Parental and Early Influences on Expectations of Financial Planning for Retirement

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This investigation was designed to test a theoretically-grounded model of the psychomotivational dimensions that underlie retirement planning. In developing the hypothesized model, special consideration was given to positive early influences on development that could potentially impact other dimensions known to predict successful planning practices. Participants were 722 college students who reported the extent of childhood personal finance lessons learned, their retirement goal clarity and knowledge of financial planning, and expectations of future planning and anticipated satisfaction with life in retirement. As hypothesized, two measures of early financial influences were predictive of other variables known to underlie the retirement planning decision-making process, and one's vision of satisfaction in retirement. Results and implications are discussed in terms of the way in which motivational forces, particularly those that occur early in life, contribute to perceptions of future planning efforts.

Introduction

The process of how individuals go about making financial plans for retirement is not a simple one or one that is easy to explain, and evidence suggests that many Americans fail to adequately plan and save for the post-employment period (VanDerhei & Copeland, 2010; Wiener & Doescher, 2008). A survey by the Employee Benefit Research Institute (Helman, Copeland, Adams, & VanDerhi, 2013) found that 57 percent of employees have less than $25,000 saved for retirement, and only 21 to 28 percent felt confident that they would be able to save enough to live comfortably after leaving the workforce. A similar lack of personal retirement savings can be found throughout much of the western world, particularly in countries where individual workers shoulder the responsibility for a portion of their own retirement income (Hershey, Jacobs-Lawson, & Austin, 2013).

Saving opportunities may be restricted by factors such as a limited income, not having access to an employer-sponsored retirement plan, or having other major expenses (e.g., a child's college tuition) that limit discretionary resources. However, even individuals who do not face these saving challenges are sometimes financially ill-prepared for old age. This could, in part, be due to certain motivational forces that predispose some, but not others, to plan and save for retirement (Hershey, 2004; Lunt & Livingstone, 1991). A number of key motivational dimensions that influence saving have been identified in previous investigations. However, few studies have focused on positive financial learning experiences that occur early in life, and how those experiences contribute to a pattern of effective saving in adulthood. From an applied perspective, if early influences are found to play a role in retirement saving practices in adulthood, then it becomes important to focus attention on this dimension. This is because unlike some motivational forces that are relatively immutable (such as personality traits or income limitations), early financial learning experiences can be carefully cultivated through modeling and intervention efforts.

The conceptual goal of the present investigation is to test a psychomotivational model of financial planning for retirement. The hypothesized model (see Figure 1) includes variables previously shown to motivate financial planning activities (e.g., financial knowledge, retirement goal clarity, future time perspective), in addition to variables that tap positive early financial learning experiences believed to contribute to a pattern of planning success. To test the model, we examined the experiences, attitudes, perceptions, and beliefs of an important yet understudied segment of the population—undergraduate college students. Although most published studies on this topic focus attention on middle-aged and older working adults, we felt that it was important to examine the future financial planning and saving intentions of college-age adults, inasmuch as intentions have been shown to be one of the best predictors of future behavior (Ajzen, 1991). An additional rationale for focusing on younger adults is because a large majority of these individuals stand on the threshold of entering the workforce, where they will be required to make important programmatic retirement saving decisions, and most will set in place a pattern of saving practices that could extend decades into the future.

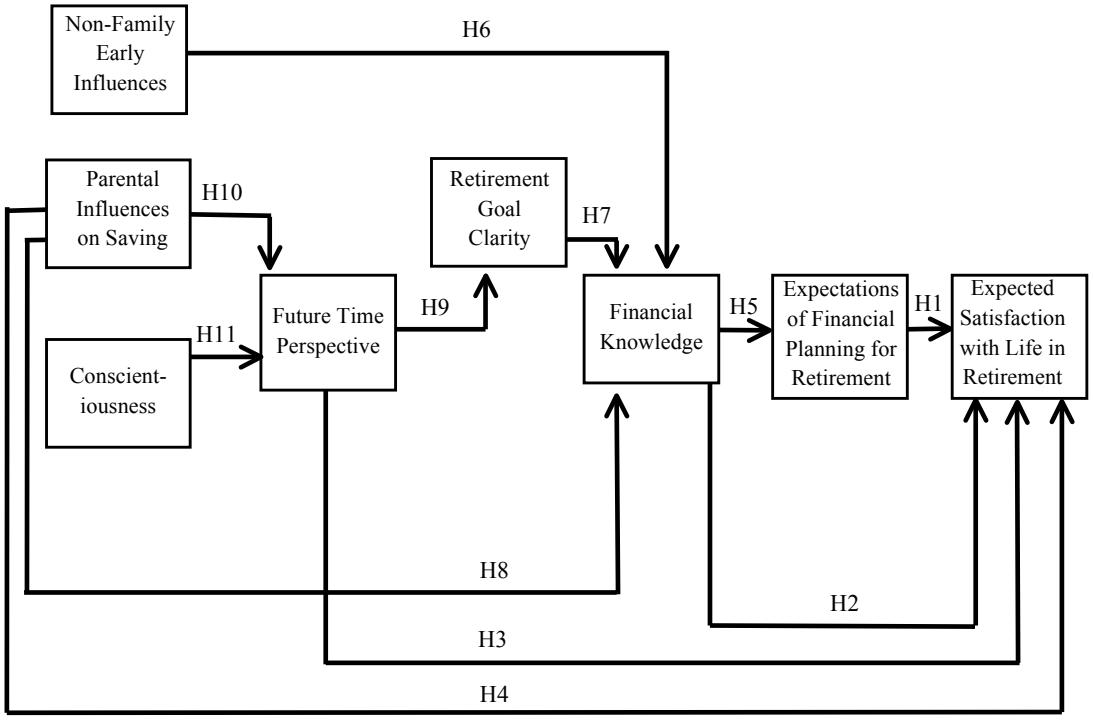

Figure 1. Hypothesized model of influences on expectations of financial planning for retirement and expected satisfaction with life in retirement. All paths shown in the model are expected to have beta weights with positive valences.

Role of Motivational Forces

Financial Literacy. As a motivational 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). Many individuals who live in Western societies tend to demonstrate low levels of financial literacy (Lusardi & Mitchell, 2011a; Lusardi & Mitchell, 2011b), and it has been argued that literacy levels among youth and young adults are insufficient to make reasonably informed financial decisions (Anderson, Zhan, & Scott, 2004; Mandell & Klein, 2007).

The situation described above can be rectified by educating children and adolescents about personal finance so as to promote sound financial saving habits over the course of one's life (OECD, 2005). In recent decades, a handful of private and government programs have been instituted that are designed to teach children about personal finance (Anderson et al., 2004; Jump$tart Coalition, 2012). Although the need for approaches to early financial education has been recognized (Anderson et al., 2004; Shobe & Sturm, 2007), the implementation of worthwhile programs often face barriers because they can be costly and time consuming to administer. Furthermore, controversy exists as to the most effective means of educating children and adolescents about finances, and how early intervention programs should be best evaluated (McCormick, 2009). Some researchers have suggested that because parents have the primary influence on their children's development, it is them who should be responsible for serving as positive role models so as to help their children achieve a reasonable degree of financial literacy (Heckman & Grable, 2011), make sound economic decisions (Webley & Nyhus, 2006), and develop healthy financial behaviors and attitudes (Jorgensen, 2010; Lusardi, Mitchell, & Curto, 2010). In the present investigation, self-rated financial knowledge will be used as the indicator of financial literacy.[1] Based on these considerations, it is hypothesized that financial knowledge will be not only positively related to expectations of financial planning for retirement (path H5; Adams & Rau, 2011; Hershey, Jacobs-Lawson, McArdle, & Hamagami, 2007; Van Rooij, Lusardi, & Alessie, 2011), but also to expected satisfaction with life in retirement (path H2; Elder & Rudolpha, 1999; Gutierrez & Hershey, 2014).

Personality Factors. Personality represents a second motivational dimension that has been shown to be associated with retirement planning and saving. Two personality traits in particular have received a fair amount of attention in the literature. Conscientiousness refers to the extent to which one is mindful of planning and responsive to making preparations, and it has been shown to be related to aspirational motivations in retirement (Robinson, Demetre, & Corney, 2010). This trait has also been shown to be predictive of another personality trait, future time perspective (Hershey & Mowen, 2000), which itself has been tied to planning practices. As a trait, future time perspective characterizes the extent to which individuals enjoy thinking about events in the distant future. Persons 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). Being future oriented has also been associated with the desire to think about and discuss retirement plans with others (Yang & Devaney, 2011), which, we believe, should help to refine and clarify individuals' long-range financial goals. Based on these findings, it is predicted that conscientiousness will be positively related to future time perspective (path H11; Hershey & Mowen, 2000; Webley & Nyhus, 2006). It is also predicted that future time perspective will be positively linked to both retirement goal clarity (path H9; Hershey et al., 2007; Yang & Devaney, 2011) and to expected satisfaction with life in retirement (path H3; Gutierrez & Hershey, 2014).

Goals. The clarity of individuals' retirement goals represents a third important dimension that has been linked to planning and saving practices. Financial advisors would argue that it is beneficial to calculate one's financial needs well in advance of retirement, as doing so not only allows one to set critical savings goals, but it also allows one to establish a metric against which savings efforts may be measured. Yet, many individuals fail to carry out a future needs analysis that will facilitate setting a concrete savings goal, because they do not consider the task worthwhile (Mayer, Zick, & Marsden, 2011). In one recent study by Petkoska and Earl (2009), financial goals were shown to be a significant predictor of engaging in activities designed to increase financial knowledge and preparedness. That same investigation demonstrated that being in possession of clear and meaningful retirement goals played an important adaptive role in other (non-financial) domains, such as health and leisure. In other work by Stawski, Hershey, and Jacobs-Lawson (2007), the clarity of individuals' retirement goals was found to be positively related to financial planning activities, which in turn, was linked to regular savings contributions. Based on the evidence cited above, it is anticipated that retirement goal clarity will be positively related to financial knowledge (path H7; Hershey et al., 2010; Petkoska & Earl, 2009).

Expected Satisfaction with Life in Retirement. The fourth motivational dimension that will be examined as a part of this study involves expectations of satisfaction with life in retirement. Financial security is one key component when it comes to experiencing a high quality of life in old age, and insufficient engagement in planning and saving activities over the course of one's career is likely to hinder post-employment satisfaction (Couture, 2011; Elder & Rudolpha, 1999). Moreover, previous research (Quick & Moen, 1998) has demonstrated that differences in planning behaviors lead to different quality of life outcomes in old age. In light of these linkages between planning and anticipated future quality of life, in the present study we use the Gutierrez and Hershey (2014) Expected Satisfaction with Life in Retirement Scale (SWLRS), which is based on the well-known Diener, Emmons, Larson, and Griffin (1985) Satisfaction with Life Scale (SWLS). It is hypothesized that financial knowledge will be positively related to expectations of financial planning for retirement (path H5; Adams & Rau, 2011; Hershey, et al., 2007; Van Rooij et al., 2011). Furthermore, it is anticipated that expectations of financial planning for retirement will be positively related to expected satisfaction with life in retirement (path H1; Elder & Rudolpha, 1999; Quick & Moen, 1998).

Role of Early Learning Experiences

In addition to the motivational forces identified in the previous section, planning and saving practices may also be realistically influenced by positive early financial learning experiences. Shobe and Sturm (2007) have made a strong argument to suggest that a lack of financial literacy among children and adolescents is a serious problem, and financial learning opportunities should ideally be introduced as early in life as possible. Studies have shown that parental influences play a considerable role 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, 2006). Early parental and social influences on retirement planning and saving have been found to have a significant effect on retirement goal clarity (Hershey, Henkens, & Van Dalen, 2010) and financial knowledge (Guiterrez & Hershey, 2014). Furthermore, having parents who planned for their own retirement has been found to be predictive of one's income (Dan, 2004), and income, in turn, has been shown to predict savings contributions (Hira, Rock, & Loibl, 2009; Lunt & Livingstone, 1991).

Whereas positive parental and family learning experiences can increase financial planning involvement, more formal financial education also has the potential to make a significant contribution (Bernheim, Garrett, & Maki, 2001). Some schools include personal finance components as part of the curriculum (Fox, Bartholomae, & Lee, 2005; Spielhofer, Kerr, & Gardiner, 2010), and focused education in personal economics and related areas have been shown to help increase overall levels of financial literacy (Van Rooij, et al., 2011). Therefore, in addition to the role of parental influences on planning and saving, exposure to non-family early influences, such as school-based educational programs, should help to improve lifespan financial planning. In the present investigation, two different measures of early learning (parental influences and non-family influences) will be employed to assess the extent to which early financial learning experiences influence expectations of not only future planning and saving, but also expectations of satisfaction with life in retirement. Indeed, one of the clear value added aspects of the present study involves the inclusion of early learning indicators in the theoretical model to be tested.

Based on the considerations regarding early learning experiences in the preceding paragraphs, it is hypothesized that non-family early influences will be positively related to financial knowledge (path H6; Bernheim et al., 2001; Van Rooij et al., 2011). It is also hypothesized that parental influences on saving will be positively related not only to future time perspective (path H10; Hershey & Mowen, 2000), but to financial knowledge as well (path H8; Bernheim et al., 2001; Walker, 2012). Furthermore, it is anticipated that parental influences on saving will be positively related to expected satisfaction with life in retirement (path H4; Gutierrez & Hershey, 2014).

Theoretical Framework

Elements of the theoretical foundation for the current study draw upon the life course perspective (also known as life course theory) (Crosnoe & Elder, 2002; Elder, 1994; Elder, 1998a, 1998b; Umberson, Crosnoe, & Reczek, 2010). The life course perspective is a broad, meta-theoretical view of adult development. One aspect of the model maintains that individuals' decisions are influenced by past life events as well as future expectations. Following from this observation, positive early financial learning experiences are likely to influence the way individuals think about retirement at present, and those present viewpoints are posited to shape expectations of future planning and saving practices.

Core propositions found in image theory (Beach, 1998; Beach & Mitchell, 1987) also serve to buttress the proposed theoretical framework. Image theory researchers maintain that individuals do not use a formal analytical process when making significant life decisions (Beach, 1998); but rather, they make decisions on the basis of three things: (i) how well an action plan (in this case, making savings contributions) is likely to achieve one's goals, (ii) whether the action plan is consistent with one's morals, values, and beliefs, and (iii) whether the types of tactics and strategies associated with the action plan are reasonable and effective. Furthermore, like the life course perspective, image theory holds that lifespan planning and decision making is colored by personal experiences, previous consequential life decisions, and other contextual and situational factors.

This study was designed to contribute to the extant literature in four different ways. First, it will build upon existing investigations by testing a theoretical model that is designed to replicate and extend the field of forces that underlie retirement planning practices. Second, as mentioned above, by studying college students we will examine a large and important segment of the population that has received scant attention in the literature on retirement finances. Third, by taking individuals' early financial influences into account, we seek to take existing theoretical models in a novel and profitable direction. Finally, the present study is unique in that it will test a theoretically-derived model that is conceptualized from a lifespan perspective (Baltes, 1987; Baltes, Staudinger, & Lindenberger, 1999). This is accomplished by examining the way in which early financial influences shape perceptions and beliefs, as well as the way in which perceptions and beliefs lead to expectations of future financial sufficiency and quality of life.

Method

Participants

All participants in the study ($N = 722$) were students attending a large, mid-western state university. Each respondent earned partial credit in a psychology course for their participation. 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). At the time of testing, the majority of respondents were unemployed (72.4 percent). Only 3.0 percent of participants held jobs where they worked more than 32 hours per week.

Measures

The present study utilized a number of different scales and measures, some of which were existing scales that had been used

in previous investigations and others that were developed for the purpose of this study. All but the last scale listed below used a 7-point Likert-type response format (1 = *strongly disagree*; 7 = *strongly agree*). Each scale is described in detail below.

Future Time Perspective. This 5-item scale (M = 5.66; SD = 1.09) measures the extent to which individuals are prone to think about the future, specifically in the context of retirement planning. The measure used in this investigation is a modified version of the Hershey et al. (2007) scale.[2] A sample item is, *"I enjoy thinking about how I will live years from now in the future."* Psychometric evaluation of the measure revealed a single factor structure and a coefficient alpha level of .89. The future time perspective score for each participant is the mean of the five items, with higher scores indicating a greater tendency toward future-oriented thinking.

Financial Knowledge. This 3-item scale (M = 3.62; SD = 1.56) 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."* Psychometric evaluation of the measure revealed a single factor structure and a coefficient alpha level of .92. The financial knowledge score for each participant is the mean of the three items, with higher scores indicating higher levels of perceived financial knowledge.

Retirement Goal Clarity. This 5-item scale (M = 3.73; SD = 1.52) 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."* Psychometric evaluation of the measure revealed a single factor structure and a coefficient alpha level of .91. The retirement goal clarity score for each participant is the mean of the five items, with higher scores indicating a greater degree of retirement goal clarity.

Conscientiousness. This 3-item scale (M = 5.45; SD = 1.19) measures the extent to which individuals are efficient and precise when engaged on a task (Hershey & Mowen, 2000; Mowen, 2000). A sample item is, *"I am organized."* Psychometric evaluation of the measure revealed a single factor structure and a coefficient alpha level of .87. The conscientiousness score for each participant is the mean of the three items, with higher scores indicating higher levels of task-related conscientiousness.

Expected Satisfaction with Life in Retirement Scale. This 4-item scale (M = 5.04; SD = 1.16) assesses expectations of satisfaction with retirement among individuals who are not yet retired (Gutierrez & Hershey, 2014). A sample item is, *"I expect that in retirement my life will be close to ideal."* Psychometric evaluation of the measure revealed a single factor structure and a coefficient alpha level of .89. The retirement satisfaction with life score for each participant is the mean of the four items, with higher scores indicating expectations of greater satisfaction with life in retirement.

Expectations of Financial Planning for Retirement. This 3-item scale (M = 5.23; SD = 1.09) is a new scale designed for the present study to assess participants' expectations of how easy or difficult they anticipate finding the task of retirement planning. A sample item is, *"Success at financial planning for retirement will be something that will come easily to me."* Psychometric evaluation of the measure revealed a single factor structure and a coefficient alpha level of .84. The expectations of financial planning for retirement score for each participant is the mean of the three items, with higher scores indicating expectations of minimal difficulties in carrying out financial planning tasks.

Parental Influences on Saving. This 4-item scale (M = 5.67; SD = 1.24) is a new measure designed for the present study to assess the effect one's parents had on money management and saving. A sample item is, *"My parents had a strong influence on my current opinions about saving."* Psychometric evaluation of the measure revealed a single factor structure and a coefficient alpha level of .86. The parental influences on saving score for each participant is the mean of the four items, with higher scores indicating a greater degree of positive parental influences on saving.

Non-Family Early Learning Experiences. This 5-item scale (M = 0.45; SD = 0.09) is a new measure designed for the present study to asses 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 five items was dichotomous (0 = *no*; 1 = *yes*); therefore, the total score for each participant was the sum of the five dichotomous items. The degree of internal consistency (KR-20) is adequate at .67. Higher scores on this measure indicate more in the way of financial learning experiences in school or community-based settings.

The last three (newly developed) scales listed above were created by identifying dimensions relevant to the scale topic, writing items that reflect those dimensions, and then pilot testing those items to determine whether they were suitable as part of the three measures.

Procedure

Participants completed an online questionnaire that was designed using the web-based software SurveyGizmo (Widgix, 2012). Most questions contained in the instrument used 7-point Likert-type scales; one measure (non-family influences) used dichotomous (yes/no) scoring. Each of the scales and measures contained in the questionnaire is described in Table 1; a complete list of scales and their corresponding items can be found in the Appendix. Following the completion of testing, all participants were thanked for their participation and given contact information for the investigators should they have any questions about the study.

Analysis Plan. In terms of an analysis plan, a measurement model will first be tested to ensure that all scale items load on their respective constructs. Once the factor structure for the scales has been confirmed, the path model shown in Figure 1 will be tested. As part of that process, the statistical significance of slope parameters in the model will be evaluated, and the overall goodness of fit of the broader theoretical framework will be assessed.

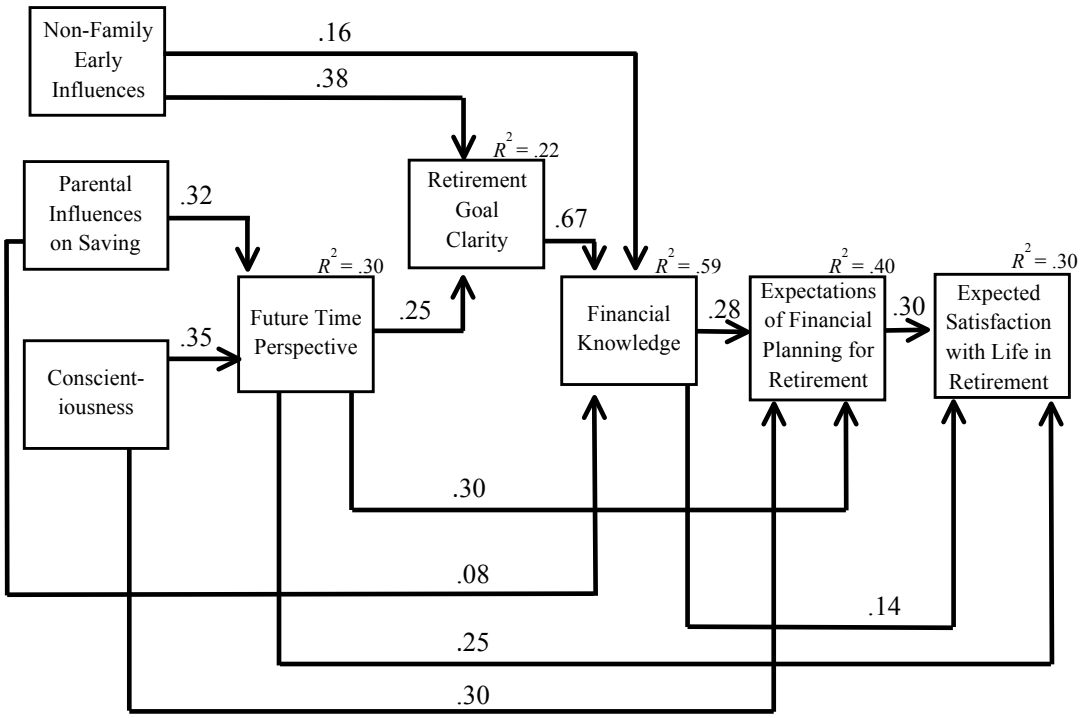

Figure 2. Observed model of influences on expectations of financial planning for retirement and anticipated satisfaction with life in retirement. All path parameters shown are standardized beta weights, and all were found to be statistically significant at the .01 level.

Results

The data were cleansed and examined for skew, kurtosis, outliers, and any other possible issues that may lead to either distributional distortions or violations of the assumptions of general linear model analyses. Prior to testing the 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 different type of response format. The measurement model was evaluated using the Analysis of Moments Structures (AMOS) software version 19 (Arbuckle, 2010). Model fit indices for both 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 was found to be a good fit to the data, χ^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 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 served to pave the way to compute the hypothesized path analysis model.

The path model shown in Figure 1 was then analyzed in order to compute values for the eleven path parameters and establish metrics reflecting overall goodness-of-fit. Exogenous variables were allowed to correlate.[3] As is often the case when using structural equation modeling software, the initial run of the model was found to have a less than adequate fit, χ^2 (14) = 433.17, $p < .01$, *TLI* = .55, *CFI* = .78, *RMSEA* = .20. Modification indices revealed that the fit could be improved by deleting the path from parental influences on saving to expected satisfaction with life in retirement (H4). 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 three of these paths were theoretically plausible; therefore, each was incorporated into 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, χ^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. A graphic representation of the revised model, which contains 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.

Discussion

The overarching 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 constructs, and those predicted relationships would account for appreciable amounts of variance among the

endogenous variables. The revised path model was found to meet those expectations. Indeed, the findings provide important insights into the way college students think about the retirement planning process.

Two broad take-away messages are worth noting at the outset of the discussion. 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 investigation have also been shown to play a role in studies carried out with members of middle-aged and older cohorts (Adams & Rau, 2011; Hira et al., 2009; Hershey et al., 2007; Hershey et al., 2010; Petkoska & Earl, 2009; Webley & Nyhus, 2006). 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 (Doyle, 2007; Jorgenson, 2010; Lusardi et al., 2010). Both findings suggest important theoretical and applied implications, which are discussed in the following paragraphs.

Two different theoretical frameworks were used in order to position the present investigation within the existing literature. These frameworks were the life course perspective (Elder, 1998a) and image theory (Beach & Mitchell, 1987). The findings from the observed path model were consistent with both of these theories.

One key proposition of the life course perspective is that individuals' lives are embedded in social contexts (Elder, 1998a), and an individual's family structure is one such context. Therefore, the fact that parental influences on saving was predictive of individuals' future time perspective is consistent with life course theory. What this suggests is that for many of the college students involved 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 others in his or her life sphere (Elder, 1998a). This premise was also supported by the data, in that individuals who reported having positive parental influences ultimately developed higher levels of financial knowledge (H8). However, the prediction that parental influences would be related to superior expectations of satisfaction with life in retirement (H4) was not supported by the data. Perhaps this non-significant hypothesized finding is due to the number of years that transpire between one's early learning experiences and how they envision their quality of life decades into the future.

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). Choosing to take part in non-family related financial learning activities during one's formative years is consistent with the notion of human agency, and it appears that the nature of these experiences helps to shape individuals' future behaviors when it comes to planning and saving. Both of these life course theory elements—linked lives and human agency—provide theoretical support for the observed relationships between parental influences on future time perspective (H10), and non-family early influences on financial knowledge (H6), respectively.

The second theoretical framework 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 the individual desires to achieve in the future (cf., Austin & Vancouver, 1996). In this investigation, the extent to which one thinks about future goal states was represented by the measure of future time perspective, and this measure was predictive of not only retirement goal clarity (H9), but also expectations of satisfaction with life in retirement (H3). Taken together, this pair of findings provides empirical support for the closely aligned constructs of one's orientation to time, the clarity of one's goals, and one's vision of the future.

Beyond the trajectory image, Beach's 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 plans and tactics individuals use to achieve their goals. In terms of the present investigation, financial knowledge could be thought to serve as a proxy indicator for the strategic image. The third of the three images, the value image, represents personal values, morals, and ethics held by the decision maker. In the present investigation, the early influence variables—parental influences on saving and non-family early influences—could be considered to reflect one's personal financial values, inasmuch as they shape personal beliefs about the world that the individual carries forward into adulthood. In the observed model of retirement planning, both non-family early influences and parental influences on saving were predictive of financial knowledge (H6 and H8, respectively), which are reflective of the theoretical link between one's value image and strategic image. Financial knowledge, in turn, was predictive of variables involving future expectations (i.e., expectations of financial planning for retirement [H5] and expected satisfaction with life in retirement [H2]), which is reflective of the theoretical link between one's strategic image and trajectory image. In short, these observed empirical relationships are consistent with the flow of influences posited in Beach's theoretical framework.

Implications also exist in terms of the way in which personality traits influence 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 (H11) was replicated. Furthermore, the observed model revealed that conscientiousness was predictive of expectations of financial planning for retirement, which is a non-hypothesized empirical link not previously demonstrated. Given the fact that one's level of conscientiousness tends to remain developmentally stable over the life course (Gallagher, Fleeson, & Hoyle, 2010), low levels of this personality trait could represent a true barrier to envisioning oneself as being

effective when it comes to planning and saving for the future.

Like conscientiousness, the measure of future time perspective served to replicate and extend associations with other measures in the model. In support of H9, future time perspective was predictive of retirement goal clarity among these college student respondents, which is a relationship that has previously been established among a sample of older adults (Hershey et al., 2007). Furthermore, in support of H3, future time perspective was predictive of expectations of financial planning for retirement, which is an effect that has not previously been demonstrated. Knowledge of the linkages between personality traits and expectations of future life satisfaction might benefit intervention specialists, who not only face the challenge of getting their clients to plan and save, but also to envision a financially secure and worry-free old age.

One 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 variables were analyzed in relation to one another, which 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; Gutierrez & Hershey, 2014; Hershey et al., 2007; Hershey et al., 2010; Hershey & Mowen, 2000; Webley & Nyhus, 2006). The complex and dynamic nature of the model tested brings into sharp focus the important role of human agency (Elder, 1994), which suggests that individuals make decisions within the context of multiple forms of opportunities and constraints.

In terms of applied implications, 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 experiences were found to play a prominent role in shaping attitudes toward and knowledge of retirement planning. This would suggest that the scaffolding of youth financial education programs could help individuals acquire a solid level of financial literacy by their early twenties (Cowen, Blair, & Taylor, 2011). Indeed, we believe that early financial learning experiences can translate into positive attitudes toward money management, saving, and financial independence if they are introduced to children and adolescents at the right time and in a meaningful manner. Whereas certain psychomotivational dimensions that shape planning practices (such as elemental personality traits) tend not to be malleable (Gallagher et al., 2010), it is encouraging to note that early financial learning experiences (which can take the form of parental modeling or formal interventions) may be a particularly effective means of nurturing individuals into becoming both interested in planning and competent when it comes to saving.

The results of this study offer a number of valuable insights into the psychological mechanisms that underlie retirement planning. However, certain limitations should be acknowledged. These limitations include the fact that the scales used relied upon self-report, which may be subject to certain reporting biases; the investigation relied on the use of correlational data, which limits the ability to draw causal conclusions (Cliff, 1983); and the observed findings cannot be generalized to non-college age populations. To address the first limitation, in future investigations researchers might consider using objective measures (where applicable) in conjunction with self-reports. With regard to the second limitation, in future studies a true experimental design could be employed, in which one group of children is assigned to complete a financial literacy program (while the contrast group does not). A different experimental design might involve having one group of parents receive money management training, while training is withheld from a second (matched) group of parents, to observe the effects of the intervention on their children. And the third limitation cited above could be addressed by designing a study in which the model shown in Figure 2 is tested on populations other than college-aged students.

The results of this study make both theoretical and applied contributions to the existing literature on the psychology of retirement planning. From a broad theoretical perspective, the findings suggest that we should take seriously the impact early learning experiences have on an individual's development. It appears the long-terms effects of positive financial lessons learned in the home, the school system, or the community, not only extend one's view of the future, but they also help to clarify retirement goals and enhance levels of financial literacy. From an applied perspective, our findings provide educators, retirement counselors, and financial professionals excellent reasons and motives to promote forward-thinking youth intervention programs designed to foster appropriate levels of financial competence.

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Endnotes

[1]Use of a self-report measure of financial knowledge was decided upon because it is more efficient to administer than an objective measure of knowledge, and both objective and self-reported financial knowledge have previously been shown to be positively correlated (Goldsmith & Goldsmith, 1997; Goldsmith, Goldsmith, & Heaney, 1997).

[2]The original Hershey et al. (2007) future time perspective scale contained six items, four of which were reverse coded. In an effort to improve the level of internal consistency, the four reverse coded items were replaced with the following three new items: *"I look forward to life in the distant future," "It is important to take a long-term perspective on life,"* and *"My close friends would describe me as future oriented."*

[3]The three correlations among exogenous measured variables (i.e., parental influences, conscientiousness, and non-family influences) were all quite small, and for that reason are not shown in Figure 1.

Appendix:

List of Scales Used in the Study

Expected Satisfaction with Life in Retirement 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.

Expected 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.

Self-rated 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.

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.

Conscientiousness Scale

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

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 person 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 saving 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 could save money to get the things I need.

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.