MASTER'S THESIS:

PARENTAL AND SOCIAL INFLUENCES ON UNDERSTANDING OF FINANCIAL PLANNING FOR RETIREMENT

By

JANET L. KOPOSKO

Bachelor of Arts in Psychology

California University of Pennsylvania

California, Pennsylvania

2010

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
MASTER OF SCIENCE
May, 2013

PARENTAL AND SOCIAL INFLUENCES ON

UNDERSTANDING OF FINANCIAL PLANNING

FOR RETIREMENT

Thesis Approved:

Dr. Douglas Hershey

Thesis Adviser

Dr. Celina Reese-Melancon

Dr. Maureen Sullivan

ACKNOWLEDGEMENTS

I would like to thank Dr. Doug Hershey, my research advisor and committee chair, for his constant guidance and advice. I would also like to thank the members of my thesis committee, Dr. Cindy Reese-Melancon and Dr. Maureen Sullivan, for their helpful comments and insights regarding my thesis. I am grateful to the members of the Retirement Planning Research Laboratory for their support and assistance, and also to the faculty and staff in the Oklahoma State University psychology department. Finally, I would like to acknowledge and thank my family and friends for their moral support and constant understanding.

Name: JANET L. KOPOSKO

Date of Degree: MAY, 2013

Title of Study: PARENTAL AND SOCIAL INFLUENCES ON UNDERSTANDING OF FINANCIAL PLANNING FOR RETIREMENT

Major Field: PSYCHOLOGY

ABSTRACT: Financial planning for retirement has been studied by researchers from various disciplines. The current psychological investigation served to develop and test a theoretically grounded, life-span model of the psychomotivational dimensions of retirement planning. In developing the model, special consideration was given to positive early influences on development that may impact other dimensions known to predict successful financial planning. As hypothesized, these measures of early influences were predictive of other variables that are known to underlie the retirement planning decision-making process. The results and implications are discussed in terms of how motivational factors contribute to effective retirement planning.

TABLE OF CONTENTS

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Overview

When college students think about their future careers, they may imagine events such as getting their first job, moving into a professional position, and relocating. They may consider future job stability, salary expectations, and opportunities for professional development. In high school, students may be encouraged by teachers and guidance counselors to think about their professional futures, and universities usually have a career services center to provide support and resources on future careers. However, most college students are not actively encouraged to think about how their work lives will end—with retirement. Many employees do not prepare for retirement or set aside the necessary financial resources to support themselves once their career has ended, and the result is often a less than ideal situation in old age.

The process of how individuals go about making financial plans for retirement is not a simple one or one that is easy to explain. A variety of factors, including economic, demographic, social, and psychological dimensions, all influence how individuals go about formulating plans for the future. One thing, however, seems to remain constant, and that is that many Americans do not adequately plan and save for retirement (VanDerhei & Copeland, 2010; Wiener & Doescher, 2008).

A survey by the Employee Benefit Research Institute (Helman, Copeland, & VanDerhi, 2012) reported that 60 percent of employees have less than $25,000 saved for retirement, and only 14 percent felt confident that they would be able to save enough to live comfortably after leaving the workforce. Furthermore, over half of the respondents had not even tried to estimate the amount of money that they would need to save, which suggests that many individuals are not even thinking about how they will finance their retirement (Helman et al., 2012). Unfortunately, saving challenges such as this are not uncommon, and extend to other countries, as well (Litwin & Sapir, 2009).

Role of Motivational Forces

An area of study that comes into play when examining attitudes toward retirement planning are motivational forces that drive some, but not others, to plan and save. Psychological constructs play a major role in determining how much (and the way in which) an individual will plan and save for the future (Hershey, 2004; Lunt & Livingstone, 1991). In the following paragraphs, five different motivational forces will be discussed. These are financial literacy, demographics, personality factors, goals, and satisfaction with life.

Financial Literacy. Of the six motivational forces that will be examined as part of this thesis, the most is known about financial literacy. As a construct, financial literacy involves financial knowledge, behavior, and attitudes, and it is used to refer to the range of awareness, knowledge, and skills that help people to make good decisions when it comes to managing money (OECD INFE, 2011). Financial literacy has been measured in a number of different ways. In some instances, it is assessed by asking individuals to report how much they feel that they know about certain financial concepts (Croy,

Gerrans, & Speelman, 2010; van Dalen, Henkens, & Hershey, 2010; Worthington, 2008), and in other instances (Heckman & Grable, 2011; OECD INFE, 2011; Jorgensen, 2010; Lusardi, Mitchell, & Curto, 2010; van Rooij, Lusardi, & Alessie, 2011) it is assessed by asking individuals to use simple math to answer real-world financial questions (e.g., calculating interest earned on an investment). One recent study used the latter method with a young adult population and concluded that levels of financial understanding were low (Lusardi et al., 2010). A similar study (van Rooij et al., 2011) asked participants to answer a series of financial questions (e.g., *"Stocks are normally riskier than bonds. True or false?"*). Thirty percent of participants gave an incorrect answer, and between 11 and 38 percent of respondents selected *"Don't Know"* as an answer. Other studies (Goldsmith & Goldsmith, 1997; Goldsmith, Goldsmith, & Heaney, 1997) have used a mixed-methods approach to assess financial literacy and they found self-reported and objective financial knowledge scores to be positively correlated with each other.

Regardless of the measurement method employed, many individuals in Western societies tend to demonstrate low levels of financial literacy (Lusardi & Mitchell, 2011a; Lusardi & Mitchell, 2011b). Studies have shown that a majority of consumers not only have low levels of financial literacy, but they also fail to appreciate the importance of understanding basic financial concepts (OECD, 2005).

Overall, literacy levels among youth and young adults are insufficient to make reasonably informed financial decisions (Anderson, Zhan, & Scott, 1998; Mandell & Klein, 2007). This situation may be rectified by educating young children about personal finance in order to promote good financial habits into adulthood and throughout the course of one's life. In some cases, community-based organizations and government

programs have been implemented to teach children about making financial decisions (Anderson et al., 1998; Jump$tart Coalition for Personal Financial Literacy, 2012). The need for such approaches have been recognized (Anderson et al., 1998; Shobe & Sturm, 2007), but the implementation of these programs can be costly and time consuming. Furthermore, there is controversy as to what is the most effective means of implementing youth education programs, and how these programs should be best evaluated (McCormick, 2009). Other studies have suggested that parents are the main influence on children's development of knowledge, and researchers have proposed that positive parental influences are the key to helping children achieve financial literacy (Heckman & Grable, 2011), make sound economic decisions (Webley & Nyhus, 2006), and develop healthy financial behaviors and attitudes (Jorgensen, 2010; Lusardi, et al., 2010).

In sum, a lack of financial literacy is evident among numerous segments of the population, including children, young adults, and older working adults. While inadequate financial literacy is not the only problem leading to poor financial planning practices, it can be a helpful area of study for those who seek to understand the reasons why people do not responsibly plan and save for old age.

Demographics. The second motivational force dimension that will be examined as part of this thesis is demographic factors, which have also been shown to be related to the way in which individuals plan and save. Gender, in particular, is associated with substantial differences in planning. Compared to women, men tend to have higher financial knowledge and perform better on financial tasks in research settings (Goldsmith & Goldsmith, 1997; Goldsmith, Goldsmith, & Heaney, 1997), and men tend to have higher incomes, as well (Adams & Rau, 2011; Quick & Moen, 1998; Roszkowski &

Grable, 2010; Shobe & Sturm, 2007). Income has been shown to be a significant predictor of financial planning activities (Lee & Law, 2004), and it has also been shown to be predictive of American workers' savings contributions (Hershey et al., 2007; Hira, Rock, & Loibl, 2009; Lunt & Livingstone, 1991).

One's level of education is another demographic factor that is closely related to retirement planning, in that higher levels of education tend to be predictive of effective savings practices (Bernheim, Garrett, & Maki, 2000; Lee & Law, 2004; Lunt & Livingstone, 1991). This is most likely because higher levels of education indicate high intelligence, and those individuals may also be likely to have better jobs and higher incomes compared to those less educated. Finally, age has been shown to be related to retirement planning. Older individuals have been shown to think about retirement planning more seriously compared to younger individuals, likely because older adults are closer to the retirement transition. Age ranges used in studies and the research methods employed vary, but relationships between age, income, and education level are fairly consistent. For example, in Hira et al. (2009), participant ages ranged from 21 to over 60. The data were organized into three age groups representing young adults, middle aged adults, and older adults. Hira and colleagues found that age and retirement planning were positively correlated in each age group. In Hershey et al. (2007), participant ages ranged from 25 to 45. Age was analyzed as part of a path model and was shown to be a direct positive predictor of income; income, in turn, was found to be a direct positive predictor of savings contributions. Despite differences in specific age ranges studied and statistical techniques used, the literature has consistently shown a positive relationship between age and retirement planning practices (Adams & Rau, 2011). These studies demonstrate that

education tends to covary with job status, and that job status, in turn, tends to covary with income levels. Taken as a whole, these factors have been shown to account for appreciable variability in retirement planning practices.

Personality Factors. The third motivational force that will be examined as a determinant of retirement planning and saving is personality. Personality traits have a more tacit influence when it comes to the task of planning for the future, but are nonetheless an important dimension. Conscientiousness, one of the traits in the Big Five Model (McCrae & Costa, 1999), has been used to study retirement planning in previous studies (Robinson, Demetre, & Corney, 2010). Conscientiousness refers to the extent to which one is mindful of planning and responsive to making preparations, and it is related to aspirational motivations in retirement (Robinson et al., 2010). This trait has also been shown to be predictive of another personality trait, future time perspective (Hershey & Mowen, 2000). As a trait, future time perspective indicates the extent to which individuals enjoy thinking about events in the distant future. Individuals who are more future oriented or who feel more connected to possible future events tend to be more effective at planning and saving for retirement than those who are not (Knoll, Tamborini, & Whitman, 2012; Wiener & Doescher, 2008).

Goals. The fourth motivational force when it comes to planning and saving is the nature and clarity of individuals' retirement goals. This is an important factor because individuals' actions are propelled largely by goal objectives (Austin & Vancouver, 1996), and goals are constantly being reshaped and reformed by outside factors, such as environmental forces, experiences, and future expectations (Pecchenino, 2011). In the case of retirement planning, goals have a strong influence on how and why people make

certain financial and planning decisions. The clarity of one's retirement goals, not the number of goals, is more likely to predict preparation for retirement (Noone, Stephens, & Alpass, 2010). Some individuals have retirement related savings goals and report having calculated their specific financial needs for retirement, whereas others report not even having begun to think about how they will survive financially during the post-employment period (Helman et al., 2011). It is clearly beneficial to calculate one's financial needs well in advance of retirement, as doing so provides a metric against which savings efforts may be measured, yet individuals may fail to do so because they do not think of it as worthwhile (Mayer, Zick, & Marsden, 2011).

Desire for a Satisfying Life. The sixth and final motivational force that will be examined as a determinant of retirement planning is the desire to achieve a reasonable level of life satisfaction after leaving the workforce. Financial security is a key component in having a high quality of life in retirement, and insufficient planning and saving is likely to hinder one's enjoyment during late life (Couture, 2011). Previous research (Quick & Moen, 1998) has integrated one's current life satisfaction into the framework of other variables to demonstrate that differences in planning behaviors impact quality of life in old age.

It has been demonstrated that multiple motivational factors are predictive of one's expectations of life satisfaction in retirement (Guitierrez & Hershey, 2011). Understanding the mechanisms that underlie retirement planning will be fundamental when it comes to understanding how individuals can achieve a high level of satisfaction later in life (Adams & Rau, 2011).

Finally, it should be acknowledged that, whereas psychological dimensions such as personality traits and goals may have an influence on the retirement planning process, these forces could be negated by inadequate financial resources. If an individual either does not have an income or an income that is inadequate, then saving for retirement may not be possible. College students may be particularly susceptible to this situation, due to low or non-existent incomes while in school and the increasing amounts of debt they are likely to incur just prior to beginning their main working years (Reed, 2011).

Role of Early Learning Experiences

In addition to the motivational forces identified in the previous section of this document, planning and saving practices may also be influenced by positive early financial learning experiences. Shobe and Sturm (2007) have made a strong argument that a lack of financial literacy among children and teenagers is a serious problem and that financial learning should begin as early in life as possible. Studies have shown that parental influences play a large part in how individuals go about forming their attitudes, beliefs, and behaviors, both in the area of finance (Jorgensen, 2010) and in other life domains (Webly & Nyhus, 2005). Early parental and social influences on retirement planning and saving have been found to have a significant effect on retirement goal clarity (Hershey et al., 2010) and on financial knowledge (Guiterrez & Hershey, 2011). Furthermore, having parents who planned for their own retirement is predictive of one's income (Dan, 2004), and income, in turn, has been shown to be predictive of savings contributions (Hira et al., 2009; Lunt & Livingstone, 1991).

While positive parental and family learning experiences can increase financial planning involvement, more formal financial education can also potentially make a

significant contribution (Bernheim et al., 2001). Some schools include personal finance components as part of the curriculum (Spielhofer, Kerr, & Gardiner, 2010), and focused education in personal economics and related areas may help to increase overall levels of financial literacy (van Rooij et al., 2011). Therefore, non-family early influences, such as school-based educational programs, in addition to parental influences should help to improve lifespan financial planning. In the present investigation, two different measures of early learning will be employed to assess the extent to which early financial learning experiences influence expectations of future retirement satisfaction with life.

Strengths and Limitations of Previous Research

The existing body of literature on retirement planning represents multiple strengths and limitations. In this section, some of the key strengths and limitations will be discussed. The strengths will be described first, followed by the limitations, and the conclusion will focus on ways in which the present investigation addresses certain limitations.

Two strengths of the existing literature on retirement planning include (i) the application of interdisciplinary viewpoints to the study of the topic, and (ii) the use of longitudinal research designs. Interdisciplinary viewpoints are necessary to understand the breadth of the topic, because retirement planning can be effectively viewed through a variety of different lenses. For example, from a personal finance perspective, it is interesting to examine how retirement planning practices impact the spending patterns of older adults. From a sociological perspective, one might be interested in changes that occur because of differences in planning among different groups of people. And from a psychological perspective, it is interesting to examine the way in which the interplay of

goals, time perspective, domain-specific knowledge, and future expectations relate to individual retirement planning decisions. Interdisciplinary studies are beneficial because they encompass multiple viewpoints within a single investigation, and by doing so provide a more comprehensive picture of the components that go into the planning process.

Another strength of the existing body of literature on retirement planning is an increase in recent years in large-scale longitudinal studies such as the Health and Retirement Study (Juster & Suzman, 1995), the Survey of Consumer Finances (Board of Governors of the Federal Reserve System, 2012), and the Retirement Confidence Survey (Employee Benefit Research Institute, 2012). Longitudinal research designs are often impractical because of participant mortality and the increased study expenses required. However, the study of retirement planning is best approached as a holistic, complex investigation, with consideration given to events that occur developmentally over time, throughout the course of individuals' lives. Therefore, longitudinal studies can contribute significantly to the understanding of the topic by providing a more comprehensive view of intra-individual change.

The existing literature on retirement planning also suffers from certain weaknesses. Three shortcomings include the fact that research in the area is dominated by economists, most studies have been conducted using only a small number of variables, and the role of positive early learning experiences in contributing to planning practices has largely been ignored.

Over the past three decades, economists have focused attention on the lack of retirement planning among the general population. However, economic studies are often

characterized by a focus on demographic factors alone (Adams & Rau, 2011; Hershey, Jacobs-Lawson, & Austin, 2013; Jacobs-Lawson, 2000), often ignoring psychological and social force dimensions that are associated with planning. It is often not possible to change an individual's demographic category (e.g., age), and there are psychological and motivational dimensions that may facilitate or inhibit certain behaviors, irrespective of one's demographic characteristics. Therefore, a broader view of planning (beyond mere demographic influences) is needed to fully understand why some individuals do and some don't plan and save for retirement. Furthermore, demographic factors are often studied as predictors of retirement planning practices, but it is rarely the case that demographic dimensions are causally related to planning and saving. For example, American men and women differ in their likelihood of planning and saving—which is a fact that is well documented. But identification of this gender difference doesn't *explain* why it is that men and women differ in planning tendencies. Presumably, gender differences arise from the different types of experiences men and women have growing up, the types of social pressures and expectations that exist regarding their interests and abilities, differences in cognitive factors such as their knowledge of the domain, and differences in personality dimensions that are related to saving and investing, such as one's tolerance for risk. What is needed, it seems, are studies that transcend the goal of merely identifying demographic differences in planning practices, to investigations that seek to explain why those demographic differences exist. A second limitation is that most studies of retirement planning include only a small number of independent variables. The process of financial planning for retirement involves a dynamic set of complex decisions, and it is difficult to study specific predictive indicators (such as financial knowledge) in

isolation of other determinants of behavior. For example, numerous studies have exclusively examined the role of financial knowledge when it comes to planning, and others have simply examined one's tolerance for investment risk. These types of investigations do shed light on financial planning behaviors, but they can only explain limited reasons for why some individuals do—and others do not—plan and save for retirement.

A third limitation is that studies of retirement planning typically focus on individuals' attitudes, thoughts, and perceptions exclusively at the time the study is conducted. Early childhood influences on attitudes toward planning and saving, and expectations individuals have about what the future may hold could heavily influence other variables related to planning practices, but retrospective and prospective reports are rarely considered. Not acknowledging the impact prior life experiences and expectations of the future have on behavior can only lead to partial or incomplete conclusions.

Design features of the present investigation will attempt to remedy some of the weaknesses identified above. One weakness is that studies are largely carried out from an economic perspective; this shortcoming will be remedied in the present study by including an array of psychological measures as predictor variables. A second weakness is that many prior studies are limited by focusing on only one or two major variables. This will be remedied by constructing a psychomotivational model that will include seven predictor variables. A final limitation is that participants' retrospective and prospective reports are rarely included in retirement studies. This will be remedied in this investigation by including measures of early financial learning experiences and measures of future expectations.

Present Investigation

The complex set of relationships among variables outlined in previous sections suggests that it makes sense to study retirement planning in the context of broad holistic models, rather than in the context of a small set of individual predictors. The idea of model testing is not a novel pursuit. Previous studies of personal finance (e.g., Dan, 2004; Hershey et al., 2007; Hershey, et al., 2010; Hira et al., 2009; Jorgensen, 2010; Wiener & Doescher, 2008) have taken this approach and have been successful in developing comprehensive models that explain appreciable amounts of variance in retirement planning practices. The present study will build upon previous investigations by constructing and testing a model designed to extend certain previously demonstrated relationships. This study will also contribute to the literature by using data from a sample that is younger than most age groups tested in previous investigations. Perhaps most importantly, the present study will contribute to the literature by adding an "early influences" component to a psychomotivational model of planning. This early influences dimension represents a truly novel aspect of this project relative to existing studies in this field. Furthermore, the present study is unique in that it will test a theoretically-based model from a lifespan perspective, encompassing not only the role of early influences and individuals' current perceptions, beliefs, and opinions about retirement, but also their expectations about future financial sufficiency.

The theoretical foundation for the current study draws heavily from the life course perspective (also known as life course theory) (Crosnoe & Elder, 2002; Elder, 1994; Elder, 1998a, 1998b; Umberson, Crosenoe, & Reczek, 2010). The life course perspective maintains that individuals' decisions are influenced by both past life events and by future

expectations. In terms of the former, positive early financial learning experiences are likely to influence the way individuals think about planning and saving money later in life. In terms of the latter (i.e., future expectations), there is a line of research that suggests individuals have preconceived notions about multiple future selves (Cinnirella, 1998; Hoyle & Sherill, 2006; Leondari, 2007; Markus & Nurius, 1986). Different decisions can lead to different outcomes, and perceptions of different possible future selves emerge from decisions made earlier in life. Thus, ideas of what the future is likely to hold are influenced not only by the past, but also expectations about the future. Therefore, when individuals make complex decisions (such as those required when planning for retirement), they are implicitly influenced by expectations of their future selves (Markus & Nurius, 1986). This provides an empirical rationale for including variables in the proposed model that tap expectations regarding future financial planning for retirement, and expectations regarding future retirement satisfaction with life.

Finally, propositions found in Image Theory (Beach & Mitchell, 1987) also provide a basis for the theoretical framework that will be used in the present investigation. Image Theory maintains that individuals do not use a formal analytical process when making significant life decisions (Beach, 1998); rather, they make decisions on the basis of ideas about how they will achieve their desired goals, how their personal morals, values, and beliefs relate to those goals, and the types of tactics and strategies that can be used to achieve those goals. Like the theories cited above, Image Theory posits that lifespan planning is the result of numerous previous decisions that build upon one another. Furthermore, Image Theory, the life course perspective, and the theoretical notion of multiple future selves all predict that life planning decisions are

impacted by previous consequential life decisions, external circumstances, and personal experiences.

Hypotheses

The goal of the present study is to test the theoretically and empirically grounded path model of retirement planning shown in Figure 1. As seen in the diagram, the model contains eleven different hypotheses that are cast across eight different constructs. All paths specified in the path model are expected to have beta weights with positive valences.

Hypothesis A indicates that expectations of success in financial planning for retirement will be predictive of one's expected satisfaction with life in retirement. This link has been demonstrated in a sample of retired adults (Quick & Moen, 1998), but has yet to be replicated among younger cohorts. It is also hypothesized that financial knowledge will be predictive of expectations of financial planning for retirement (hypothesis B), because previous research suggests that financial knowledge is related to effective financial planning for retirement. For example, a high level of financial knowledge is associated with being good at planning and saving for retirement (Adams & Rau, 2011; van Rooij et al., 2011), and financial knowledge has been shown to be predictive of one's level of planning activities and financial preparedness (Hershey et al., 2007).

Future time perspective is expected to be predictive of retirement goal clarity (hypothesis C; Hershey et al., 2007). The life course perspective would suggest that parental influences on saving will be predictive of future time perspective (hypothesis

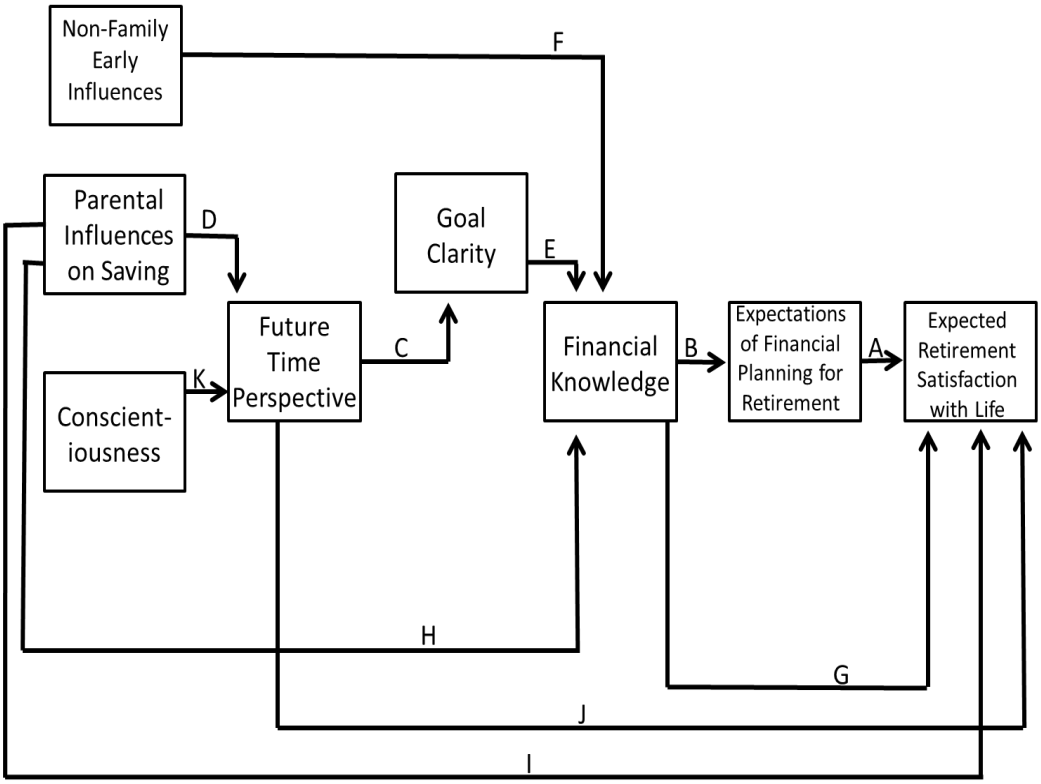

Figure 1. Hypothesized model of influences on retirement planning. All paths shown in the model are expected to have beta weights with positive valences.

D), and goal clarity is expected to predict financial knowledge (hypothesis E; Hershey et al., 2010). Furthermore, non-family influences on retirement planning, such as personal finance lessons one might be exposed to in secondary school, is expected to predict financial knowledge (hypothesis F; Bernheim et al., 2001).

Continuing with the predictions, previous research (Guiterrez & Hershey, 2011) suggests that financial knowledge will be predictive of expected satisfaction with life in retirement (hypothesis G). Moreover, parental influences on saving are posited to predict financial knowledge as well as expected retirement satisfaction with life (hypotheses H and I, respectively). Both of these predictions have been supported in a previous study of expected retirement satisfaction with life (Gutierrez & Hershey, 2011). That same study also revealed that future time perspective is predictive of expected satisfaction with life in retirement (hypothesis J). Hypothesis K suggests that conscientiousness will be predictive of future time perspective, a personality relationship that has also been demonstrated in previous investigations (Hershey & Mowen, 2000; Webley & Nyhus, 2006).

These eleven hypotheses comprise the theoretically-driven model that will be tested. It is important to note that much of the overall structure of the model is based on empirical findings from previous investigations. Hypotheses A, C, E, G, J, and K have each been demonstrated in past studies, as noted in the preceding paragraphs. The other hypotheses have been formed on the basis of theoretical or logical considerations.

CHAPTER II

METHOD

Participants

Data for the present investigation was obtained from a larger data collection effort designed to assess various domains of early financial learning, retirement knowledge, and planning behaviors. All participants were students attending a large, mid-western state university.

The mean age of the sample was 19.51 years (*SD* = 2.83), and 64.0 percent of the sample was female. The majority of the participants self-identified as being White (80.5 percent) and non-Hispanic (91.1 percent). The remaining racial and ethnic composition of the participant pool is as follows: Black, 4.3 percent; American Indian or Alaska Native, 4.2 percent; Asian, 1.8 percent; Native Hawaiian or Other Pacific Islander, 0.6 percent; Two or more races, 6.0 percent; and "other," 2.8 percent. Some 8.9 percent of the students self-identified as Hispanic or Latino. The average income for members of the sample was $2,719.60 (*SD* = $8,124), but the majority of the sample was currently unemployed (72.4 percent), and only 3.0 percent of the participants were working more than 32 hours per week.

Procedure

Participants completed an online questionnaire in order to earn partial credit in a

psychology course. The data collection was carried out at a time and place of each participant's choosing, and the study took approximately thirty minutes to complete.

The data were collected as follows. Individuals were recruited through the use of the university online data collection system. When participants logged on to the system, they were presented with a description of the study. If they clicked on a "complete survey" link, then they were directed to an online questionnaire that was developed using the web-based software SurveyGizmo (Widgix, 2012). When participants began the questionnaire, they were presented with an informed consent form and asked to indicate their consent. The participant then moved to the first page of the online questionnaire (see Appendix). The questions appeared in a variety of formats, including 7-point Likert-type scales, yes/no questions, drop-down menus, and open text boxes in which the participant was required to type a response. Upon completion of the survey, participants were directed to a debriefing page.

Scales and Measures

The present study utilized a number of different scales and measures. Some of these were existing scales that had been used in prior investigations and demonstrated to have sound psychometric properties. Others were newly developed specifically for the purposes of this investigation. Data were also collected on a number of demographic dimensions. Each of the scales and measures used in this study is described in detail below.

Future Time Perspective. The 5-item future time perspective scale is designed to measure the extent to which individuals are prone to think about the future, specifically in the context of retirement planning. The measure used in the present investigation is a

modified version of the Hershey et al. (2007) scale. A sample item is, *"I enjoy thinking about how I will live years from now in the future."* The scale uses a 7-point Likert-type response format (1 = *strongly disagree*; 7 = *strongly agree*). Data from the present study revealed a single factor structure and a coefficient alpha level of .89. The future time perspective score for each participant was the mean of the five items, with higher scores indicating a greater tendency toward future-oriented thinking. The mean score on this measure was 5.66, and the standard deviation was 1.09.

Financial Knowledge. The 3-item financial knowledge scale measures self-reported knowledge of financial planning for retirement (Hershey et al., 2010). A sample item is, *"I know more than most people about retirement planning."* The scale uses a 7-point Likert-type response format (1 = *strongly disagree*; 7 = *strongly agree*). Data from the present study revealed a single factor structure and a coefficient alpha level of .92. The financial knowledge score for each participant was the mean of the three items, with higher scores indicating higher levels of perceived financial knowledge. The mean score on this measure was 3.62, and the standard deviation was 1.56.

Retirement Goal Clarity. The 5-item retirement goal clarity scale measures the extent to which individuals report thinking about and setting specific goals for retirement (Stawski, Hershey, & Jacobs-Lawson, 2007). A sample item is, *"I have a clear vision of how life will be in retirement."* The scale uses a 7-point Likert-type response format (1 = *strongly disagree*; 7 = *strongly agree*). Data from the present study revealed a single factor structure and a coefficient alpha level of .91. The retirement goal clarity score for each participant was the mean of the five items, with higher scores indicating a greater

degree of retirement goal clarity. The mean score on this measure was 3.73, and the standard deviation was 1.52.

Conscientiousness. The 3-item conscientiousness scale was designed to measure conscientiousness as a cardinal personality trait (Hershey & Mowen, 2000; Mowen, 2000). A sample item is, *"I am organized."* The scale uses a 7-point Likert-type response format (1 = *strongly disagree*; 7 = *strongly agree*). Like the conscientiousness measure contained in the NEO-R (Costa & McCrae, 1995), this scale taps the extent to which individuals are efficient and precise when engaged on a task. Data from the present study revealed a single factor structure and a coefficient alpha level of .87. The conscientiousness score for each participant was the mean of the three items, with higher scores indicating higher levels of task-related conscientiousness. The mean score on this measure was 5.45, and the standard deviation was 1.19.

Retirement Satisfaction with Life. The 4-item expected retirement satisfaction with life scale was designed to be a modified version of the satisfaction with life scale developed by Diener, Larsen, and Griffin (1985). It is used to assess future expectations of satisfaction with life among individuals who are not yet retired (Guitierrez & Hershey, 2011). A sample item is, *"I expect that in retirement my life will be close to ideal."* The scale uses a 7-point Likert-type response format (1 = *strongly disagree*; 7 = *strongly agree*). Data from the present study revealed a single factor structure and a coefficient alpha level of .89. The retirement satisfaction with life score for each participant was the mean of the four items, with higher scores indicating expectations of greater satisfaction with life in retirement. The mean score on this measure was 5.04, and the standard deviation was 1.16.

Expectations of Financial Planning for Retirement. The 3-item expectations of financial planning for retirement scale is a new scale designed to assess participants' expectations of how easy or difficult they will find the task of retirement planning. A sample item is, *"Success at financial planning for retirement will be something that will come easily to me."* The scale uses a 7-point Likert-type response format (1 = *strongly disagree*; 7 = *strongly agree*). Data from the present study revealed a single factor structure and a coefficient alpha level of .84. The expectations of financial planning for retirement score for each participant was the mean of the three items, with higher scores indicating expectations of minimal difficulties in carrying out financial planning tasks. The mean score on this measure was 5.23, and the standard deviation was 1.09.

Parental Influences on Saving. The parental influences on saving measure represents a newly developed, 4-item scale designed to assess the effect one's parents had on each respondent when it comes to money management and saving. Sample items from this measure include: *"My parents had a strong influence on my current opinions about saving"* and *"Saving was an important lesson I learned as a child."* In a previous investigation, the latter item was used as a single-item indicator and shown to be a significant predictor of future time perspective in a path analysis model (Hershey et al., 2010). The measure uses a 7-point Likert-type response format (1 = *strongly disagree*; 7 = *strongly agree*). Data from the present study revealed a single factor structure and a coefficient alpha level of .86. The parental influences on saving score for each participant was the mean of the four items, with higher scores indicating a greater degree of positive parental influences on saving. The mean score on this measure was 5.67, and the standard deviation was 1.24.

Non-Family Early Learning. The 5-item non-familial early learning measure is designed to assess financial knowledge derived during childhood or adolescence from sources beyond one's family or parents. A sample item is, *"In school I took a course on money management, investing, or personal finance."* The response format for each of the items was dichotomous (0 = *no*; 1 = *yes*). The total score for each participant was the sum of the five dichotomous items, and the degree of internal consistency was found to be adequate (KR-20 = .67). Higher scores on this measure indicate more in the way of financial learning experiences in school or community-based settings. The mean score on this measure was 0.45, and the standard deviation was 0.09.

CHAPTER III

RESULTS

The data were cleaned and examined for skew, kurtosis, outliers, and any other possible issues that may lead to distortions or violate the assumptions of general linear model analyses. Prior to testing the hypothesized model shown in Figure 1, a measurement model was created to ensure that the factor structure of the items were as hypothesized for each scale. One independent variable, the non-family early influences measure, was not included in the measurement model because it utilized a dichotomous response format. The measurement model was computed using the Analysis of Moments Structures (AMOS) software version 19.0 (Arbuckle, 2010). Model fit indices for the measurement and path model were interpreted according to criteria established by Hu and Bentler (1999), as well as Hooper, Coughlan, & Mullen (2008).

The measurement model, which included seven scales, was found to be a good fit to the data, $\chi^2(303) = 1221.24$, $p < .01$, *TLI* = .92; *CFI* = .93; *RMSEA* = .07. No appreciable cross-loadings were observed and the model fit could not be improved upon by re-specifying paths to non-hypothesized constructs. In sum, the computation of this measurement model demonstrates empirical evidence that the items for the various scales loaded on their respective factors, which serves to pave the way to compute the path analysis model shown in Figure 1.

The hypothesized path model was then tested in order to compute values for the eleven path parameters and establish metrics reflecting goodness-of-fit. Exogenous variables were allowed to correlate. As is often the case when using SEM software, the initial run of the model was found to have a less than adequate fit, $\chi^2(14) = 433.17$, $p < .01$, *TLI* = .55, *CFI* = .78, *RMSEA* = .20. Modification indices revealed that the fit could be improved upon by deleting the path from parental influences on saving to retirement satisfaction with life (path I). Modification indices also suggested that fit could be improved by adding three new paths to the model: one from conscientiousness to expectations of financial planning for retirement, a second from non-family early influences to goal clarity, and a third from future time perspective to expectations of financial planning for retirement. It was decided that all of these paths were theoretically plausible; therefore, each was added to the revised model.

Next, a revised path model was tested that contained all eight original variables, but now thirteen paths. In this model, exogenous variables were again allowed to correlate. The resulting specification was shown to be a good fit to the data, $\chi^2(12) = 68.74$, $p < .01$, *TLI* = .93, *CFI* = .97, *RMSEA* = .08. Moreover, all thirteen path parameters were shown to be statistically significant at the .01 level. The revised model, containing R^2 values for each endogenous variable and standardized beta weights for each path, is shown in Figure 2. As seen in the figure, this model did an excellent job in accounting for variance among the endogenous variables, capturing between 22 to 59 percent of the total variance operating for each construct.

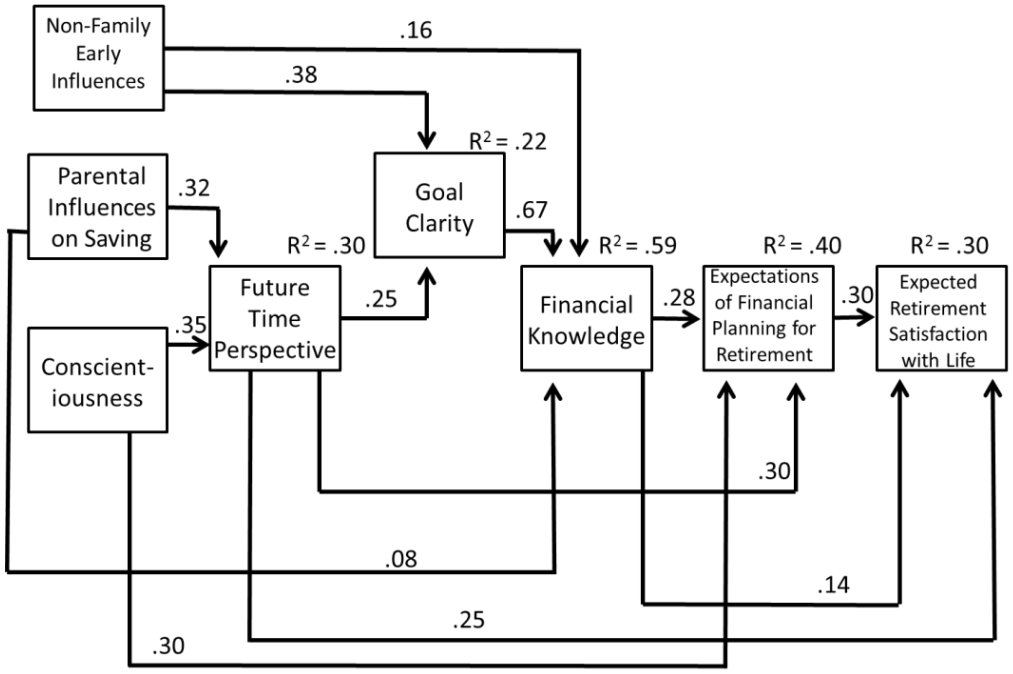

Figure 2. Observed model of influences on retirement planning. All parameters shown are standardized beta weights. All paths were found to be statistically significant at the .01 level.

CHAPTER IV

DISCUSSION

The broad goal of the present investigation was to test a theoretically driven, lifespan model of retirement planning. It was expected that the hypothesized paths shown in Figure 1 would reveal a number of important relationships between key retirement planning variables, and that the model would account for appreciable amounts of variance in the endogenous variables. The revised path model met those expectations. The findings provide important insights into the way college students think about retirement.

Two overarching take-away messages are worth noting. The first is that the field of forces that influence the anticipated retirement planning practices of young (mostly non-working) college students is quite similar to the motivational forces that shape the planning and saving behaviors of older, working adults. This is seen by the fact that many of the variables (and relationships between variables) identified as important in the present study have been shown to also play a role in investigations carried out with members of older cohorts (Hira et al., 2009; Hershey et al., 2007; Hershey et al., 2010). The second broad finding is that early financial influences do indeed have an effect on individuals' motives to save for retirement, which is a topic that has received scant attention in the extant literature on financial and retirement planning (Hershey et al.,

2013; Doyle, 2007; Jorgenson, 2010; Lusardi et al., 2010). Both findings suggest important theoretical and applied implications, which are discussed in the following sections.

Theoretical Implications

Three different theoretical frameworks were used to position the present investigation within the existing literature. These frameworks were the life course perspective (Elder, 1998a), image theory (Beach & Mitchell, 1987), and the theory of future selves (Markus & Nurius, 1986). The findings from the path model tested were consistent with each of these theoretical frameworks.

One key proposition of the life course perspective is that individuals' lives are embedded in social contexts (Elder, 1998a). An individual's family structure is one such social context. Therefore, it is not surprising that parental influences on saving were predictive of individuals' future time perspective, because for many college students in this study forward-thinking attitudes were promoted in the social context of the home environment. The life course perspective also suggests that individuals have "linked lives," and that each individual is influenced by significant other individuals in his or her life sphere (Elder, 1998a). This, too, is supported by the data in that individuals who had positive parental influences developed positive perceptions and attitudes toward effective financial planning for retirement.

Another key element of the life course perspective is human agency, or the idea that individuals shape their lives by choosing to engage (or choosing not to engage) in certain types of activities (Elder, 1994). The role of human agency is certainly quite important in the United States when it comes to retirement planning, as the burden of

responsibility for managing long-term investments has been shifted in recent years from employers to individual workers. Both of these life course theory elements—linked lives and human agency—provide theoretical support for the observed relationship between the non-family early influences measure and financial knowledge. Being exposed to or choosing to engage in non-family related financial learning activities during one's formative years is consistent with the concept of human agency, and it appears that the nature of these experiences will help shape individuals' future behaviors when it comes to retirement planning.

A second theoretical framework that was used as a foundation for the present investigation was image theory (Beach, 1998; Beach, 1990; Beach & Mitchell, 1987). The "trajectory image" in image theory refers to a decision-maker's goal state, or in other words, the state that the individual desires to achieve in the future. This notion of a future goal state represented by the trajectory image is conceptually similar to the idea of "future selves" proposed by Markus and Nurius (1986). In this investigation, the extent to which one thinks about future goal states or future selves is best represented by the measure of future time perspective, and this measure was predictive of retirement goal clarity, expectations of financial planning for retirement, and one's expected quality of life in retirement. Taken together, this cluster of findings provides strong empirical support for the closely aligned constructs of goals and visions of the future.

Beyond the trajectory image, image theory posits that individuals make decisions in the context of two other images: the strategic image and the value image (Beach, 1990; Beach & Mitchell, 1987). The strategic image represents the various plans and tactics individuals use to achieve their goals. In terms of the present investigation, financial

knowledge is a proxy indicator for the strategic image. The third of the three images, the value image, represents personal values, morals, and ethics that the decision-maker holds. In the present investigation, the early influence variables—parental influences on saving and non-family early influences—could be considered to be indicative of personal values, because they represent personal beliefs about the world that the individual has carried forward into adulthood. For example, a child's parents could shape a child's values about financial responsibility, and these values could conceivably continue to be prominent for decades to come. In the observed model of retirement planning, both parental influences on saving and non-family early influences were predictive of financial knowledge, which are reflective of the theoretical link between one's value image and strategic image. Financial knowledge, in turn, was predictive of variables regarding future expectations (expectations of financial planning for retirement and expected quality of life in retirement), which is reflective of the theoretical link between one's strategic image and trajectory image. In short, each of these observed empirical relationships is consistent with the flow of influences posited in Beach's theory.

Another theoretical implication of the present investigation has to do with the contribution of new scales and measures to the existing research literature on retirement planning. Three new measures were included in this study: the parental influences on saving scale, the non-family early influences measure, and the expectations of financial planning for retirement scale. Each of these measures was found to demonstrate reasonable psychometric properties and predictive validity. In addition, each of the measures is relatively short and easy to administer. Therefore, in future investigations

these measures could easily be included in questionnaires designed to tap precursors to, or outcomes of, retirement planning practices.

The parental influences on saving scale and the non-family early influences measure could both be particularly useful in seeking to understand the way in which financial attitudes are shaped during different developmental stages. Financial literacy levels among members of the general population are low (Lusardi & Mitchell, 2011a; Lusardi & Mitchell, 2011b), and one proposed solution to this problem is to improve financial literacy starting early in life (Bernheim et al., 2001). That being the case, it would be useful to have good predictive measures of positive financial attitudes and values that are cultivated in childhood.

Theoretical implications also exist in terms of the way in which personality influences individuals' retirement planning decisions. Two personality variables—conscientiousness and future time perspective—were included in the hypothesized model. In previous investigations, conscientiousness has been shown to be associated with future time perspective and knowledge of financial planning (Hershey & Mowen, 2000; Webley & Nyhus, 2006). In the observed model, the first of these two findings was replicated. Furthermore, the observed model also revealed that conscientiousness was predictive of expectations of financial planning for retirement, which has not previously been demonstrated. This provides further support for using conscientiousness as a robust personality indictor in future studies of financial planning for retirement. Given that individuals' levels of conscientiousness tend to be stable and not likely to change over time (Gallagher, Fleeson, & Hoyle, 2010), then this may be a barrier to effective retirement planning for individuals who have low levels of this trait. However, for an

intervention specialist, having solid information about levels of this trait in a client could be helpful. If a financial advisor is aware that an individual has a low level of conscientiousness, then he or she may choose to advise the client in such a way that promotes financial knowledge and goal clarity, which are both dimensions that are malleable and can be improved upon through education.

The other personality variable included in this study was future time perspective. Like conscientiousness, the future time perspective measure served to both replicate and extend associations with other existing measures. Future time perspective was predictive of retirement goal clarity in this college student sample, which is a relationship that has previously been demonstrated in an older adult sample (Hershey et al., 2007). Furthermore, future time perspective was predictive of expectations of financial planning for retirement, which is an effect that has not previously been demonstrated. Both of these relationships were relatively strong, so this provides further support for using a measure of time perspective when conducting studies of retirement planning. Again, knowledge of this relationship could potentially be useful for financial advisors with clients who have low levels of future time perspective. If an advisor is aware of such a situation, then he or she may be able to work with the client to promote forward-thinking attitudes so as to clarify goals and expectations for retirement.

A final, broader theoretical implication has to do with the use of multivariate models to capture complex decision making processes. The goal of understanding complex thought has been the subject of increased attention in recent years (Bakken, 2008; Bargh, 2011; Klein, 2005; Qudrat-Ullah, 2008). In the present investigation, eight different variables were analyzed in relation to one another. This resulted in a holistic

picture of the forces that drive an individual to save for retirement. The results from this analytic effort serve to replicate and extend existing multivariate models of retirement planning (e.g., Adams & Rau, 2011; Guiterrez & Hershey, 2011; Hershey et al., 2007; Hershey et al., 2010; Hershey & Mowen, 2000; Webley & Nyhus, 2006). The complex nature of the model tested reiterates the concept of human agency in the life course perspective (Elder, 1994), which suggests individuals make decisions within the context of multiple forms of opportunities and constraints.

Applied Implications

From an applied perspective, the findings from this study should help retirement counselors and financial professionals develop more effective and efficient approaches to intervention. In the present investigation, early learning measures were predictive of financial knowledge, future time perspective, and retirement goal clarity. Financial knowledge, retirement goal clarity, and future time perspective, in turn, have all been linked to effective retirement planning (Adams & Rau, 2011; Hershey et al., 2010; Hershey et al., 2007; van Rooij et al., 2011). This is useful to know because although a young child may not be able to fully understand concepts such as financial knowledge, future time perspective, and goal clarity, the child would likely be able to understand very basic ideas about the importance of saving money. A child could use the idea of spending and saving to engage in a developmentally-appropriate activity, such as "playing store" with friends. In fact, there is some evidence to suggest that scaffolding financial education in this fashion could help college-aged individuals to reach a solid level of financial knowledge by their early twenties (Cowen, Blair, & Taylor, 2011). Indeed, early financial learning experiences can translate into positive attitudes toward money

management, saving, and financial independence if they are introduced to the child at the right time and in a meaningful manner.

By and large, the findings from the path model suggest that if savings-related predispositions were cultivated during childhood, then it would have ramifications for attitudes, beliefs, and behaviors once the child becomes an adult. This empirical observation provides support for the use of forward-thinking educational initiatives such as the one promoted by the Jump$tart program (Jump$tart Coalition, 2012), which aims to increase financial literacy, and youth individual development accounts, which are designed to encourage children to begin thinking about retirement at a young age (Shobe & Sturm, 2007). Furthermore, educators and school administrators should be aware of the potential benefits of including personal finance modules in school curriculums, and parents should be advised of ways in which to structure a positive financial learning environment at home. In addition, parents might also benefit from knowing that financial information should be framed in a way that promotes the setting of future financial goals. For example, it would be advantageous to give a child a task to earn (real or hypothetical) money, then ask the child to set a goal for what he or she would like to save for or purchase. In light of the findings from this study pertaining to early financial influences, goal clarity, and financial knowledge, techniques such as this may be more effective than simply instructing a child to "save money."

Another applied implication has to do with making parents aware of the way in which early financial learning experiences can be beneficial to children. In the observed model, parental influences on saving was directly predictive of future time perspective. Thus, parents can play a vital role in helping their children foster a long future term

perspective when it comes to planning. This suggests that there exists a need for workshops, seminars, and community events designed to educate parents about the value of being a positive financial role model for their children.

It is encouraging that early financial education may be one way to lead individuals to become more effective retirement planners. Some psychomotivational factors that pertain to retirement planning research—such as personality dimensions—tend not to be malleable (Gallagher et al., 2010). However, early financial learning is an experiential dimension that can be addressed at the level of societal influences. This could be done by increasing broad-based financial learning opportunities, with the hope that doing so would lead individuals to make better financial decisions in adulthood.

Limitations and Future Directions

Although the results of the present study offer a number of valuable insights, certain limitations should be acknowledged. One limitation is that the study was conducted by means of a self-report questionnaire. Consequently, it is possible that some responses were subject to a self-serving bias, socially desirable responding (Crowne & Marlowe, 1960), or demand characteristics such as the good subject effect (Nichols & Maner, 2008). Taken together, these biases could have contributed to a degree of parameter inflation due to common methods variance. Moreover, on the measures of early learning, participants could have had flawed recollections about their parents' influence on their perceptions of savings or financial lessons they learned in school or community-based settings. On the financial knowledge measure, participants may have underestimated (or overestimated) their actual level of knowledge. On the expectations of financial planning for retirement measure and the expected retirement satisfaction with

life measure, participants' expectations may be systematically different from their actual future behavior. Perhaps in future studies objective measures for these constructs and proxy reports could be used in conjunction with self-report measures. For example, an objective measure of financial knowledge could be administered in conjunction with a self-report literacy measure. In the case of proxy measures, a respondent's parents could be queried about the nature of the financial training they provided to their children as an adjunct to the respondent's self-reported measure of early learning.

A second limitation of this study involves the fact that the investigation relied on correlational data, which made it impossible to draw definitive causal conclusions regarding the relationships between constructs (Cliff, 1983). One way to address this concern would be to use a longitudinal research design that employs groups of children who have received different manipulations. That is, one group of children could be assigned to complete a financial literacy program; a different group could have parents who received money management training, and a third group of children could serve as a no-intervention control. Assessments for the three different groups could be made on multiple occasions over time, which would allow for certain temporally-based causal inferences to be drawn about the nature of how one learns about the retirement planning process.

A third limitation involves the generalizability of the findings. In this investigation, all participants were college students. This was the target age group, but the focus on this specific age cohort limits the extent to which the findings can be applied to other age groups. In addition, the sample was fairly homogeneous in terms of its racial and ethnic make-up and the geographic region from which they were sampled.

Investigators might be encouraged to replicate the present findings on samples that are more representative of college students at large in terms of age, race, ethnicity, and geographic region. A related consideration is that the findings may not generalize to other young adults who are not attending college. Young adults who attend college are likely to be in a superior financial situation relative to peers because of the high costs affiliated with a college education. Therefore, young, working adults who are outside of the college environment may have different perceptions of retirement planning. Limited financial resources could make it impossible for an individual to save for retirement. Therefore, these individuals may face a situation in which they have a high willingness to save, but not have adequate investment opportunities (Hershey et al., 2013).

Another potentially valuable future research direction would involve developing more comprehensive and varied measures of early learning designed to assess not only positive early influences, but negative influences as well. Negative early financial learning influences (such as parents who are particularly poor financial role models) may lead to poor attitudes toward financial planning among children, thereby inhibiting their ability to save. Conversely, it is possible that negative early influences could serve to motivate individuals to plan and save, because one may recognize that they do not want to end up in a situation similar to their parents' (negative) financial state.

Conclusion

The present study offers a number of important insights into the prominance of early financial learning experiences in relation to a variety of psychological and motivational factors linked to retirement planning. Furthermore, the results serve as a replication and extension of previous multivariate models of retirement planning (Dan,

2004; Guiterrez & Hershey, 2011; Hershey et al., 2007; Hershey et al., 2010; Hershey & Mowen, 2000; Webley & Nyhus, 2006).

The purpose of this investigation was to examine the way in which motivational forces known to underlie retirement planning practices may be influenced by positive financial learning experiences one has during childhood. Toward this end, thirteen hypotheses were tested in the context of a holistic path model, and it was found that the majority of the predictions were supported. Despite the fact that participants in this sample were college students, many of the observed empirical relationships were found to be consistent with those seen in previous investigations that have been carried out with middle-aged and older adults. It is also noteworthy that positive, early financial learning experiences served as significant (direct or indirect) predictors of anticipated retirement planning behaviors, and ultimately, one's expected future quality of life. This suggests that these early learning experiences may play an important role in structuring one's retirement planning practices later in life.

Finally, the results from this study contribute to the existing body of literature on the psychology of retirement planning. By identifying ways to facilitate effective planning and saving behaviors, educators, retirement counselors, and financial professionals will be in a better position to motivate individuals to plan and save for old age. For example, if financial professionals are aware of the fact that early learning experiences, goals, and future time perspective collectively have a strong influence on the planning process, then they will be in a better position to cultivate those specific dimensions when working with clients. To the extent that intervention specialists are aware of the range of forces that motivate individuals to plan and save for the future, they

will have keen insights into how to nurture their clients in such a way as to maximize their planning potential. If professionals are effective at achieving these ends, then they will stand to maximize not only individuals' financial resources, but also the quality of life they can expect to encounter in old age.

REFERENCES

Adams, G. A., & Rau, B. L. (2011). Putting off tomorrow to do what you want today: Planning for retirement. *American Psychologist, 66,* 180-192. doi: 10.1037/a0022131

Anderson, S. G., Zhang, M., & Scott, J. (2004). Targeting financial management training at low-income audiences. *Journal of Consumer Affairs, 38,* 167–177. doi: 10.1111/j.1745-6606.2004.tb00

Arbuckle, J. L. (2010). *IBM SPSS Amos 19 user's guide*. Chicago, IL: Amos Development Corporation.

Austin, J. T., & Vancouver, J. B. (1996). Goal constructs in psychology: Structure, process, and content. *Psychological Bulletin, 120,* 338-375. doi: 10.1037/0033-2909.120.3.338

Bakken, B. E. (2008). On improving dynamic decision-making: Implications from multiple-process cognitive theory. *Systems Research and Behavioral Science, 25,* 493-501. doi: 10.1002/sres.906

Bargh, J. (2011). Unconscious thought theory and its discontents: A critique of the critiques. *Social Cognition, 29,* 629-647. doi: 10.1521/soco.2011.29.6.629

Beach, L. R. (1990). *Image theory: Decision making in personal and organizational contexts.* Chichester, UK: Wiley.

Beach, L. R., & Mitchell, T. R. (1987). Image theory: Principles, goals, and plans in decision making. *Acta Psychologica, 66,* 201-220. doi: 10.1016/0001-6918(87)90034-5

Beach, L. R. (Ed.). (1998). *Image theory: Theoretical and empirical foundations.* Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Bernheim, B. D., Garrett, D. M., & Maki, D. M. (2001). Education and saving: The long-term effects of high school financial curriculum mandates. *Journal of Public Economics, 80*, 435-465. doi: 10.1016/S0047-2727(00)00120-1

Board of Governors of the Federal Reserve System. (2012). Survey of consumer finances [Data file]. Retrieved from http://www.federalreserve.gov/econresdata/scf/scf_2010survey.htm

Cinnirella, M. (1998). Exploring temporal aspects of social identity: The concept of possible social identities. *European Journal of Social Psychology, 28*, 227-248. doi: 10.1002/(SICI)1099-0992(199803/04)28:2<227::AID-EJSP866>3.0.CO;2-X

Cliff, N. (1983). Some cautions concerning the application of causal modeling methods. *Multivariate Behavioral Research, 18,* 115-126.

Costa, P. T. Jr., & McCrae, R. R. (1995). Domains and facets: Hierarchical personality assessment using the revised NEO Personality Inventory. *Journal of Personality Assessment, 64,* 21-50. doi:10.1207/s15327752jpa6401_2

Couture, L. (2011). Planning for retirement. *Activities, Adaptation, and Aging, 35*, 267-273. doi: 10.1080/01924788.2011.602927

Cowan, J., Blair, W., & Taylor, S. (2011). The use of scaffolding in the financial planning classroom: An Australian case study. *Australian Accounting and Business Finance Journal, 5,* 3-16.

Crosnoe, R., & Elder, G. H. Jr. (2002). Successful adaptation in the later years: A life course approach to aging. *Social Psychology Quarterly, 65,* 309-328.

Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24,* 349-354. doi: 10.1037/h0047358

Croy, G., Gerrans, P., & Speelman, C. (2010). The role and relevance of domain knowledge, perceptions of planning importance, and risk tolerance in predicting savings intentions. *Journal of Economic Psychology, 31,* 860-871. doi: 10.1016/j.joep.2010.06.002

Dan, A. A. (2004). *What are people doing to prepare for retirement? Structural, personal, work, and family predictors of planning.* Doctoral dissertation, Case Western Reserve University. DAI-A 65/01, 251. Retrieved from: http:etd.ohiolink.edu/view.cgi/Dan%20Amy%20Anne.pdf?case1079241195

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49,* 71-75. doi: 10.1207/s15327752jpa4901_13

Doyle, N. (2007). Children's pensions: How to develop an accessible and understandable personal savings habit that produces an adequate retirement income. *Pensions, 12,* 213-216. doi: 10.1057/palgrave.pm.5950057

Elder, G. H., Jr. (1998a). The life course and human development. In R. M. Lerner (Ed.), *Handbook of Child Psychology: Vol. 1. Theoretical models of human development,* 5th ed., (pp. 939-991). New York: Wiley.

Elder, G. H., Jr. (1998b). The life course as developmental theory. *Child Development, 69,* 1-12. doi: 10.1111/j.1467-8624.1998.tb06128.x

Elder, G. H., Jr. (1994). Time, human agency, and social change: Perspectives on the life course. *Social Psychology Quarterly, 57,* 4-15.

Employee Benefit Research Institute (2012). Retirement confidence survey [Data file]. Retrieved from http://www.ebri.org/surveys/rcs/

Gallagher, P., Fleeson, W., & Hoyle, R. H. (2010). A self-regulatory mechanism for personality trait stability: Contra-trait effort. *Social Psychological and Personality Science, 2,* 335-342. doi: 10.1177/1948550610390701

Goldsmith, E., & Goldsmith, R. E. (1997). Gender differences in perceived and real knowledge of financial investments. *Psychological Reports, 80,* 236-238. doi: 10.2466/PR0.80.1.236-238

Goldsmith, R. E., Goldsmith, E. B., & Heaney, J. G. (1997). Sex differences in financial knowledge: A replication and extension. *Psychological Reports, 81,* 1169-1170. doi: 10.2466/pr0.1997.81.3f.1169

Gutierrez, H. C. & Hershey, D. A. (2011, November). *Expectations of satisfaction with life in retirement*. Poster presented at the 64th meeting of the Gerontological Society of America. Boston, MA.

Heckman, S. J., & Grable, J. E. (2011). Testing the role of parental debt attitudes, student income, dependency status, and financial knowledge have in shaping financial self-efficacy among college students. *College Student Journal, 45*, 51-64.

Helman, R., Copeland, C., & VanDerhei, J. (2012). *The 2012 Retirement Confidence Survey: Job Insecurity, Debt Weigh on Retirement Confidence, Savings* (Issue Brief No. 369). Washington, D. C.: EBRI. Retrieved from http://www.ebri.org/publications/ib/index.cfm?fa=ibDisp&content_id=5017

Hershey, D. A. (2004). Psychological influences on the retirement investor. *CSA Journal, 22*, 31-39.

Hershey, D. A., Henkens, K., & van Dalen, H. P. (2010). Aging and financial planning for retirement: Interdisciplinary influences viewed through a cross-cultural lens. *International Journal of Aging and Human Development, 70*, 1-38. doi: 10.2190/AG.70.1.a

Hershey, D. A., Jacobs-Lawson, J.M., & Austin, J. T. (2013). Effective financial planning for retirement. In M. Wang (Ed.), *The Oxford handbook of retirement* (pp. 402-430). New York: Oxford University Press, Inc.

Hershey, D. A., Jacobs-Lawson, J. M., McArdle, J. J., & Hamagami, F. (2007). Psychological foundations of financial planning for retirement. *Journal of Adult Development, 14*, 26-36. doi: 10.1007/s10804-007-9028-1

Hershey, D. A. & Mowen, J. C. (2000). Psychological determinants of financial preparedness for retirement. *The Gerontologist, 40*, 687-697.

Hira, T. K., Rock, W. L., & Loibl, C. (2009). Determinants of retirement planning behaviour and differences by age. *International Journal of Consumer Studies, 33,* 293-301. doi: 10.1111/j.1470-6431.2009.00742.x

Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modeling: Guidelines for determining model fit. *Journal of Business Research Methods, 6,* 53-60.

Hoyle, R. H., & Sherrill, M. R. (2006). Future orientation in the self-system: Possible selves, self-regulation, and behavior. *Journal of Personality, 74,* 1673-1696. doi: 10.111/j.1467-6494.2006.00424.x

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6,* 1-55. doi: 10.1080/10705519909540118

Jacobs-Lawson, J. M. (2000). *Influences of gender and investment strategies on retirement savings: A review of the psychological and economic literature*. (Unpublished comprehensive exam). Oklahoma State University, Stillwater, OK.

Jorgensen, B. L. (2010). Financial literacy of young adults: The importance of parental socialization. *Family Relations, 59,* 465-478. doi: 10.1111/j.1741-3729.2010.00616.x

Jump$tart Coalition (2012). *Jump$tart Coalition for Personal Financial Literacy*. Retrieved from http://jumpstart.org/about-us.html

Juster, F., & Suzman, R. (1995). An overview of the health and retirement study. *Journal of Human Resources, 30,* S7-S56.

Klein, J. (2005). The contributions of a decision support system to complex educational decisions. *Educational Research and Evaluation, 11,* 221-234. doi: 10.1080/13803610500101140

Knoll, M. A. Z., Tamborini, C. R., & Whitman, K. (2012). I do…want to save: Marriage and retirement savings in young households. *Journal of Marriage and Family, 74,* 86-100. doi: 10.1111/j.1741-3737.2011.00877.x

Lee, W. K. M., & Law, K. W. K. (2004). Retirement planning and retirement satisfaction: The need for a national retirement program and policy in Hong Kong. *Journal of Applied Gerontology, 23,* 212-233. doi: 10.1177/07334648042668591

Leondari, A. (2007). Future time perspective, possible selves, and academic achievement. *New Directions for Adult and Continuing Education, 114,* 17-26. doi: 10.1002/ace.253

Litwin, H., & Sapir, E. V. (2009). Perceived income adequacy among older adults in 12 countries: Findings from the survey of health, ageing, and retirement in Europe. *The Gerontologist, 49,* 397-406. doi: 10.1093/geront/gnp036

Lunt, P. K., & Livingstone, S. M. (1991). Psychological, social, and economic determinants of saving: Comparing recurrent and total savings. *Journal of Economic Psychology, 12,* 621-641. doi: 10.1016/0167-4870(91)90003-C

Lusardi, A., & Mitchell, O. S. (2011a). Financial literacy around the world: An overview. *Journal of Pension Economics and Finance, 10,* 497-508. doi: 10.1017/S1474747211000448

Lusardi, A. & Mitchell, O.S. (2011b). Financial literacy and retirement planning in the United States. *Journal of Pension Economics and Finance, 10,* 509-525. doi: 10.1017/S147474721100045x

Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. *The Journal of Consumer Affairs, 44,* 358-380. doi: 10.1111/j.1745-6606.2010.01173.x

Mandell, L., & Klein, L. S. (2007). Motivation and financial literacy. *Financial Services Review, 16,* 105-116.

Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist, 41*, 954-969. doi: 10.1037/0003-066X.41.9.954

Mayer, R. N., Zick, C. D., & Marsden, M. (2011). Does calculating retirement needs boost retirement savings? *The Journal of Consumer Affairs, 45*, 175-200. doi: 10.1111/j.1745-6606.2011.01199.x

McCormick, M. H. (2009). The effectiveness of youth financial education: A review of the literature. *Journal of Financial Counseling and Planning, 20,* 70-79.

McCrae, R. R., & Costa, P. T. Jr. (1999). A five-factor theory of personality. In L. A. Pervin & P. O. John (Eds.), *Handbook of Personality: Theory and Research*, 2nd ed., (pp. 139-153). New York: The Guilford Press.

Mowen, J. C. (2000). *The 3M Model of Personality: Theory and Empirical Applications to Consumer Behavior*. Boston: Kluwer Academic Press.

Nichols, A. L., & Maner, J. K. (2008). The good-subject effect: Investigating participant demand characteristics. *The Journal of General Psychology, 135*, 151-166. doi: 10.3200/GENP.135.2.151-166

Noone, J. H., Stephens, C., & Alpass, F. (2010). The process of retirement planning scale (PRePS): Development and validation. *Psychological Assessment, 22*, 520-531. doi: 10.1037/a0019512

OECD INFE (2011). *Measuring financial literacy: Questionnaire and guidance notes for conducting an internationally comparable survey of financial literacy.* Paris: OECD.

OECD (2005). *Recommendation on principles and good practices for financial education and awareness*. Retrieved from http://www.oecd.org/dataoecd/7/17/35108560.pdf

Pecchenino, R. A. (2011). Preferences, choice, goal attainment, satisfaction: That's life? *The Journal of Socio-Economics, 40,* 237-241. doi: 10.1016/j.socec.2011.01.004

Qudrat-Ullah, H. (2008). Future directions on complex decision making using modeling and simulation decision support. In H. Quadrat-Ullah, J. M. Spector, & P. I. Davidsen (Eds), *Complex Decision Making: Theory and Practice* (pp. 323-337). Cambridge, MA: Springer.

Quick H. E. & Moen, P. (1998). Gender, employment, and retirement quality: A life course approach to the differential experiences of men and women. *Journal of Occupational Health Psychology*, *3*, 44-64. doi: 10.1037/1076-8998.3.1.44

Reed, M. (2011). *Student debt and the class of 2010* (Institute for College Access and Success Report). Retrieved from http://projectonstudentdebt.org/files/pub/classof2010.pdf

Robinson, O. C. Demetre, J. D. & Corney, R. (2010). Personality and retirement: Exploring the links between the Big Five personality traits, reasons for retirement and the experience of being retired. *Personality and Individual Differences, 48,* 792-797. doi: 10.1016/j.paid.2010.01.014

Roszkowski, M. J., & Grable, J. E. (2010). Gender differences in personal income and financial risk tolerance: How much of a connection? *The Career Development Quarterly, 58*, 270-275. doi: 10.1002/j.2161-0045.2010.tb00192.x

Shobe, M. A., & Sturm, S. L. (2007). Youth individual development accounts: Retirement planning initiatives. *Children & Schools, 29*, 172-181.

Spielhofer, T., Kerr, D., & Gardiner, C. (2010). *Personal finance education: Effective practice guide for schools.* Slough, UK: National Foundation for Educational Research.

Stawski, R. S., Hershey, D. A., & Jacobs-Lawson, J. M. (2007). Goal clarity and financial planning activities as determinants of retirement savings contributions. *International Journal of Aging and Human Development, 64*, 13-32. doi: 10.2190/13GK-5H72-H324-16P2

Umberson, D. Crosnoe, R., & Reczek, C. (2010). Social relationships and health behavior across the life course. *Annual Review of Sociology, 36,* 139-157. doi: 10.1146/annurev-soc-070308-120011

Van Dalen, H. P., Henkens, K., & Hershey, D. A. (2010). Perceptions and expectations of pension savings adequacy: A comparative study of Dutch and American workers. *Ageing & Society, 30,* 731-754. doi: 10.1017/SoI44686Xo9990651

VanDerhei, J., & Copeland, C. (2010). *The EBRI retirement readiness rating: Retirement income preparation and future prospects.* (Issue Brief No. 344). Washington, D. C.: EBRI. Retrieved from http://ebri.org/publications/ib/index.cfm? fa=ib Disp&content_id=4593

Van Rooij, M. C. J., Lusardi, A., & Alessie, R. J. M. (2011). Financial literacy and retirement planning in the Netherlands. *Journal of Economic Psychology, 32*, 593-608. doi:10.1016/j.joep.2011.02.004

Webley, P., & Nyhus, E. K. (2006). Parents' influence on children's future orientation and saving. *Journal of Economic Psychology*, *27*, 140-164. doi: 10.1016/j.joep.2005.06.016

Widgix (2012). *SurveyGizmo* [Computer Software] (2012). Boulder, CO: Widgix, LLC.

Wiener, J., & Doescher, T. (2008). A framework for promoting retirement savings. *The Journal of Consumer Affairs, 42*, 137-164. doi: 10.1111/j.1745-6606.2008.00102.x

Worthington, A. C. (2008). Knowledge and perceptions of superannuation in Australia. *Journal of Consumer Policy, 31*, 349-368. doi: 10.1007/s100603-008-9069-2

APPENDIX

Appendix:

Scales and Measures Used in the Study

Note: The following passage was displayed to participants.

This study focuses on your perceptions, understanding, and opinions about retirement. We will ask a number of questions, many of which relate to the influence your parent(s) had on your thoughts and opinions. If you were raised in a single-parent household, please just answer the questions in relation to the one parent who raised you. If you were raised by grandparents, other relatives, or a legal guardian, then please consider them your "parents" in responding to the questions. The following set of questions asks you to indicate when you became familiar with certain concepts related to retirement and financial planning.

Note: The questionnaire included several scales and measures. Only the relevant measures are included below.

Retirement Satisfaction with Life Scale

1. I expect that in retirement my life will be close to ideal.
2. Once I enter retirement, the conditions of my life will be excellent.
3. After I retire, I will be satisfied with life.
4. After I retire, I will have gotten the important things I wanted in life.

Expectations for Financial Planning for Retirement Scale

1. I expect to meet my financial goals in terms of planning and saving for the future.
2. I think I will do a good job of planning and saving for retirement.
3. Success at financial planning for retirement will be something that will come easily to me.

Financial Knowledge Scale

1. I know a great deal about financial planning for retirement.
2. I have informed myself about financial preparation for retirement.
3. I know more than most people about retirement planning.

Non-Family Early Influences Measure

1. In school I took a course on money management, investing, or personal finance.
2. In the past, I have seen a guest speaker, educator, or other personnel talk about financial planning.
3. At some point during school, I studied the general structure of how social security and pension plans work.
4. When I learned about career planning and career exploration in school, I learned about typical retirement savings options that are offered to employees by their employer.
5. I had to do an assignment or class project in the past that involved making either a real or mock budget. This involved describing the types of things I would spend money on and how I would save money to get the things I needed.

Goal Clarity Scale

1. I have set clear goals for gaining information about retirement.
2. I have thought a great deal about my quality of life in retirement.
3. I set specific goals for how much will need to be saved for retirement.
4. I have a clear vision of how life will be in retirement.
5. I have discussed retirement plans with a spouse, friend, or significant other.

Future Time Perspective Scale

1. I enjoy thinking about how I will live years from now in the future.
2. I like to reflect on what the future will hold.
3. I look forward to life in the distant future.
4. It is important to take a long-term perspective on life.
5. My close friends would describe me as future oriented.

Parental Influences on Saving Scale

1. Growing up, my parents helped me to imagine situations when I might need extra money to fall back on.
2. My parents made sure that I understood the value of money and that money is a limited resource.
3. Saving money for the future was an important lesson I learned as a child.
4. My parents suggested to me concrete ways to save money on my own.

Conscientiousness Scale

1. I am organized.
2. I am orderly.
3. I am efficient.

VITA

Janet L. Koposko

Candidate for the Degree of

Master of Science

Thesis: PARENTAL AND SOCIAL INFLUENCES ON UNDERSTANDING OF FINANCIAL PLANNING FOR RETIREMENT

Major Field: Psychology

Biographical:

Education:

Completed the requirements for the Master of Science in Psychology at Oklahoma State University, Stillwater, Oklahoma in May, 2013 (Anticipated).

Completed the requirements for the Bachelor of Arts in Psychology at California University of Pennsylvania, California, Pennsylvania in May, 2010.

Experience:

Laboratory Assistant, Retirement Planning Research Laboratory; Graduate Student Instructor, Oklahoma State University; Graduate Teaching Assistant, Oklahoma State University

Professional Memberships:

Association for Psychological Science; Psychology Graduate Student Association, Oklahoma State University; Eastern Psychological Association; Gerontological Society of America; Psi Chi National Honor Society in Psychology