presented to me, I would have brought them to the chair of the dissertation committee for guidance on how to move forward. This would have happened because I would not want to cause any undue influence on the participants in any way, and I would not have wanted to cause any additional stress to them within their workplace in the event that a company would have allowed me to conduct research. However, since there were no organizations that were willing to allow me to conduct research within their place of business, this did not end up becoming an issue one way or another.

The chapter is organized overall based on the research questions that were asked to participants and their answers to these questions. This includes a brief introduction to the research, the central research questions and sub questions, the setting, research participant demographics, the changes to the data analysis and research methodology, evidence of trustworthiness, results and finally the summary.

Demographics

Blue-collar workers, as referred to in Chapter 1, were generally defined consist primarily of four groups of occupations: construction and extraction occupations; installation/maintenance and repair crafts (electrical and electronic technicians, heating and air conditioning mechanics, auto repair technicians); production workers (machine operators, fabricators, assemblers); and transportation operatives, including truck and bus drivers and material movers (Sum et al, 2010,

p. 9). Participants that were included in this category, which was not all-inclusive, were allowed to take place in the research. Other factors, such as race, religion, veteran status, age, or employment status were not considered during the member checking portion.

The only thing I was concerned about was whether or not a particular person fell into the blue-collar category. The ten participants all fell into the blue-collar category in a variety of different ways. Nine out of ten of them were located in the Midwest. Four of the participants were employed in the state of North Dakota. Five of the participants were employed in state of South Dakota, and one participant had recently moved from South Dakota to Seattle, Washington. This fell in line with the proposed areas of participant selection of the Midwest and the Inland Northwest.

The participants from the state of North Dakota included three diesel mechanics and one oil field worker. The participants from South Dakota included five employees who worked at an ice distribution company, where one of them was a diesel mechanic, and the remaining four were loaders (loading ice on and off the truck) and drivers of the trucks. The employee who moved from South Dakota to Washington State was a diesel mechanic. There were three female participants and seven male participants, for a total of ten.

Data Collection

Prior to collecting the data, a letter of consent was crafted in order to allow the potential participants know what their rights were as a participant in study. This included, but was not limited to, letting the participants know that they could stop participating at any time, let them know that there would be the inconvenience of spending about ten minutes with me answering questions, and that their responses would be helpful for future researchers who would be doing research on the blue-collar worker community as a whole.

Each participant that agreed to participate in the research provided a phone number in which they could be contacted at, and they also provided some acceptable times in which I could give them a call that would not provide further inconvenience. I also asked each one of them if I could record the conversation so that I would not misinterpret any of the answers that they had given me at a later date as I attempted to transcribe their answers and process the data that they provided to me. I also explained to the participants that it was completely acceptable if they chose to be recorded at the beginning of the research and then changed their mind to no longer be recorded as the research progressed. During the research, none of the participants that agreed to be recorded asked for the interview to stop being recorded.

The data was recorded by using an audio recorder that was built into the HP computer that I was using during the interviews that were allowed to be recorded. After the interviews were conducted, transcripts were formed based on the responses given. Some of the participants did not feel comfortable being recorded. In this case, I informed the participants that I would be taking notes. I did this by using Microsoft Word on my laptop. I would ask a question to the participant, and when the answer was provided I would type their answer. This would be done by typing their general response, and not a word-for-word response. I would then ensure that the answer they had given me was the answer they wanted me to have by reading back the notes that I had taken down. In the event that information needed to either be added or removed, it was done so and then read back to the participant before the interview would proceed.

As previously described in Chapter 3, the intention was to make contact with a person who worked at an organization that employs blue-collar workers in order to obtain permission to make contact with the employees who might be interested in taking part in the study. This was done with three separate organizations that fell into the blue-collar worker category. As part of the proposal, and the IRB application, it was also noted that a search for blue-collar workers who would like to be part of the research in the event that I was unable to gain permission through a company to work with its employees. As previously mentioned, there was an attempt made to contact three separate companies, and after being denied access to advertise the research within their business establishment, there was an unusual incident that occurred. There were some blue-collar workers who indicated interest in participating in the research outside of their normal place of business. They had also been talking about the study amongst themselves outside of work and they wanted to know if it was possible to conduct the study outside of the confines of their employer.

After careful consideration on how to move forward, a decision was made to both use the snowball technique and to pay participants who participated in the study $10 for their participation. I began by asking potential participants for recommendations on who might be suited for participation in the research (Patton, 2002). Also, as was the case in this study, this type of approach diverged initially as many possible sources that were recommended started to participate and then there was a convergence as a few key names were mentioned over and over with no new names being recommended.

Data Analysis

The questions located within the questionnaire were designed to answer the research sub questions, and each response by a participant was categorized under each of the sub questions in NVivo. These sub questions were designed to provide adequate answers to the two central research questions, which were designed to discover the answers to the overall case study. NVivo was initially going to be used to analyze the data, and it was also used to detect any themes that arose from the data collected. Codes were also going to be created once the data had been collected in order to reduce confusion during the coding and theme discovery process.

It was entirely possible that as the data was going to be analyzed, and that a series of codes would be formed and then changed later into different categories of codes, so a list was created of the codes that were generated and how they were changed throughout the process. This information might or might not have been relevant to the study, but if it was not included in the dissertation it was kept on file for five years. It should also be known that themes may or may not emerge as a result of this study. If there were any discrepant pieces of data that emerge in the research, they were presented in a section that separated this data from the other findings. They would have also been fully explained to the best of my ability, but they would not be removed from the findings.

Once the research began, it was incredibly difficult to find organizations that would allow me to come in and recruit participants for the research. So what ended up happening, once there were three different organizations that had declined to allow the research to move forward, was that an employee of one of those organizations agreed to work with me outside of his normal duty hours. Along with the concurrence of the chair of this dissertation, and with the permission of the university research reviewer, purposeful sampling was not used. Instead, the snowball sampling technique was employed whereby this particular individual would end up providing me references that would lead to a total of ten participants.

As previously discussed in the literature review, several studies in the academic literature (Wiltermuth & Gino, 2013; Bower & Maxham, 2012; Tang & Jianmin, 2008; Lankton & Luft, 2008) seemed to support the notion that when researchers want to study regret theory, they want results that were based on both consumer behavior and empirical data, because the majority of the studies in existence did not seem to use the case study approach or qualitative inquiry in general. One might also have gone as far as to argue that researchers might have been doing studies on regret theory with the intentions on being able to solidify their findings in quantitative data in order for it to be more credible, which would also seemingly made it easier for another researcher to take the findings from the research and replicate it in order to expand on it.

However, societal issues such as the ones incorporated in this study could allow researchers to view similar problems through a different set of spectacles. It was also the intention of this study to fill the gap in the literature between the findings of quantitative studies and the very few studies based on blue-collar workers investment behaviors using qualitative methodologies. It would be beyond the scope of this research to speculate why exactly there are not more qualitative methodologies used in the existing literature; however, this ultimately ended up leaving a very large gap in the research because very little inductive research has been used in the past.

The intention with analyzing the data would be to break down the results by the individual components (i.e. age, gender, academic education, financial education, et cetera) in a way that would make sense and produce a logical flow of the results. Early on I did not know if it would be appropriate to break down the results by whether or not a blue-collar worker was investing and how they spread their investments around, or diversified their investments, because I did not know what they're answers would be. Once the interviews had been completed it would be easier to do this.

After the interviews were conducted, and after the answers given by the participants to the questions I was asking, it made more sense to see if there were some sort of logical pattern based on age with respect to whether or not a person regardless of their gender (or any of the other variables) were investing or not. This was not immediately obvious to me once I was done with the interviews, so the best way I could see a logical flow of information was to pick a variable, input the information into a table starting with that variable, and then determine if any logical sense was being made in a way that the reader could clearly understand the results.

Once I did this, the best logical direction to take in order to break down the results seemed to be to do so by the central research question that was being answered. So there would in the up being two different tables, one per central research question, that would present the information. The information would be presented from the youngest participant to the oldest participant in order to see if any patterns of behavior emerged regardless of the reasons given by the participant for investing or not investing. Then the reasons for investing or not investing would be presented with in the table and explained after the table as appropriate.

Coding did not take place as part of processing the results of the study for a few reasons, and the ultimate reason was that because only four out of ten people allowed me to record the results there was the potential for the coding to be unreliable since the exact wording of the participants were not always used as notes were taken. In an example provided by Patton (2002), one such use of codes was used when there were 15 general categories and subcategories of codes, and they were generated based on lengthy interviews with 60 project officers, evaluators, and federal decision makers (p. 464). Patton also noted that coding would not be used for small-scale formative evaluation or action research projects.

While this research project does not exactly mirror the intent of the Patton, it is very close within the scope of the guidance Patton provided. However, the notes taken were verified with the participants at a later date whereby they agreed that the notes taken were in fact the answers they were intending to provide. Also, because of the varied responses from responses it would be unlikely that adequate codes could have been generated. A solid overall theme was also not noted throughout the results since the responses from the participants were not always recorded, which would have allowed for a possible theme to emerge through the coding process. Since patterns and themes were not consistent enough to present on their own, results are presented based on each individual central research question.

After all ten participants were interviewed, I began by transcribing all of the answers from the participants that allowed me to record them. The participants who did not wish to be recorded were already taken care of, with respect to me taking notes throughout the phone call is concerned. Those answers were verified with the participants to make sure that I wrote down the correct answers. The participants who allowed me to record them did not need to go through that additional process, because I was able to come back later on and listen to what they had to say and I made sure that I understood what they were trying to tell me with respect to their responses as the interview went along. None of the questions that were asked to the interviewees were very different overall. The only subtle changes that may have taken place were based on me explaining what a given question met. This did not happen very often, and most of the participants knew exactly what I was asking for throughout the interview.

I contemplated the best way to present the data that was found, and the best way to present it seemed to be based on age and the central research question in which I was trying to answer. This would mean that two different tables would be created, with one table per central research question, and it would allow for any trends that will emerge based on the answers given by the participants to show through in the data as it was presented. The goal was to present the data in a way that was completely free of bias.

There were no significant discrepant cases since the participant group was only made up of ten people. Overall financial education did not end up playing as big of a role as one may have thought that it would have. Only three people indicated that they had formal financial education. Some of the participants felt that financial education would not preclude them from investing in their retirement. Some of the participants also wanted to make it known that because of where they live that, based on the fact that their city is a popular tourist travel destination, they tend to be financially secure throughout the year. This includes even those times where the tourist season was over and/or had slowed down. It also seemed that the people who invested were not as concerned with the diversification of their portfolio. Instead they felt that the investment product that they bought, such as a 401(k) or an IRA, would provide the necessary diversification on its own.

Evidence of Trustworthiness

Credibility

In order to maintain the credibility of the study, I carefully implemented member checking with the results. Member checking, as described by Carlson (2010) was a way to allow participants of the study to review and approve particular aspects of the interpretation of the data that they provided. This did not mean I took raw data, such as specific transcripts, back to the participants. Instead, Creswell (2009) suggested taking the themes (if any become present) and the case analysis back to the participants in the form of a polished product. This was done in the form of a follow-up interview where I spoke with participants who were willing to meet with me so they could see what their responses were.

If participants were unable or unwilling to meet back up with me after they had submitted their responses, then I would have handled the situation through the peer review process of the dissertation committee that had already been scheduled to take place. Except when I presented the information to the committee, I would have explained what happened with the participants and I would have annotated this in the findings section.

The change of sampling method, along with the change to move from processing codes and looking for themes through NVivo, added to the limitations of the study but did not affect the overall credibility of the findings. These limitations were explained throughout the dissertation, especially under the appropriate limitations section heading. If I had taken a mixture of generalized responses that I had gotten from the participants who did not want to be recorded and compiled them with the exact responses that I get from the recorded participants, then this could have called into question the credibility of the findings. Also, it was not appropriate to try to find themes and create codes with such a small number of participants as mentioned earlier.

Transferability

Transferability, according to Creswell (2009), was the ability for another researcher to take the findings of one study and implement them in another similar setting. In order for this to be insured an extremely detailed process of the case study was explained so that another researcher could find blue-collar workers in another area and replicate the study. However, since the study would not be able to generalize the entirety of the blue-collar community, it would not be able to be used in an exact manner somewhere else.

A copy of the interview questions was also provided in the appendix so that future researchers could have a higher chance of very close replication of the study. The findings of the study were also explained at length in order for future researchers to have more information to compare their results to as well, which would give them an idea of what their own findings might be. One would not expect for the results to be the same in such a study that were found here.

However, it may be possible that a researcher in a different area that has a different economic circumstance could potentially find his or her way into an organization, or even perhaps a few different organizations, that would allow for more than ten participants to provide enough data through their responses in such a way that would allow for more in-depth information to be provided.

Perhaps a researcher could do a case study whereby there would be a few separate sub case studies conducted on three different organizations that have a higher number of employees so that the researcher could get may be 20+ participants to take part in the research. The researcher might even go one step further and attempt to make contact with the unemployment office that is located in area the area that the researcher resides to see if they can attempt to recruit unemployed former blue-collar workers. This would allow for the researcher to get the perspective of both the employed and unemployed blue-collar community. Also, it should be known that if a participant were able to answer the same questions that are presented here there may potentially be some similarities with some of the responses to some of the questions. However, I would not expect to see across the board similar responses to all of the questions.

Dependability

In order to ensure the dependability of the study, I maintained an explicit audit trail. According to Patton (2002) an audit trail should be established to verify the rigor of the fieldwork and confirmability of the data collected in order to minimize bias, maximize accuracy, and report impartiality since inaccuracy and bias are unacceptable in any case study. In order to achieve this, assumptions have been presented and biases have been elaborated on. The information that was collected was presented as it was received without my own personal opinion being added to it. Essentially I allowed the data to speak for itself. This also included an analysis of how the instruments used were created, how instruments were used, the research design itself, and processes undertaken to evaluate, manage, and describe the data. Every attempt to ensure that bias did not make its way into the findings of the study was made, and the research committee also took time through proofreading to ensure this as well. Data can only be as dependable as the researcher who presents it, so the intention here was to allow the data to speak for itself without any biased interference.

One can easily make the argument that the dependability of the study could be reduced if another researcher could not come along and read the results and even potentially see how those results made sense based on the study that was conducted. And since there were several participants who declined to be recorded during the interviews, it is incredibly difficult for another researcher to come along and read the transcript notes that I made based on the interview and see with 100% certainty that the participant's exact words were transcribed. Part of the reason for this is because I was unable to transcribed verbatim every word that came out of the participants mouth, because I did not want the participant to continue to repeat themselves throughout the conversation because that would cause an undue inconvenience to the participant and it would also cause them to be stressed out and even potentially stop the interview before it was even over. So what I did was I paraphrased what they said, and at the end of the interview I made sure that the responses I wrote down is what the participant was intending to say.

Confirmability

Creswell (2009) posits that confirmability is parallel with subjectivity whereby another researcher should be able to read the contents in their entirety of a given study and arrive at the same conclusion. Therefore, it will be my primary objective to present the data as it is found in order for someone else to come along and see the same exact thing that I saw and reach a similar conclusion. This was where presenting the facts objectively came into play, and this was done throughout the process of the data collection and presentation. This also meant being as specific as possible when presenting the methodology that was used in the case study, and every effort was been exhausted to ensure that was done here.

One may argue that the findings of a given research can only be done with a high confidence level that would be seen through quantitative inquiry. It is also known, as will be explained later, that one limitation of qualitative inquiry is that the results cannot be tested against a larger population. However, the answers provided by the participants were recorded when they were allowed to be and the unrecorded responses were written down and verified with the participants in order to ensure that only the responses given were the ones that were presented here in the findings of the study.

As mentioned earlier, the coding process would have taken place once the information had already been gathered. According to Patton (2002) developing some manageable classification or coding scheme was the first step of analysis. Based on the recommendations from Patton, at the beginning of the research I did not feel that it was appropriate to begin to identify codes prior to the beginning of the research. In order to avoid confusion with the analysis, codes would have been presented in a separate appendix along with an explanation of what each code meant. However, once the codes were to be created it could have been easier to determine if any patterns, or themes, had emerged in the findings of the case study. NVivo would have been helpful to find these patterns and develop the codes. I would have also explained in the appendix that was created for the section how each pattern or code was recognized, and I would have also presented the data that I retrieved from NVivo. For areas of coding that were not specifically mentioned here, and elaboration of the data and coding concerning the reliability of the findings would have also been presented in this chapter.

It is important to reiterate that the coding process did not happen throughout the research. This is because there were such a limited amount of participants that could be used for the research. As previously mentioned, this is because once I had tried to make contact with three different organizations and I had been told that I would not be allowed to use their organization to recruit participants for the research. So the decision to move forward with the snowballing technique was made and only ten participants could be found.

Study Results

The first central research question was: What factors contributed to the decision by blue-collar workers to invest or not invest for retirement? There were 15 questions that were asked to participants based on this central research question. Where applicable, the results are pooled into Table 1 with further explanation located below the questions presented here:

- What is your age?
- What is your gender?
- How would you describe your financial education? Please explain.
- Describe the amount of financial education you would have to obtain before you would consider investing your money for your retirement. Please explain.
- What is your highest level of academic education? Please explain.
- Do you, or your family, have a budget? Please explain.
- What general occurrence(s) has to happen in your life, or did happen, for you to invest for your retirement? Please explain.

- Regardless of whether or not you are an investor in the stock market, in what ways do you feel that your academic education would affect your choice to invest for your retirement? Please explain.
- What is your opinion of individual stocks of United States (U.S.) companies in the U.S. stock market? Please explain.
- What is your opinion of individual stocks of non-U.S. companies in the U.S. stock market? Please explain.
- In what ways does your opinion of the current U.S. economy affect your decision of whether to invest for your retirement? Please explain.
- In what ways does the current state of the U.S. economy affect your family budget? Please explain.
- In what ways does the economy in your local area affect your decision of whether to invest for your retirement? Please explain.
- Looking ahead, how do you think you will be financially a year from now, will you be better off, worse off, or about the same? Please explain.
- Looking back, would you say that you are financially better off, worse off or about the same as you were a year ago? Please explain.

Explained in further detail below in Table 1, the age ranges of the participants were from 20 to 52, and there were three female participants and seven male participants. Three people, all male participants, said that they had formal financial education. This included three people who had taken a financial budgeting and planning course in high school, and one person had taken a financial investing seminar. The remaining participants indicated that they had no formal financial education; however, one person who did not fall had no formal financial education said, “I have no formal financial education, however I do have a good grasp on finance” (Respondent 9, personal communication, September 7, 2014).

Only four people indicated that financial education would not be necessary prior to making a decision to invest for their retirement. None of those respondents were females, and one female respondent, Respondent 6, indicated that she would not invest unless she was guaranteed to make money. Respondent 9 indicated that he did not think it was necessary to have formal financial education. Instead, it was only necessary to trust the people who were managing the money, whereas Respondent 5 stated that he did not trust anyone with his money because he had known too many people who had lost money in the stock market in the past. Finally, Respondent 8 was afraid of running out of money in retirement so he felt that he had no other choice but to invest.

The highest levels of academic education indicated by the respondents ranged from high school to one participant who just finished his bachelor’s degree. All of the participants had completed high school, and none indicated that they had earned a General Education Development diploma. Three respondents had trade school education. Six respondents, including three female participants and three male participants, said that they have budgets. The other respondents said that they either did not have a budget or they tried to follow one but were frequently unsuccessful. As shown below, the responses were varied between participants when asked whether they were better off, worse off, or about the same from a year ago. The responses were also varied when asked the same question with the exception of how they believe they would fare in a year from now.

Table 1
Blue-Collar Worker Responses

Age	Gender	Has a Budget	Highest Level of Academic Education	Has Financial Education	Better off (1), Worse off (2), or about the same (3) from 1 year ago	Better off (1), Worse off (2), or about the same (3) 1 year from now
20	Male	No	High School	Yes	1	2
23	Male	Yes	Some College	Yes	1	1
24	Female	Yes	Some College	Yes	3	1
26	Male	No	Bachelor's Degree	Yes	1	1
29	Male	No	Trade School	No	1	3
30	Female	Yes	Trade School	No	3	1
38	Female	No	Some College	No	1	1
47	Male	Yes	High School	No	3	3
52	Male	Yes	Trade School	No	3	1
52	Male	Yes	Some College	Yes	3	1

When asked about the general occurrence(s) that had to happen, or did happen, for the decision to be made to start investing for retirement, there were a variety of reasons given. Participant 10 stated that he and his wife realized that they needed to start saving for their retirement after they had their first child. Respondent 1 indicated that he would have to be more educated about finance, along with securing a higher-paying job, before he would invest. Three participants indicated that they did not want to run out of money in retirement, and Respondent 3 said she was afraid to be like a family member that she saw die poor. Two participants indicated that they started investing because their employer offered 401(k) matches. The remaining participants did not want to invest because they did not trust the stock markets.

When asked how academic education affects the choice to invest for retirement, four participants indicated that it did have an effect on their decision to invest. Some of the reasons cited included the fact that academic education made them more comfortable understanding finance based on the courses in finance and economics that were taken (Participant 10, personal communication, September 5, 2014; Participant 4, personal communication, September 5, 2014), the ability to speak to students and professors about their opinions on the markets and companies (Participant 4, personal communication, September 5, 2014), one participant (Participant 1, personal communication, September 7, 2014) indicated that it affected it a lot but could not articulate why.

It seemed that he was generally uncomfortable investing based on his other answers throughout the interview. Finally, another participant (Participant 6, personal communication, September 8, 2014), indicated that she would not be comfortable investing because she does not know much about stocks and the stock markets. The remaining six participants indicated that they needed to invest, for a variety of reasons (mainly to fund retirement), so they would/did invest anyways.

Participants were asked to provide their opinions about the individual stocks of both U.S. and non-U.S. companies in the U.S. stock market. Nine out of 10 participants indicated that they did not know enough about the stock market itself, or the individual companies listed for sale there, to answer the question. One participant stated that even though he did not know much about the U.S. and non-U.S. companies he would still invest with the help of a financial planner.

The participant who did offer an opinion on the two categories of stocks said this of U.S. stocks, “Some companies are safe and some are not. We must look at diversifying risk to different sectors and type and sizes of companies” (Participant 10, personal communication, September 5, 2014). When asked about non-U.S. stocks, he said, “I generally do not trust non-U.S. companies, because of the volatility of exchange rates and general political instability of the world” (Participant 10, personal communication, September 5, 2014).

When asked about how the current U.S. economy affects the decision of whether to invest for retirement, all ten participants indicated that it made a significant impact on their overall decision. One participant (Participant 2, personal communication, September 6, 2014) indicated that he was worried that the U.S. may enter into a second recession, and as a result he was trying to save more money so that in the event that he lost his job he would have cash on hand to pay bills and buy groceries. Another participant felt he would lose more money this time if he was still investing in the stock market and felt that he would be better off paying down debt, while another participant (Participant 7, personal communication, September 6, 2014) felt that she would not want to invest in this economy because it was too shaky and wants it to be more stable. Finally, one participant felt that a person would have to be rich to invest in the current economy.

When asked how the U.S. economy affects their budget, one participant said that she was unable to save as much money as she would like because prices in her area for various items that she purchases, including groceries, were going up. Two participants said it does not affect them at all. Another participant said he was recovering from losing $50,000 on a house that he had to sell, and he also said that he had a tough time finding a reasonably-paying job in his area. So he had to take the job he has now working at an ice distribution company. The other participants said that they were afraid of the economy crashing again so instead of spending money on things that they would like to buy they find themselves holding off and saving the money.

Many of them said that they would likely start buying things and spending their money again once the economy got better because they were not sure over the long term how long they would get to keep their jobs. Some of the participants also reiterated that they are not good with sticking to a budget regardless of what the economy is doing, while a couple of the participants reiterated that they do not have a budget in the first place. Finally, one participant indicated that he cannot save money because he has too many medical bills to pay.

The general answers between the participants were the same when they were asked the question regarding the local economy and its affect on their decision of whether to invest for retirement. The ones that did not invest feel that the local economy did not necessarily have anything to do with it, and the ones who were investing basically said the same thing except for a few respondents that felt the local economy made them feel comfortable investing because they live in a tourist town in South Dakota. As one respondent put it, "We are an anomaly because of where we are located. We are very fortunate! So I make sure to invest as much and as often as I can" (Participant 9, personal communication, September 7, 2014).

Participants were asked whether they would be better off, worse off, or about the same in a year from now. They were also asked whether they would be better off, worse off, or about the same from a year ago. Only one participant felt he would be worse off in a year from now, and that was because he planned on going back to school and not working as much so that he could focus his time and energy on his course work.

A couple of participants felt they would be better off in the future because they planned on relocating to another place where they felt they either had better job opportunities or would like the area better. One trend that was noted was that those who reported they went to college or had a degree thought they would be better off in a year from the time of the interview. Only three people, two male participants and one female participant, reported that they would be better off in the future and that they were better off than they were in the past.

The second central research question was: How did blue-collar workers diversify their portfolio if they chose to invest? There were four questions that were asked to participants based on this central research question. Where applicable, the results are pooled into Table 2 with further explanation located below the questions presented here:

- Do you currently invest for your retirement? Please explain.
- If you currently invest for your retirement, what do you invest in? Please explain.
- What other types of investment products (i.e. United States Treasury Bonds, Mutual Funds or perhaps other investments), if any, have you invested in for your retirement?
- What percentage, if any, would you say you have in each investment product? Please explain.

Participants were asked if they invest or not, what they invest in, and how much they invest with respect to the percentage of the amount invested per investment product. Out of the participants who are not currently investing, the main investment product they have either purchased (i.e. invested in) was a U.S. Treasury Bond. One participant indicated that he only buys U.S. Treasury Bonds but he wants to buy mutual funds in the future. Another participant (Participant 3, personal communication, September 5, 2014) indicated that she invests $200 per month into a mutual fund. When asked what other investment products they had invested in, they all reiterated what they currently invest in because it is what they have chosen in the past or they said that they had bought U.S. Treasury Bonds in the past or these bonds were given to them by family members.

Table 2
Blue-Collar Worker Investment Decisions

Age	Gender	Invests for Retirement	Investment Product of Choice	Percentage Allocated if Known
20	Male	No	N/A	N/A
23	Male	Yes	U.S. Treasury Bond	100%
24	Female	Yes	Mutual Fund	100%
26	Male	No	N/A	N/A
29	Male	No	N/A	N/A
30	Female	Yes	401(k)	100%
38	Female	No	N/A	N/A
47	Male	Yes	IRA and U.S. Treasury Bonds	80%/20%
52	Male	Yes	401(k)	100%
52	Male	Yes	Mutual Fund, IRA, 401(k)	70%/25%/5%

Overall, based on the answers provided by ten different research participants, who were located in Washington State, North Dakota, and South Dakota, their particular investment choices, opinions, and reasons for doing or not doing something or feeling a certain way were overall non-confirming based on the given research conducted. This would mean that answers were varied from question to question, but some consistencies, as described and presented above, did arise in the findings. It also meant that the answers would not always be the same, or redundant, as one might find in qualitative research. So the answers to the questions that could be placed into a table were done so above in two different segments to illustrate the responses by the participants.

Some things could not be illustrated in the tables. For example, one participant indicated that she would not feel comfortable investing in something that does not guarantee a return. However, even though she indicated she would not be comfortable investing, she later indicated that she does actually invest because her company offers it and she can fit it in her budget. This also provides further proof that a given research would not be able to replicate the findings of the study given the varied answers from one person to another.

One could also find the argument that if these same questions were asked of the same participants in the future, perhaps in one year from the time of the interview, the answers could likely change given the normal change of events in one's life. For example, if economic conditions were to improve throughout the U.S., then it may be possible to see more people investing for their retirement. However, it seemed that if a person was interested in investing for their retirement that they were going to do it. Based on the general answers to the questions that participants were providing, the general sense I came away with seemed to me that the more a person knew about finances the more likely they may be to invest. I say this because the tone of a participant's voice would be almost more indicative of fear of the unknown when we would speak about investing for their retirement if they did not have financial education.

Summary

The purpose of this case study was to discover the factors that contributed to the decision by blue-collar workers to allocate funds for retirement. This also included the levels of funding should they decide to invest. Since these workers fell into various employment circumstances, and as a result of the economic downturn and slow recovery, there were a wide variety of reasons that were unknown for making or not making these investments (Sum et al, 2010). This study used prospect theory (Kahneman & Tversky, 1979) and regret theory (Loomes & Sugden, 1982) as a theoretical basis for the research to uncover these reasons.

Prospect theory is a theory based on behavioral economics describing ways people made choices based on losses and gains versus the final outcome, and it asserted that people evaluated losses and gains using heuristics (Kahneman & Tversky, 1979). Regret theory implies that if people made a wrong choice, they remembered this choice the next time they made another decision under a similar set of circumstances (Loomes & Sugden, 1982). These theories were covered in detail in Chapter 2.

The responses by the blue-collar workers did not seem to be overwhelmingly different than one might expect to see from people with in a different research category. The factors that contributed to the decision by blue-collar workers to invest or not invest for retirement was based on a couple of contribute in factors, including employer-provided retirement accounts, the fear of running out of money later in life during retirement, and the addition of new family members. In the event that blue-collar workers chose to invest for their retirement, one of the most popular investment products was the U.S. Treasury Bonds. Other popular investments were mutual funds, 401(k)s, and IRAs. The breakdown of these was indicated in the table above. An in-depth presentation of the interpretation of the findings of the study, along with the implications to positive social change, will be presented in Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this case study was to discover the factors that contribute to the decision by blue-collar workers to allocate funds for retirement. This also included the levels of funding should they decide to invest. Since these workers fell into various employment circumstances, and as a result of the economic downturn and slow recovery, there were a wide variety of reasons that were previously unknown for making or not making these investments (Sum et al, 2010). This study used prospect theory (Kahneman & Tversky, 1979) and regret theory (Loomes & Sugden, 1982) as a theoretical basis for the research to uncover these reasons. Prospect theory was a theory based on behavioral economics that described the ways people made choices based on losses and gains versus the final outcome, and it also asserted that people evaluated losses and gains through the use of heuristics (Kahneman & Tversky, 1979). Regret theory implied that if people made a wrong choice, they remembered this choice the next time they made another decision under a similar set of circumstances (Loomes & Sugden, 1982).

The nature of this study was based on qualitative inquiry with a focus on the case study method. The case study allowed for the study of the a single case, within the site of the location of the research, and focus on the decisions made by blue-collar workers as they chose whether or not to invest and their levels of investment should they choose to invest. Qualitative research was consistent with understanding how blue-collar workers factored in the different facets of the decision-making process of allocating funds for their retirement in that it allowed for direct initial and follow-up communication with respondents in a way that permits them to provide open and in-depth responses to questions.

The necessity of the study stemmed from the need to understand the circumstances surrounding the decision of blue-collar workers to determine their level of investment for their retirement, and with that information in hand society as a whole could have a more in-depth understanding of an under-studied aspect of the life of these workers.

As previously mentioned in Chapter 4, the factors that contributed to the decision by blue-collar workers to invest or not invest for retirement was based on a couple of contribute in factors, including employer-provided retirement accounts, the fear of running out of money later in life during retirement, and the addition of new family members. In the event that blue-collar workers chose to invest for their retirement, one of the most popular investment products was the U.S. Treasury Bonds. Other popular investments were mutual funds, 401(k)s, and IRAs.

The breakdown of these was indicated in the table in Chapter 4. The amount of financial and academic education that a blue-collar worker had did not necessarily preclude them from investing. There was a mixed response, with some blue-collar workers feeling it was necessary in some feeling that it was not. There was no evidence provided that would indicate that a blue-collar worker would have an overall investment strategy, with respect to specific asset classes chosen based on the location in which they resided. Instead, the majority of the participants felt that the local area in which they lived in did not necessarily prevent them from investing.

If they chose to invest, or not to invest, the over arcing reason given was not based on the local economy. It was mainly based on whether or not they trusted someone to invest their money for them, the necessity to have adequate funding throughout retirement, and the need to be able to provide food and shelter in their retirement. One participant even went so far as to say that she did not want to be like a recently deceased family member who passed away with very little resources available to them. Four out of seven male participants were investing for their retirement, and two out of three female participants were investing for their retirement. Based on the data collected, once a person turned thirty years of age they were more likely to invest.

Interpretation of Findings

In order to provide an adequate interpretation of the findings of this case study, it is both relevant and important to first have a review of what the ten individual participants said. The age ranges of the participants were from 20 to 52, and there were three female participants and seven male participants. Three people, all male participants, said that they had formal financial education. This included three people who had taken a financial budgeting and planning course in high school, and one person had taken a financial investing seminar. The remaining participants indicated that they had no formal financial education; however, one person who did not fall had no formal financial education said, “I have no formal financial education, however I do have a good grasp on finance” (Respondent 9, personal communication, September 7, 2014).

In Chapter 2, the literature review discussed a variety of reasons of why people save. Saving money takes many forms, and it did this for a variety of reasons (Xi, Scholer, & Higgins, 2014; Burman, Coe, Pierce, & Liu, 2014; Marucci-Wellman, Willetts, Tin-Chi, Brennan, & Verma, 2014). These reasons were based on things such as the fulfillment of personal savings goals, the avoidance of having to borrow money to pay for things in the event of an emergency, and even to prevent financial hardships arising from the loss of income stemming from unemployment or retirement (Soman & Cheema, 2011; Xi, Scholer, & Higgins, 2014; Burman, Coe, Pierce, & Liu, 2014; Marucci-Wellman, Willetts, Tin-Chi, Brennan, & Verma, 2014). Based on the interviews, I would say that the interviewees did not always save in the same way that other people do with respect to having an adequate retirement. However, they did plan on emergencies and many of them indicated that they have money in the event that something happens to them (i.e. loss of a job or moving from one location to another).

Only four people indicated that financial education would not be necessary prior to making a decision to invest for their retirement. None of those respondents were females, and one female respondent, Respondent 6, indicated that she would not invest unless she was guaranteed to make money. Respondent 9 indicated that he did not think it was necessary to have formal financial education. Instead, it was only necessary to trust the people who were managing the money, whereas Respondent 5 stated that he did not trust anyone with his money because he had known too many people who had lost money in the stock market in the past. Finally, Respondent 8 was afraid of running out of money in retirement so he felt that he had no other choice but to invest.

According to Soman and Cheema (2011), who studied the effects of earmarking money on savings by low-income consumers, creating a savings goal and posting it in a visible are served as a positive visual reminder and increased the propensity for saving. Soman and Cheema also found that people saved more when earmarked money was partitioned into two accounts than when it is pooled into one account. None of the participants indicated anything to me about having more than one bank account, and I did not ask.

The highest levels of academic education indicated by the respondents ranged from high school to one participant who just finished his bachelor’s degree. All of the participants had completed high school, and none indicated that they had earned a General Education Development diploma. Three respondents had trade school education. Six respondents, including three female participants and three male participants, said that they have budgets. The other respondents said that they either did not have a budget or they tried to follow one but were frequently unsuccessful. As shown below, the responses were varied between participants when asked whether they were better off, worse off, or about the same from a year ago. The responses were also varied when asked the same question with the exception of how they believe they would fare in a year from now.

As mentioned in Chapter 2, for blue-collar workers specifically, it was difficult to account for specific reasons for the decisions to have a personal savings. One reason for this was the low wages that blue-collar workers earn, which had continued to be reduced over time as their jobs were outsourced to foreign competitors adding to a rise in wage difference between educated and non-educated workers (Kosteas, 2008). Risk of losing a job or missing out on a promotion also plays a role in how people save (Xi, Scholer, & Higgins, 2014; Marucci-Wellman, Willetts, Tin-Chi, Brennan, & Verma, 2014). None of the workers that I spoke with were worried about their jobs being outsourced overseas.

When asked about the general occurrence(s) that had to happen, or did happen, for the decision to be made to start investing for retirement, there were a variety of reasons given. Participant 10 stated that he and his wife realized that they needed to start saving for their retirement after they had their first child. Respondent 1 indicated that he would have to be more educated about finance, along with securing a higher-paying job, before he would invest. Three participants indicated that they did not want to run out of money in retirement, and Respondent 3 said she was afraid to be like a family member that she saw die poor. Two participants indicated that they started investing because their employer offered 401(k) matches. The remaining participants did not want to invest because they did not trust the stock markets.

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It seemed that he was generally uncomfortable investing based on his other answers throughout the interview. Finally, another participant (Participant 6, personal communication, September 8, 2014), indicated that she would not be comfortable investing because she does not know much about stocks and the stock markets. The remaining six participants indicated that they needed to invest, for a variety of reasons (mainly to fund retirement), so they would/did invest anyways.

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The participant who did offer an opinion on the two categories of stocks said this of U.S. stocks, “Some companies are safe and some are not. We must look at diversifying risk to different sectors and type and sizes of companies” (Participant 10, personal communication, September 5, 2014). When asked about non-U.S. stocks, he said, “I generally do not trust non-U.S. companies, because of the volatility of exchange rates and general political instability of the world” (Participant 10, personal communication, September 5, 2014).

When asked about how the current U.S. economy affects the decision of whether to invest for retirement, all ten participants indicated that it made a significant impact on their overall decision. One participant (Participant 2, personal communication, September 6, 2014) indicated that he was worried that the U.S. may enter into a second recession, and as a result he was trying to save more money so that in the event that he lost his job he would have cash on hand to pay bills and buy groceries. Another participant felt he would lose more money this time if he was still investing in the stock market and felt that he would be better off paying down debt, while another participant (Participant 7, personal communication, September 6, 2014) felt that she would not want to invest in this economy because it was too shaky and wants it to be more stable. Finally, one participant felt that a person would have to be rich to invest in the current economy.

When asked how the U.S. economy affects their budget, one participant said that she was unable to save as much money as she would like because prices in her area for various items that she purchases, including groceries, were going up. Two participants said it does not affect them at all. Another participant said he was recovering from losing $50,000 on a house that he had to sell, and he also said that he had a tough time finding a reasonably-paying job in his area. So he had to take the job he has now working at an ice distribution company. The other participants said that they were afraid of the economy crashing again so instead of spending money on things that they would like to buy they find themselves holding off and saving the money.

Many of them said that they would likely start buying things and spending their money again once the economy got better because they were not sure over the long term how long they would get to keep their jobs. Some of the participants also reiterated that they are not good with sticking to a budget regardless of what the economy is doing, while a couple of the participants reiterated that they do not have a budget in the first place. Finally, one participant indicated that he cannot save money because he has too many medical bills to pay.

The general answers between the participants were the same when they were asked the question regarding the local economy and its affect on their decision of whether to invest for retirement. The ones that did not invest feel that the local economy did not necessarily have anything to do with it, and the ones who were investing basically said the same thing except for a few respondents that felt the local economy made them feel comfortable investing because they live in a tourist town in South Dakota. As one respondent put it, “We are an anomaly because of where we are located. We are very fortunate! So I make sure to invest as much and as often as I can” (Participant 9, personal communication, September 7, 2014).

Participants were asked whether they would be better off, worse off, or about the same in a year from now. They were also asked whether they would be better off, worse off, or about the same from a year ago. Only one participant felt he would be worse off in a year from now, and that was because he planned on going back to school and not working as much so that he could focus his time and energy on his course work.

A couple of participants felt they would be better off in the future because they planned on relocating to another place where they felt they either had better job opportunities or would like the area better. One trend that was noted was that those who reported they went to college or had a degree thought they would be better off in a year from the time of the interview. Only three people, two male participants and one female participant, reported that they would be better off in the future and that they were better off than they were in the past.

The participants in this study seemed to have similar investment decisions as other people who were not blue-collar workers that were noted in the literature review in Chapter 2. Prior to the beginning of this study, the existing literature did not have many research articles that focused on blue-collar workers, so it was hard to confirm or disconfirm knowledge in the discipline of finance. At least one group of researchers (Fouad et al, 2012, p. 287) also echoed this sentiment.

Some of the findings, however, seemed to be in line with the literature review conducted in Chapter 2. For example, in the literature review there was a singular incident in which a blue-collar worker indicated that he had to work as long as he could to maintain the benefits that he was getting through his employer along with medical insurance (Sanders & McCready, 2009, p. 118). He was unsure of how long he was going to be able to make it through retirement and have enough funding to pay for everything, including medical bills and a place to live. Many of the participants in this study had near identical concerns.

The amount of financial and academic education that a blue-collar worker had did not necessarily preclude them from investing. There was a mixed response, with some blue-collar workers feeling it was necessary in some feeling that it was not. There was no evidence provided that would indicate that a blue-collar worker would have an overall investment strategy, with respect to specific asset classes chosen based on the location in which they resided. Instead, the majority of the participants felt that the local area in which they lived in did not necessarily prevent them from investing. If they chose to invest, or not to invest, the over arcing reason given was not based on the local economy. It was mainly based on whether or not they trusted someone to invest their money for them, the necessity to have adequate funding throughout retirement, and the need to be able to provide food and shelter in their retirement.

One participant even went so far as to say that she did not want to be like a recently deceased family member who passed away with very little resources available to her. Four out of seven male participants were investing for their retirement, and two out of three female participants were investing for their retirement. Based on the data collected, once a person turned thirty years of age they were more likely to invest.

One thing that seemed to be a parent as the interviews were being conducted was that people seemed to find reasons, or perhaps one could go so far as to say excuses, to invest or not invest for their retirement. The location in which they lived in did not seem to play any major role in whether or not they were going to invest. Instead, it seemed more like an issue of whether or not a given participant was ready to do it. This interpretation is not something that would be easily found by reading the transcripts or listening to the audio files. Instead, it seemed to be part of a general decision-making process.

One could also potentially make the argument that someone might not do something unless they are comfortable with it, but an even bigger argument might be made as to whether or not a person is actually ready to make a decision based on whether that decision is right for them or not. This is not something that is necessarily going to be very easy to quantify, measure, or even easily incorporate into a case study. It is also arguable that what makes one person comfortable will certainly not make another person comfortable, and that all decisions made by different people would most likely be made for different reasons.

As previously mentioned, the data essentially shows that as a person gets older they are more likely to invest. It also seemed that there was a fear of being closer to retirement, especially as a person get older, that they would need to actually begin to start investing because in some cases a couple of the participants had yet to begin investing. However, based on what we have seen here the decision of whether or not to invest for retirement seemed to be more along the lines of making a decision that will prevent something negative from happening at a later date. In this case, it would be running out of resources, especially money, during retirement.

Limitations of the Study

At the beginning of the research I tried to obtain permission from three separate organizations that employed blue-collar workers to allow me to enter into their place of business and advertise my research and conduct interviews with participants who were willing to take part in the study. After the all three attempts were unsuccessful I switched over to the snowball technique after a blue-collar worker indicated that he was interested in working with me. So I interviewed the first participant and then I asked if he knew of anyone else that might be interested in participating. I then went from one participant to the next until the recommendations either stopped or the same people kept being recommended. At the end of the study, a total of 10 people participated in the study, which met the minimum goal of the research.

A case study researcher has to be able to decide the bounded system in which to study, which would mean recognizing that several could have been possible candidates for selection and the case itself, or several cases located within the overall study, could have been worthy of study (Creswell, 2013). This included studying a single case or multiple cases. It was possible that studying more than one case could dilute the findings of the overall analysis since the more cases one studies meant a potential reduction in the depth of any single case.

Even with a singular case there could be the possibility of a reduction in the ability to generalize the findings. One particular reason for this was because, unlike quantitative-based research where variables can be tested, it may have been difficult for another researcher to take a similar given set of circumstances and reproduce similar results since qualitative variables are explained instead of being tested. In the event that this was a mixed method study, whereby quantitative inquiry was used as a way to compare the answers from the small amount of participants against the responses from a larger group of people, then the results would be arguably more rigorous than they are now.

This was one of the limitations of doing a qualitative case study, because it is not possible for a researcher to replicate the study and achieve very similar results. Instead, the basis of the study was more centered and focused on discovering what has to be in place for a blue-collar worker to invest, including their levels of diversification in the event they invest, which is rather difficult to do and a quantitative setting. However, had the study focused on the investment decisions of blue-collar workers and a more quantitative-based inquiry, then one can argue that the findings would not have been as limited as they are here.

Since the study took place in the Inland Northwest and the Midwest, it would be difficult to reproduce similar results in another part of the United States. The participants were also going to be limited to employees located in that region. However, there was literature (Sum et al, 2010) to support the notion that the findings may be generalized in other regions of the United States. There were several major biases that I identified prior going into the study. One such bias was my own personal experience with blue-collar workers.

I had several family members including myself who are, or were, blue-collar workers at one point or another. Many of my family members worked at a factory on an assembly line. I also had several family members who performed a variety of manual labor throughout their time working, and this included several family members worked in the construction crafts as well as other family members who were truck drivers. It would not be uncommon for them to work six days a week, and during a given week they would normally work around sixty hours or more. They usually only made about a few dollars an hour above minimum wage, so when an economic downturn what happened they would quickly run out of money and be unable to pay their bills. My first job was actually as a blue-collar worker where I worked at Midas helping the mechanics as a parts-runner along with other duties in the shop. This bias towards blue-collar workers was what led me to choose them for the study. The other biases are based on the assumptions below.

Some of the reasonable steps that I took to address these biases included being objective with the findings of the research, which meant removing my personal feelings and opinions from the overall research process. There was little I could do about the limitation of the audience that was used in the case study, but I made the best efforts to present the data here as efficiently and effectively as possible in order to describe how it related to the findings in the previous literature from Chapter 2. This was done by presenting information based on age so that a trend would be allowed to present itself in a logical way, because based on the data that was collected it would not make sense to categorize the data in another way. The tables were also crafted separately in order to allow the reader to see how the responses were given based on the central research question that was being answered.

Recommendations

Personal Finance

In order to discuss the recommendations for further research it is necessary to revisit the original reason behind this particular case study. Very little research has ever been conducted on the blue-collar working community. Since they are so underserved, many gaps in the research exist. With respect to this study, it was incredibly difficult to discover existing research that discussed the investment choices made by blue-collar workers. This also means that there is a wide variety of personal financial issues that have been undiscovered.

This could be a great area for future research to be conducted in order to help determine how these workers could comfortably invest in their future. One can also argue that it is difficult to measure comfort, and this can seriously add to the credibility of a given research inquiry as it will likely be limited by how it measures comfort. An exhaustive review of existing literature in the field of psychology might provide insight on how to measure this. Even incorporating a psychologist or psychiatrist to assist with the research could be very helpful and add to the soundness and credibility of the findings.

This means that there was initially a gap in the existing academic literature that did not completely discuss the contributing factors that leads to the level of investment for retirement and portfolio diversification by blue-collar workers that used both prospect theory (Kahneman & Tversky, 1979) and regret theory (Loomes & Sugden, 1982) as the underpinnings of a case study. The previous literature review, as presented in Chapter 2, had shown relevant studies (Sanders & McCready, 2009; Boris, 2010) that had come close. However, many of the underlying factors that still needed to be studied were not covered in the literature conclusively since there were very few resources upon which to draw relevant data. This also means that the literature review, which is the base or foundation of the case study, is not as strong as it could be because there is very little research that can be used to backup the findings. Instead, I am left to believe that the blue-collar worker might have similar retirement investment choices that anyone else might have based on their given age, gender, financial education and employment circumstances.

These factors included whether or not blue-collar workers in a financial position to invest, how much money they allocated if they could invest, how they diversify their portfolio, and if they had an emergency fund established so they did not have to withdraw their retirement funds. This information was not found in the literature, and in order to obtain higher levels of accurate information this information should be gathered directly from the study participants. The reason there was a need for this to be gathered from research participants was because it may have been controversial to speculate on what the individual circumstances would be prior to the study, and it could have also been controversial to assume that blue-collar respondents from other studies (Sanders & McCready, 2009; Boris, 2010) speak for all of the other participants who would be in this study.

Potential Mixed Method Research

Based on the strengths and limitations of the current study, as well as the literature review, further research should be directed to other blue-collar communities throughout the United States. This research could be quantitative-based, whereby larger groups of blue-collar workers could participate in surveys that are generated in a similar fashion based on the questions that were asked in this study. It could also be done as a mixed method study whereby, much in the same manner in which it was conducted here, through a qualitative case study approach using purposeful sampling and/or snowball sampling. Part of the study could take surveys from blue-collar workers located within a geographic region of the state, such as the southwestern region of the country or perhaps somewhere else, and then there could be interviews done with participants where they are asked to answer similar questions where they are allowed to offer in-depth responses.

The quantitative metric could be used to perhaps explain what might be said by the participants in the interviews conducted during the qualitative case study. One could make the argument that it would be worthy of research, especially if the research were conducted once the economy has improved. One could also make the argument that the answers provided by blue-collar workers could be drastically different in the event that they are located in an area where employment is not difficult to gain.

Further research using surveys into a larger group of these workers, perhaps through the use of quantitative inquiry in different states, could result in a clearer understanding of their investment habits. Perhaps if more light is shed on more of the people in this category with respect to the data that is collected would elaborate on the findings of this study, even though one could make the argument that the results may end up being very similar. One could also argue that the more that is known about this category of worker could be good for the academic community as a whole as well as the blue-collar community.

Implications

Positive Social Change

There is a potential impact for positive social change at the individual level, and this positive change could be based on the blue-collar worker community that participated in the study learning about the vast existing financial education and literacy online companies that provide their services absolutely free. There are also a wide variety of financial news outlets, such as CNNMoney, Bloomberg and Fox News, which exist as well that provide free financial education and retirement education as well. It may be possible that blue-collar workers are not aware of these resources.

However, as part of the dissemination of the findings of this study participants were informed of some of these outlets. They were also interested to hear about them, and a few of the participants even indicated that they had either already heard of them or planned on doing their own research in the future to enhance their financial education. One indirect way that the study can positively affect social change is by the participants sharing the findings of the study with one another and their friends and family. I will also be providing a copy of the dissertation to the participants of the study once it has been approved by Walden for publication so that the participants will have the opportunity to see the full study and its entirety in order to be more well-informed.

Theoretically speaking, it would be possible for participants to take time and research the various areas of investing through the aforementioned media outlets enough for them to potentially feel comfortable enough investing for their retirement in the event that they are already not investing. This is because they would not merely be looking at the prospects of buying an investment product with the notion in mind that it may go up or down in value, whereby they may regret later on having purchased something that went down in value or not purchasing something that would later go up in value. Instead, it may be possible for them to understand enough about the risks of investing in order to make a more educated decision.

The reason for sharing the entire dissertation with the participants is to allow them to see, and a more transparent way, what initially drove the research as well as what needs to be researched in the future. This will allow for them to have a better understanding of the motivation behind choosing the blue-collar worker community in the first place, as well as the potential for them to maybe pursue a PhD in their own time and conduct research on their own. Or, they may choose to share the work with a friend or family member that is a researcher so that that person might choose to look further into it on their behalf or potentially give them some more insight behind the foundations of the study.

Conclusions

The reason this case study was chosen was because it involved a category of society that was underserved. The purpose of this case study was to discover the factors that contributed to the decision by blue-collar workers to allocate funds for retirement. This also included an attempt to discover how the blue-collar workers would invest their money, to include what they would buy and how much of it, in order to better understand their investment choices. Since these workers fell into various employment circumstances, and as a result of the economic downturn and slow recovery, there were a wide variety of reasons that were previously unknown for making or not making these investments (Sum et al, 2010). However, in many cases the blue-collar workers seemed to have had similar investment habits than people who did not fall into that category. They also seemed to base their choices to invest or not invest based on how well they did or did not understand what they were buying, even though the data collected seemed to indicate that once they reach the age of thirty there was a higher likelihood that they would invest anyway.

One item that was noted during the collection of the data was that when a participant did make a choice to invest, they seemed to allocate funds in an area that most institutional investors might consider to be a more safe investment and that was the investment in a US Treasury Bond. One other item of note that seemed to be part of their overall responses, albeit a response not shared by perhaps one or two participants, was the notion that a person would not invest in something that they do not understand. I posit, based on my brief experience with these participants, that knowledge can dispel fear. That is the more we know about something the less we seem to be fearful of it. It seemed to me that the participants who had financial education at a younger age seemed to be more willing to invest even if they were not currently doing it.

Based on the data collected one can make the argument that a participant would say they were or were not investing for one reason or another, but a closer examination of the findings seems to reveal that a given participant essentially starts to realize that the older they get the closer to retirement that they are coming and the fear of running out of resources and retirement starts to set in. This seemed to be a general tone with quite a few of the participants, although a couple of the participants did seem to feel this way based on their responses as seen in Chapter 4, most of them did not directly come out and say it.

Since the US economy is recovering from one of the deepest recessions in recent history, there also seemed to be some concern expressed by the respondents about the future of the overall US economy. Although they did not come out and say that the overall US economy would prevent them for investing for their retirement, one could make the argument that if the US economy had recovered in a more meaningful and consistent way, such as a strong and steady rise in employment and hourly wages noted throughout the entire United States and not just segments of it, then these respondents might have answered differently. Or perhaps they may not have. One thing I would posit, based on my conversations with the participants, is that if they understood more about what they were investing in and the US economy was stronger, more of them would be investing. Not only that, but it might even entirely be possible that they would allocate more money than they currently do as of the time of the writing of this dissertation in late 2014.

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Appendix A: Interview Protocol and Questions

Project: A Case Study of the Contributing Factors That led to the Level of Investment for Retirement and Portfolio Diversification by Blue-Collar Workers

Date:

The purpose of the study is to explore the contributing factors that led to people investing for their retirement. This also included what they invest in, and the percentages of their money that they invest if they chose to. In-depth responses were highly encouraged. The interview questions were listed below.

Your participation in this study is completely voluntary. If you chose not to participate or to withdraw from the test at any time, you can do so without penalty or loss of benefit to yourself. There were no foreseeable risks to you from partaking in this study. Mark E. Griffin, Jr., the researcher, will not included your responses in the research study and will keep your identity confidential.

Definitions:

401 (k): A qualified plan established by employers to which eligible employees may made salary deferral (salary reduction) contributions on a post-tax and/or pretax basis.
Broker: A party that arranges transactions between a buyer and a seller, such as the sale of stock, and gets a commission when the deal is executed.
Diversification: Reducing risk by investing in a variety of assets.
Exchange Traded Fund (ETF): An investment vehicle traded on stock exchanges, much like stocks do, and they hold assets like stocks or bonds. They were usually designed to track an index, and they can combine the valuation feature of a mutual fund or a unit investment trust.
Mutual Fund: A mutual fund is a type of investment company that pools money from many investors and invests the money in stocks, bonds, money-market instruments, other securities, or even cash.
Financial Risk Tolerance: An investor's ability or willingness to accept declines in the prices of investments while waiting for them to increase in value.
Security: A security is a negotiable instrument representing financial value. Securities were broadly categorized into debt securities (such as banknotes bonds and debentures) and equity securities (common stocks). They also included derivative contracts, such as forwards, futures, options and swaps. The company or other entity issuing the security is called the issuer.
Stock Broker: A stock broker is a regulated professional broker who buys and sells shares and other securities through market makers or Agency Only Firms on behalf of investors. A broker may be employed by a brokerage firm.
Underemployment: Individuals working part-time (under thirty-five hours per week) but desire full-time jobs and were available to work full time. This could also included individuals who had skill sets that their current employer is not using.

Questions:

1. What is your age?
2. What is your gender?
3. How would you describe your financial education? Please explain.
4. Describe the amount of financial education you would had to obtain before you would consider investing your money for your retirement. Please explain.
5. What is your highest level of academic education? Please explain.
6. Do you, or your family, had a budget? Please explain.
7. Do you currently invest for your retirement? Please explain.
8. If you currently invest for your retirement, what do you invest in? Please explain.
9. What general occurrence(s) had to happen in your life, or did happen, for you to invest for your retirement? Please explain.
10. Regardless of whether or not you were an investor in the stock market, in what ways do you felt that your academic education would affect your choice to invest for your retirement? Please explain.
11. What is your opinion of individual stocks of United States (U.S.) companies in the U.S. stock market? Please explain.
12. What is your opinion of individual stocks of non-U.S. companies in the U.S. stock market? Please explain.
13. What other types of investment products (i.e. United States Treasury Bonds, Mutual Funds or perhaps other investments), if any, had you invested in for your retirement? Please explain.
14. What percentage, if any, would you say you had in each investment product? Please explain.
15. In what ways did your opinion of the current U.S. economy affect your decision of whether to invest for your retirement? Please explain.
16. In what ways did the current state of the U.S. economy affect your family budget? Please explain.
17. In what ways did the economy in your local are affect your decision of whether to invest for your retirement? Please explain.
18. Looking ahead, how do you think you was financially a year from now, will you be better off, worse off, or about the same? Please explain.
19. Looking back, would you say that you were financially better off, worse off or about the same as you were a year ago? Please explain.

Thank you for your cooperation and participation in this study. The responses you provide was beneficial in improving understanding of the facets that were necessary for people to invest for their retirement. It will also help the academic community understand how people investors invest their money if they do invest.