FEAR AND GOAL-BASED PLANNING MOTIVES:

A PSYCHOLOGICAL MODEL OF FINANCIAL

PLANNING FOR RETIREMENT

By

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Bachelor of Arts

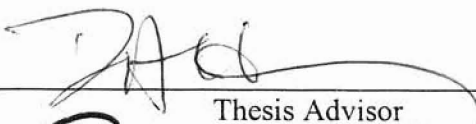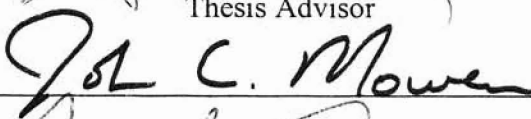The University of Texas at the Permian Basin

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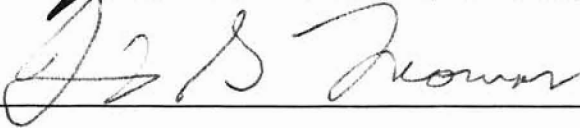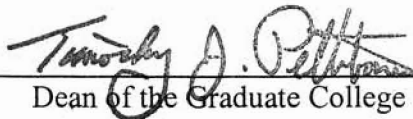
PLANNING FOR RETIREMENT

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PREFACE

The major goal of this project was to examine the underlying psychomotivational factors that influence an individual's decision to save for his or her retirement. It was hypothesized that there were two types motives that affect individuals when engaged in financial planning for retirement: inhibitory/fear motives that prevent individuals from planning for retirement, and goal/achievement motives that enhance individuals' planning activities. The study required 150 adult participants to complete a questionnaire that measured eight separate psychological constructs as well as the amount of saving conducted thus far. The eight constructs included three personality measures (a fear-based orientation, a goal/achievement orientation, and a future time perspective orientation), financial goal and fear motivational factors, two cognitive factors (financial knowledge and goal clarity), and an indicator of prior financial planning behaviors. Hierarchical multiple regression analyses were conducted to test the hypothesized model. The results confirmed 9 of the 11 hypothesized pathways found within the model. Six additional pathways were found to be significant. Major findings are discussed in terms of future implications, both theoretical and applied.

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INTRODUCTION

Predictions made by financial and retirement planning experts suggest that an economic crisis looms on the horizon. As a result of the current baby boomers aging, as well as the projected continuing increase in life expectancy, it is estimated that the number of retirees will increase from 35 million in 2000, to 78 million in 2050 (Schneider, 1999). Due to this upcoming surge of retirees within the population, a sudden demand for research has been created in order to insure that future retirees will experience a reasonable quality of life during their retirement years, especially concerning their financial well-being. It will be important for researchers to determine which factors influence an individual's decision to begin planning for his or her upcoming retirement. Towards this end, a motivational model of financial planning for retirement was proposed in the current study. However, before a description of the model can be presented, it is important to understand what research has shown thus far concerning individuals' retirement decisions.

The Retirement Savings Challenge

In the past, research has demonstrated that financial planning for retirement is one area in which many individuals fall short of their ideal goals. In fact, 38% of baby boomers have saved less than $10,000, and only 29% of this group has accumulated at least $100,000 for retirement (Stoneman, 1997). A study of retirees conducted by Perry (1980) found that 53% of those surveyed had not made any retirement plans, despite the number of industry, government, and educational institutions that offer retirement planning programs to assist individuals. Additionally, Couch and Lundgren (1963) found that 57% of individuals who were already retired had done little to no planning for

retirement. When workers leave the workforce at an early age due to poor health or forced retirement, the effects of delayed planning are exacerbated. In fact, many retirees indicate they had done little planning because they had not expected to retire when they did (Couch & Lundgren, 1963).

Only 5% to 10% of the population approaching retirement age participate in retirement preparation programs, and this proportion has not significantly increased according to McCluskey and Borgatta (1981). According to financial specialists, this is due to an underestimation in the appropriate age of when to begin planning. Singleton and Keddy (1991) found that the average individual believes that people should wait to participate in retirement programs until 45-54 years of age. Additionally, they found that the individuals' income and educational level influences perceptions of when one should begin planning for retirement. Individuals with higher incomes and levels of education believe that preparation should begin at an older age, whereas, individuals with lower levels of income and education believe that preparation should begin earlier in life. An underestimation in the appropriate age of when to begin planning has also been found to influence individuals' rate of involvement in retirement preparation programs. Younger individuals are generally not as interested in attending retirement preparation program as individuals aged 56 to 65 (Singleton & Keddy, 1991). This leads to the question of why people postpone planning for retirement despite the warnings of financial specialists. According to experts in the field, for most to obtain financial security, then retirement planning must begin at a young age (e.g., 20-30 years of age). However, most individuals believe this to be an activity that should not begin until middle age.

Previous Research on Retirement Planning

Researchers have investigated the effects of several demographic characteristics on the amount individuals have planned for retirement. Studies have found that individuals with higher levels of education, income, and occupational status plan more for retirement (Beck, 1984; Block, 1982: McPherson & Guppy, 1979; Yuh & DeVaney, 1996). Additionally, age, gender, and marital status have been found to affect the amount people save for retirement (Block, 1982; Jacobs-Lawson & Hershey, 2001; Kilty & Behling, 1986; Turner, Bailey, & Scott; 1994). This research has provided insights into the wide range of individual differences in retirement planning practices found within the population. Unfortunately, this work fails to address the psychological factors that underlie the factors that motivate individuals to plan and save.

A comprehensive psychological model of retirement planning has yet to be discussed in the current literature. Several studies have investigated how isolated psychological variables influence peoples' decisions to begin planning; however, there has been little work aimed at developing a comprehensive psychological model. The present study attempts to address this issue by proposing a motivational model of financial planning for retirement, including personality characteristics, motivational preferences, cognitive factors, and behavioral patterns. By understanding the different psychological factors that underlie individuals' motives to save, researchers can better tailor retirement preparation programs to meet their needs. This should help to increase the overall involvement rate within the population for retirement planning programs and create a population that is better prepared for retirement. Additionally, when the population is better prepared, the overall quality of life for future retirees should increase.

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When considering the psychological factors that influence individuals to plan for retirement, one factor stood out among others: motivation. There could be individuals who fail to plan due to fearful thoughts of what may transpire in the future (e.g., being poor, being dependant upon others), thus they are motivated not to save as a tactic of avoiding these negative thoughts. Alternatively, there could be individuals who do plan because they are trying to reach particular retirement goals that require a certain level of financial security (e.g., travel; buy their dream house), thus they are motivated to save in order to achieve these goals. This idea served as the foundation for the model proposed in this study. It was hypothesized that two motivational factors influence individuals' decisions to save for retirement: fear and goals. Based on this assumption, a hierarchical psychomotivational model of retirement planning was developed which includes psychological constructs designed to explain why individuals save (see Figure 1). In this model, a subjective rating of personal savings was used as the criterion. The other variables (organized hierarchically in the model) were each believed to influence (either directly or indirectly) the subjective savings criterion.

Shown in the model are four levels of variables expected to influence individuals' decision to save for retirement. The first level of variables represents three general personality constructs: future time perspective (FTP), a general fear orientation (BIS), and a general goal/achievement orientation (BAS). The second level of variables pertains to two domain-specific factors: fear-based (FBIS) and goal-based (FBAS) motives associated with financial planning for retirement. Within the third level, cognitive factors are considered. Specifically, the amounts of financial knowledge (FKNOW) individuals'
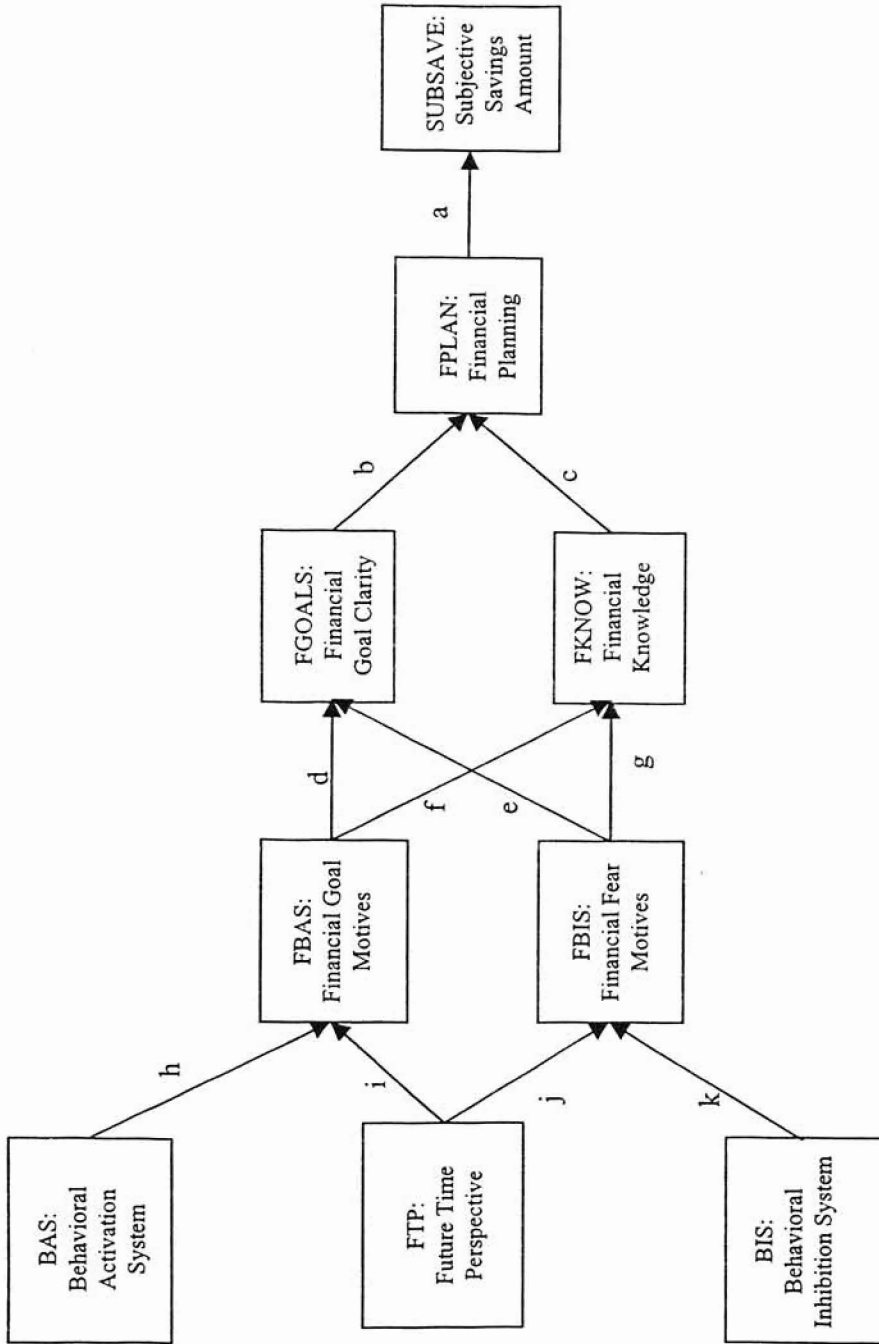
Figure 1: The first level of predictors (left side of figure) represent general personality constructs: FTP, BAS, and BIS. Predictors at the second level represent the domain-specific motivational factors: FBAS and FBIS. The third level of predictors represent the cognitive factors: FKNOW and FGOALS. The forth level of predictors represent behavioral habits: FPLAN. SUBSAVE (the criterion measure) indicates how aggressively individuals are saving for retirement.

possess and the clarity of their retirement goals (FGOAL) are located at this level. At the fourth level, the number of different planning behaviors individuals engage in (FPLAN) is located. FPLAN is expected to predict how aggressively individuals have saved, as represented by individuals' self-rated level of savings. The following sections provide a brief overview of each of the constructs in the model.

Future Time Perspective (FTP)

Defining the nature of time perspective presents no less of a problem than encountered with any other psychological construct. Nuttin (1985) referred to three different types of time perspectives that have been used in the psychological literature: time perspective, time attitude, and time orientation. Despite the confusion in terminology, however, all three concepts refer to a type of temporal experience, individuals' view of the past, present, and future. For the present study, the concept of time orientation was used. According to Nuttin, time orientation refers to the preferential direction in a person's behaviors and thought, that is, whether the individual is oriented toward objects and events in the past, present, or future.

Based on the assumption that individuals are motivated by their fears, their goals, or both, it is expected that individual differences in time orientation will predict one's level of fear-based and goal-based motivation; some people will look far into the future (setting goals for themselves), whereas others will focus moreso on the present (fearing the future). It has been shown that those who are oriented toward the present (low FTP) are less likely to engage in planning activities, whereas those who are oriented towards the future (high FTP) will be active planners. In fact, Hershey and Mowen (2000) found FTP to be a strong predictor of individuals' financial planning knowledge and their

financial preparedness for retirement. FTP has also been shown to influence other cognitive factors, such as individuals' goals. Carstensen, Isaacowitz, and Charles (1999) found that as individuals' FTP increases, their goals become stronger and more clearly prioritized.

How people think about past and future events can affect their motivation as well. This implies that a sensitive measure of FTP should predict motivational factors associated with retirement planning. Sociologists Bell and Mau (1971) suggested that people's images of the future influence their current decisions by helping to structure their goals, and the procedures they select for achieving those goals. Highly future oriented people imagine various possible futures, consider the advantages and disadvantages of each, identify their preferred end states, and then develop plans to achieve their goals while at the same time avoiding negative outcomes. Consistent with this perspective, it is expected that individuals low in FTP will not think much about their future goals, as they will be differentially focused on the present.

Fear and Goal Orientations/Motives

Past motivational research has focused on individual differences in two general types of behaviors: fear/avoidant behaviors and goal/achievement behaviors (c.f., Carver & Scheier, 1985; Carver & White, 1994; Gray, 1981, 1987; Higgins, Roney, Crowe, & Hymes, 1994; Oyserman & Markus, 1990). This research has demonstrated that individuals who possess an achievement orientation focus on the future by setting goals, whereas those driven by fear motives are mainly interested in avoiding negative outcomes. Norem and Illingworth (1993) reported that defensive pessimists (e.g., avoidant people) are more inclined to construct possible futures (both positive and

negative) than optimists (e.g., achievement people). They also found that pessimistic individuals fear the future; therefore, they are less likely to think of positive outcomes (seeing only the negative). It is not implausible that goal-based and fear-based individuals would differentiate in how they approach financial planning for retirement. Goal-oriented individuals should engage in planning and saving in order to meet long-term financial objectives, and fear-oriented individuals would be likely to channel their anxiety about failure into inhibitory behavioral plans designed to avoid thinking about the possible negative outcomes; therefore, they will do nothing with respect to planning.

Carver and White (1994) developed self-report measures to assess two different types of hypothesized motivational systems: the behavioral approach system (BAS, which is focused on goals) and the behavioral inhibition system (BIS, which is focused on fears). The BAS scale identifies people who respond to reward cues, whereas the BIS scale identifies individuals who respond to punishment cues. In an empirical study designed to examine the validity of these measures, Carver and White (1994) found that BIS scores were positively related to the level of nervousness among individuals in response to an impending punishment. Additionally, BAS scores were positively related to the level of happiness experienced by individuals in response to impending rewards. Moreover, they found that both scales demonstrated convergent validity.

Retirement is a major role change in itself, and it often leads to severe stress and anxiety (Hayslip, Beyerlein, & Nichols, 1997; Manion, 1974). According to Manion, avoidance is often the chosen response of people nearing retirement age, which is a major factor that helps to explain why people fail to save enough for retirement; however, retirement is a specific period in an individual's life that does not impact his or her

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everyday functioning. Therefore, the general personality characteristics of fear and goal orientations (BIS and BAS) designed to assess a general approach towards life may not accurately predict financial planning behaviors. Research conducted by MacEwen, Barling, Kelloway, and Higgenbottom (1995) found that within the domain of financial planning for retirement, items that tap domain specific planning were significantly better predictors of adaptive financial behaviors than general planning items. It is plausible to assume that this would be true of general motivational factors as well.

Previous research has failed to address fear- and goal-based motivational factors within the domain of financial planning for retirement. Therefore, domain-specific measures of fear- and goal-based motives associated with financial planning were developed for the present study. The author created two measures, the financial behavior inhibition scale (FBIS) and the financial behavior activation scale (FBAS), which were designed to be financially-oriented measures of the BIS and BAS constructs introduced by Carver and White (1994). The FBIS scale is designed to identify the extent to which individuals are influenced by fear/avoidance motives when planning for retirement; whereas, the FBAS scale is designed to measure the degree to which individuals are influenced by achievement/goal motives. It is expected that the scores on the FBAS and FBIS scales will be more powerful predictors of retirement savings practices than the Carver and White (1994) domain-general BAS and BIS measures.

Financial Knowledge and Goal Clarity

The adaptive decision maker is one who can effectively bring knowledge and information processing strategies to bear on the problem at hand (Payne, Bettman, & Johnson, 1993). In an extended series of investigations, Hershey, Walsh, and their

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colleagues have examined individuals' abilities to make complex retirement planning and investment decisions (Hershey, 1995; Hershey &Walsh, 2000; Hershey, Walsh, Broughm, Carter, & Farrell, 1998; Hershey, Walsh, Read, & Chulef, 1990). The general finding from this body of work indicates that when solving financial problems, people tend to consider only a small subset of information. Additionally, knowledge has been shown to be an important determinant of decision quality. In fact, Hershey and Walsh (2000) found that trained novices produced solutions to a set of retirement investment problems that were twice as good as those generated by financial planning experts, suggesting that knowledge is a better predictor of decision quality than experience. Other studies have similarly found that financial knowledge is a significant predictor of individuals' level of financial retirement preparedness (Grable & Lytton, 1997; Hershey & Mowen, 2000).

In the present study, self-ratings of financial planning knowledge will be collected and used as a predictor of planning practices. Due to their ease of administration, subjective knowledge measures have taken the forefront in retirement research. Studies have shown that self-perceived and objective domain-specific knowledge to be significantly correlated in the r = .50 range (Goldsmith & Goldsmith, 1997; Goldsmith, Goldsmith, & Heaney, 1997). Additionally, subjective knowledge measures have been demonstrated to be significant predictors of future planning behaviors. In fact, Hershey and Mowen (2000) recently found that a subjective measure of financial knowledge was a better predictor of financial preparedness than the objective measure they employed.

An individual's retirement goals are another cognitive factor that is likely to influence whether individuals save for retirement or not. There have been several

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definitions of what constitutes a goal published in the psychological literature (Austin & Vancouver, 1996), however, it is generally agreed upon that goals arise from needs within the individual. These needs (motivational states) activate and regulate one's cognitive functioning (Nuttin, 1984). Cognitive processes, in turn, transform vague motivational states (needs) into specific goals. Presumably, this same process leads to the construction of behavioral paths (i.e., plans). Thus, in order for individuals to possess the goals of planning and saving for retirement, an underlying motivational drive must be present to activate those goals into specific action plans.

Individuals may be motivated to plan and save for retirement in order to achieve different types of long-term goals. These goals could represent a pleasant state (or states) one hopes to attain, or a negative state (or states) one wishes to avoid, which presumably will be determined by the person's unique developmental history and personal characteristics (Winell, 1987). In the present study, the main interest is not whether individuals' goals have a positive or negative valence, but rather, how clear those goals are. Whether people have primarily fear-based goals (i.e., ones with a negative valence) or achievement-based goals (i.e., ones with a positive valence) should not differentially influence the motivation to engage in planning. However, how clearly defined one's goals are should have a significant impact on the amount of planning one does. Therefore, for the purposes this study, goal clarity (not goal content) will be used as the construct of interest.

A valid goal clarity measure should not only indicate how clearly defined one's goals are, but also how much thought has been given to one's goals in general. A study conducted by Stawski and Hershey (2001) found retirement goal clarity was a significant

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predictor of pre-retirement planning behaviors, which in turn, predicted the amount of money individuals saved for retirement. Those who possessed clear retirement goals saved aggressively, whereas those with poorly defined goals were found to have saved little or nothing.

Financial Planning Behaviors

Evans, Ekerdt, and Bosse (1985) found that people are more motivated to gather information on retirement as the event approaches, as opposed to when it is in the distant future. Unfortunately, many individuals who wait to collect information on financing retirement until late in life will fail to develop an effective plan of action. This poor timing will cause many to lack sufficient resources once in retirement, and subsequently, experience the need to re-enter the workforce in order to survive (Mergenhagen, 1994). Therefore, gaining knowledge about the retirement planning process at the appropriate time in one's life should have a significant effect how successfully one could be expected to plan.

To assess the amount of planning individuals engage in when preparing for retirement, it is important to note how researchers have measured the construct in the past. Some have asked specific questions about planning, such as: "Have you ever thought about what you will do when you retire?" and "Do you have any definite plans for retirement?" (McPherson & Guppy, 1979). Others have asked individuals what types of financial arrangements they have made in terms of cultivating different sources of retirement income, such as social security, private pensions, and personal savings (Grable & Lytton, 1997; Kilty & Behling, 1985). Both types of self-report measures have been shown to be significant predictors of objective measures of the actual amount of planning

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engaged in by pre-retirees. Additionally, research has shown that individuals who have done sufficient planning tend to perceive life in retirement as happier and more satisfying than those who fail to plan (Kim & Moen, 2001).

The retirement planning activity scale that will be used in the study was modeled after the Hershey and Mowen (2000) TIAA-CREF Financial Planning Index. These authors constructed a self-report measure designed to tap multiple aspects of financial planning. In a follow-up factor analytic study, Stawski and Hershey (2001) substantially reduced the original 37-item measure to a 9-item planning measure that tapped three different areas: information gathering, instrumental financial planning activities, and professional advice. Taken together, the set of items were shown to accurately predict the level of voluntary contributions individuals made to a retirement savings program.

Conclusions

The research described above suggests that a number of different psychological factors influence individuals' retirement planning tendencies. Personality factors, domain specific planning motives, cognitive factors (including knowledge and goals), and planning behaviors all influence how much individuals are likely to save. The goal of the present study is to empirically test a theoretical model that includes each of these factors as predictors in order to help explain the psychological basis of individuals' savings practices. Hypotheses for each of the six endogenous variables shown in Figure 1 are stated separately below, starting with predictors for the criterion variable (subjective savings, SUBSAVE) located on the far right side of the figure.

<u>Hypotheses</u>

Based on the work of Hershey and Mowen (2000) and Stawski and Hershey (2001), the following hypotheses were developed to describe predicted relationships between financial savings practices, planning behaviors, and the two cognitive variables (goal clarity and financial knowledge):

> <u>Hypothesis 1.</u> The amount of resources individuals save for retirement will be positively related to their planning behaviors (FPLAN will predict SUBSAVE, path a).

> <u>Hypothesis 2.</u> The clarity of one's goals will be positively related to how much individuals plans for retirement (FGOAL will predict FPLAN, path b).

> <u>Hypothesis 3.</u> The amount of financial knowledge individuals possess will be positively related to how much they plan (FKNOW will predict FPLAN, path c).

Because FBAS and FBIS are newly developed scales, predictions 3 through 6 were developed based on the author's intuition and findings from conceptually similar research. Winell (1987) stated that goals represent a pleasant state to be attained, or a negative state to be avoided. Therefore, it was expected that regardless of the valence of one's motives, a high motivational level will lead to clear goals. Based on this idea, the following hypotheses were developed:

> <u>Hypothesis 4.</u> Financially-oriented goal motives will be positively related to the clarity of individuals' goals (FBAS will predict FGOAL, path d)

> <u>Hypothesis 5.</u> Financially-oriented fear motives will be positively related to the clarity of one's goals (FBIS will predict FGOAL, path e).

It is anticipated that individuals who are highly motivated by goals/achievement when planning for retirement will seek out as much information as possible when contemplating savings decisions. In contrast, those who are fearful of their upcoming retirement would be less likely to think about it, thus, they would also be less likely to seek out financial information. Based on these assumptions, the following hypotheses were developed:

Hypothesis 6. Individuals' financial goal/achievement motivational level will be positively related to their level of financial knowledge (FBAS will predict FKNOW, path f).

Hypothesis 7. Individuals' financial fear motivational level will be negatively related to their levels of financial knowledge (FBIS will predict FKNOW, path g).

Bell and Mau (1971) suggested that individuals' images of the future influence their decisions by determining their goals, and the procedures they select for achieving those goals. Thus, people who are future-oriented (those with a high FTP) would be more likely to consider future goals. Moreover, individuals who possess a high level of general achievement orientation (BAS score) are expected to display high levels of goal-based motivation in the financial planning domain. Thus, the following predictions were developed:

Hypothesis 8. Individuals' goal orientation will be positively related to their financial goal/achievement motivational level (BAS will predict FBAS, path h).

Hypothesis 9. Individuals' future time perspective will be positively related to their financial goal/achievement motivational level (FTP will predict FBAS, path i).

Extrapolating from the work of Carver and Scheier (1985), it is expected that those individuals who score high on the general fear motives scale (BIS) would also be high in fear-based motives associated with retirement. Moreover, those individuals who prefer to live on a day-to-day basis (i.e., who have a low FTP) will be more afraid of what the future will hold, and thus, possess high fear-based motives associated with retirement. Based on these ideas, the following predictions were developed:

Hypothesis 10. Individuals' level of future time perspective will be negatively related to their scores on the financial fear/avoidant scale (FTP will predict FBIS, path j).

Hypothesis 11. Individuals' general fear orientation scores will be positively related to their scores on the financial fear/avoidance scale (BIS will predict FBIS, path k).

METHODS

<u>Participants</u>

A power analysis (Cohen, 1988) was conducted to determine the minimum number of participants (N_{min}) needed to test the model proposed in Figure 1. The analysis was carried out under the assumption of a power level of .80, and small to moderate effect sizes for the various paths. The obtained N_{min} from the analysis was 109 participants. After adding a generous oversampling margin of 41 persons, a minimum sample size of 150 individuals was decided upon.

Data were collected from 150 participants (79 men, 71 women) within North Central Oklahoma. The sampling design called for the recruitment of working individuals aged 25-45 years ($\underline{M} = 34.3$, $\underline{SD} = 5.8$). An additional recruiting goal was to ensure that the final sample of respondents represented a wide cross-section of demographic backgrounds in an effort to help ensure variability across the sample in terms of planning practices. Toward this end, convenience-sampling procedures were employed. Personal solicitations were made at parks, airports, and other commercial venues within the North Central Oklahoma region. The final sample was 81.3% Caucasian, 0.7% Asian, 4.7% Native American, 6.0% African American, 3.3% Hispanic, 1.3% Multiethnic, and 2.7% other. Additionally, the median income level was $50K, <u>SD</u> = $33.7K) and the median education level was 16 years (<u>SD</u> = 1.0)

<u>Materials and Procedure</u>

Each potential participant was approached in person by the experimenter. Participants were told that the Cognitive Development Laboratory at Oklahoma State University was seeking working men and women between the ages of 25-45 to complete

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a questionnaire about their personal approach to financial planning for retirement. Upon initial contact, individuals were given a detailed description of the level of involvement associated with participation (e.g., answering questions about past retirement planning activities, views of the present and future, and knowledge of financial planning). During this time, the researcher pre-screened the individual to ensure that the inclusionary criteria (i.e., age and work status) were met. Individuals who agreed to participate in the study were given a consent form and the survey at that time. Additionally, the researcher stressed the need for the participant to complete the survey independently (i.e., not asking for the opinions of a spouse or friend).

The survey was seven pages in length. The first page was a brief disclosure statement describing the purpose of the study, which reiterated the information discussed during recruitment. The following six pages included questions that tapped nine different psychological constructs and several demographic variables. The nine constructs (see Appendix A) included BAS, BIS, Financial BAS, Financial BIS, Financial Knowledge, Future Time Perspective, Goal Clarity, Retirement Planning Activities, and Subjective Savings. Once the survey was completed, the participant was debriefed and given a contact number for further inquires. Following is a brief description of each of the scales.

Demographic Information. Several demographic items were included in the survey: age, gender, ethnic background, marital status, income level, educational level, and the number of dependants living in the respondent's household. These items were chosen in order to describe the characteristics of the sample, and if needed, to help minimize error variance in the planned regression models.

BAS and BIS. Carver and White (1994) developed the BAS and BIS scales contained in the proposed model. These two self-report measures used a 4-point response scale (1 = "strong disagreement"; 4 = "strong agreement"). The BIS scale consists of 7 statements designed to reflect a concern over the possibility of bad occurrences (e.g., "I worry about making mistakes") or sensitivity to such events when they occur (e.g., "Criticism or scolding hurts me quite a bit").

In designing the BAS scale Carver and White used a more divergent strategy. All items on the BAS were designed to reference potentially rewarding events. However, unlike the BIS scale which was unidimensional, there were three related subscales on the BAS. The Drive scale consists of 4 items that pertain to the pursuit of desired goals (e.g., "When I want something, I usually go all-out to get it"). The Fun Seeking scale contains 4 items reflecting both a desire for new rewards, and a willingness to approach potentially rewarding events on the spur of the moment (e.g., "I crave excitement and new sensations"). The Reward Responsiveness scale includes 5 items that focus on responses to the occurrence or anticipation of rewards (e.g., "When I get something I want, I feel excited and energized"). The total scores for the BIS and BAS scales were arrived at by summing over their seven and thirteen items, respectively.

FBAS and FBIS. For the purpose of this study financial BAS and BIS scales (FBAS and FBIS) were created by the investigator Based on Carver and White's (1994) BAS and BIS scales. The scales consist of 9 items each. The FBIS items were designed to represent statements that reflected a concern for negative occurrences or fearful feelings toward retirement planning (e.g., "I worry about my finances in retirement"). In contrast, the FBAS items focused on positive occurrences or goal setting activities in the

financial planning context (e.g., " I am highly active in my pursuits towards financial planning for retirement"). For each item, participants were asked to indicate how well the statement represents them or describes their opinions/beliefs using a 7-point response scale, (1 = "strongly disagree"; 7 = "strongly agree"). Total scores for FBIS and FBAS are arrived at by separately summing scores over items for each of the scales.

Future Time Perspective (FTP). Hershey and Mowen (2000) developed the FTP scale that was used in the present study. The measure was designed to assess individuals' general orientation toward the future. Items require participants to judge how well statements represent their attitudes or beliefs (e.g., "I pretty much live on a day-to-day basis"). The scale consists of 6 items which use a 7-point response scale, (1 = "never"; 7 = "always"). A total FTP score is calculated by summing scores over each of the six items.

Financial Knowledge (FKNOW). A modified version of the Hershey and Mowen (2000) subjective financial knowledge measure was used in this study. Self-report financial knowledge measures have been found to be better predictors of financial planning practices than objective indicators of knowledge. In fact, Hershey and Mowen (2000) found that a single-item subjective rating of knowledge was more predictive of financial preparedness among a sample of older adults than a 32-item objective knowledge test they had administered (D. A. Hershey, personal communication, 2000). The FKNOW scale in the present study consists of 4 items that use a 7-point response scale, (1 = "strongly disagree"; 7 = "strongly agree"). For each item, the participant indicates how well the statement represents his or her level of financial knowledge (e.g.,

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"I am very knowledgeable about financial planning for retirement"). A total FKNOW score is calculated by summing scores over the four items.

   Retirement Goal Clarity (FGOAL) and Retirement Planning Scales (FPLAN). The retirement planning activity scale used in this study was modeled after the TIAA-CREF Financial Planning Index (Hershey & Mowen, 2000). That index is a 37-item self-report measure designed to tap retirement goal clarity as well as aspects of prior financial planning. Stawski and Hershey (2001) later refined the 37-item measure down to 14 items in a factor analytic study. The final 14-item measure is comprised of a retirement goal clarity scale (FGOAL) and a financial planning activity scale (FPLAN). FGOAL is comprised of 5 items that assess the clarity of one's goals toward retirement (e.g., "Set specific goals for how much will need to be saved for retirement"). For each item, participants were asked how well the statement represents their behaviors using a 7-point response scale (1 = "strongly disagree"; 7 = "strongly agree"). FPLAN is comprised of 9 items designed to determine whether individuals have engaged in certain key activities related to planning for retirement (e.g., "Assessed your net worth"). For each item, participants were asked whether they had engaged in that activity during the past 12 months using a 7-point response scale, (1 = " strongly agree"; 7 = "strongly disagree"). Total scores for the FGOAL and FPLAN scales are arrived at by summing scores over their 5 and 14 items, respectively.

   Criterion Measure (Subjective Savings). In the present study, a measure of subjective retirement savings effort, created by the investigator, was used as the criterion. The scale consists of 5 items that use a 7-point response scale, (1 = "strongly disagree"; 7 = "strongly agree"). The items are designed to assess how aggressively individuals

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believed they have saved for retirement (e.g., "Accumulated substantial savings for retirement"). For each item, participants are asked to indicate whether they had engaged in particular voluntary savings activities during the past 12 months. A total subjective savings score is calculated by summing scores over the five items.

PILOT RESEARCH

Pilot research was conducted to assess the characteristics of the different scales. Within the hypothesized model (see Figure 1), there were two as of yet untested psychological constructs, FBAS and FBIS. To ensure that the validity and reliability of these scales were adequate for research purposes, factor analyses were conducted and measures of internal consistency were calculated. Additionally, the pilot research provided measures of internal consistency for the other previously developed scales. The pilot study included 32 individuals (17 men; 15 women) from North Central Oklahoma. Participants' ages ranged from 25 to 45 years ($\underline{M} = 34.1$, $\underline{SD} = 7.0$).

A factor analysis was conducted on the combined set of FBAS and FBIS items to insure that they captured two separate psychological dimensions: fear and goal motives associated with financial planning for retirement. A principle component analysis extraction was used, followed by varimax rotation. As anticipated, two factors emerged from the combined set of 18 items. The first factor included only items from the FBIS scale, and the second factor was found to include only items from the FBAS scale. Additionally, the rotated factor loadings failed to reveal any cross-loadings among the items, and all primary factor loadings were observed to be greater than .34 ($\underline{M}_{FBIS} = .81$, $\underline{M}_{FBAS} = .62$). Additionally, Coefficient Alpha levels for each of the eight scales contained in the survey were found to exceed .70, which is generally considered a minimum threshold for research instruments of this type (Nunnally, 1978).

The data analysis began by inspecting each raw score distribution for skew, kurtosis, outliers, or any other distorting conditions. The purpose of this inspection was to ensure that the basic assumptions of multiple regression techniques would not be violated. There were no significant distortions found among the data.

Scale Development

The next step in the analysis plan was to factor analyze the combined set of FBAS and FBIS items. The purpose of the exploratory factor analysis (EFA) was to identify the factor structure for the set of variables (Stevens, 1996). This involved determining how many factors existed if any, beyond the two that were hypothesized, as well as the pattern of factor loadings for the two separate measures. A principle components analysis for the 18 items was conducted, which was followed by varimax rotation. This yielded four factors with eigenvalues greater than 1, which together accounted for 70% of the overall variance. The items and factor loadings are shown in Table 1. Two subscales were identified within each theoretical construct. The FBIS scale consisted of "financial worry" and "planning worry" subscales. The FBAS scale consisted of a "drive subscale" and a "financial freedom" subscale.

In theory, the FBIS and FBAS measures should be structurally independent of one another. Consistent with this assumption, the two subscales of the FBIS were found to group together independently of the two FBAS subscales when a second factor analysis was conducted which specified that only two factors were extracted. In this analysis, all of the FBIS items loaded on one factor and the FBAS items loaded on a second (see Table 2). Additionally, the rotated matrix failed to reveal any cross-loadings among the

Table 1

FBAS/FBIS Scales: Items and Factor Loadings using the Eigenvalues Greater than One Criteria.

Scale and items	Factor Number			
	1	2	3	4
1. FBIS- financial worries				
I worry about my finances in retirement.	.81			
I am concerned about being dependant upon friends or family members for financial support after I retire.	.70			
I often find myself concerned about not having enough money in retirement.	.85			
I worry about making mistakes in my financial preparations for retirement.	.77			
I am concerned about being financially stable in retirement.	.80			
I often feel that something bad will happen in retirement for which I will not have adequately saved enough money.	.67			
2. FBIS- planning worries				
I have a lot of fears toward financial planning for retirement compared to my friends.		.85		
I feel nervous and hesitant when doing financial planning for retirement.	[.48]	.76		
I am hesitant about making retirement investment decisions because I am worried about making a mistake.		.82		
3. FBAS- drive				
When it comes to financial planning for retirement, I use a "no holds barred" approach.			.84	
When doing financial planning for retirement, I feel excited an energized			.83	
I go out of my way when it comes to financially planning for retirement.			.88	
I am highly active in my pursuits towards financial planning for retirement.			.78	
When I see the chance to further my retirement investments, I move on it right away.			.81	
4. FBAS- financial freedom				
I desire financial freedom when I retire.				.56
I have the desire to be able to do what I want financially in retirement.				.77
When I retire, I want to have enough money to be able to participate in any leisure activities that I desire.				.82
I want to have enough money in retirement to be able to purchase the items I wish without being concerned about my financial security.				.81

Note. Decimals and loadings below .40 are omitted; FBIS = Financial Behavioral Inhibition System; FBAS = Financial Behavioral Activation System. Significant cross-loadings are shown in brackets.

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Table 2

FBAS/FBIS Scales: Items and Factor Loadings using the Two Forced Factors Approach.

Scale and items	Factor Number	
	1	2
1. FBIS		
I worry about my finances in retirement.	.78	
I am concerned about being dependant upon friends or family members for financial support after I retire.	.60	
I often find myself concerned about not having enough money in retirement.	.85	
I worry about making mistakes in my financial preparations for retirement.	.81	
I am concerned about being financially stable in retirement.	.77	
I often feel that something bad will happen in retirement for which I will not have adequately saved enough money.	.78	
I have a lot of fears toward financial planning for retirement compared to my friends.	.74	
I feel nervous and hesitant when doing financial planning for retirement.	.82	
I am hesitant about making retirement investment decisions because I am worried about making a mistake.	.68	
2. FBAS		
When it comes to financial planning for retirement, I use a "no holds barred" approach.		.77
When doing financial planning for retirement, I feel excited an energized.		.80
I go out of my way when it comes to financially planning for retirement.		.80
I am highly active in my pursuits towards financial planning for retirement.		.72
When I see the chance to further my retirement investments, I move on it right away.		.83
I desire financial freedom when I retire.		.49
I have the desire to be able to do what I want financially in retirement.		.60
When I retire, I want to have enough money to be able to participate in any leisure activities that I desire.		.46
I want to have enough money in retirement to be able to purchase the items I wish without being concerned about my financial security.		.53

Note. Decimals and loadings below .40 are omitted; FBIS = Financial Behavioral Inhibition System; FBAS = Financial Behavioral Activation System. No significant cross-loadings were identified (i.e., > .40):

items, and all factor loadings were observed to be .46 or greater ($\underline{M}_{FBIS}$ = .76, $\underline{M}_{FBAS}$ = .67). Based on theoretical considerations, the FBIS and FBAS scales were scored and used as unitary constructs when testing the hypothesized model, rather than separately assessing the effects of each of the subscales within each of the two measures.

Coefficient Alpha levels for each of the scales were found to exceed .70. Additionally, for all items within each scale the corrected item-total correlations were found to exceeded .40.

Regression Analyses

A series of hierarchical path analyses were conducted that correspond to the model shown in Figure 1. Tests of this causal model were aimed at determining whether the *a priori* specified paths were statistically significant. Six hierarchical regression models were tested, one for each of the endogenous variables shown in Figure 1. As is customary with hierarchical regression, for each model tested, variables were entered in a stepwise, block fashion. The blocks were entered sequentially until the $\underline{R}^2$ change for a block failed to reach the .05 level of significance. At that point, the analysis was stopped, and the next model was tested. The path diagram that resulted from these analyses is shown in Figure 2. The specific findings from each of the six regression analyses are summarized below.

The first regression analysis employed the subjective savings measure as the criterion, which was estimated based on four blocks of predictors. In the first level, scores on the financial planning measure were regressed on the criterion using the enter method. The standardized beta for FPLAN was .55 ($\underline{p} < .01$), and the variance accounted for in the criterion was .30. In the second block, the measures of financial knowledge
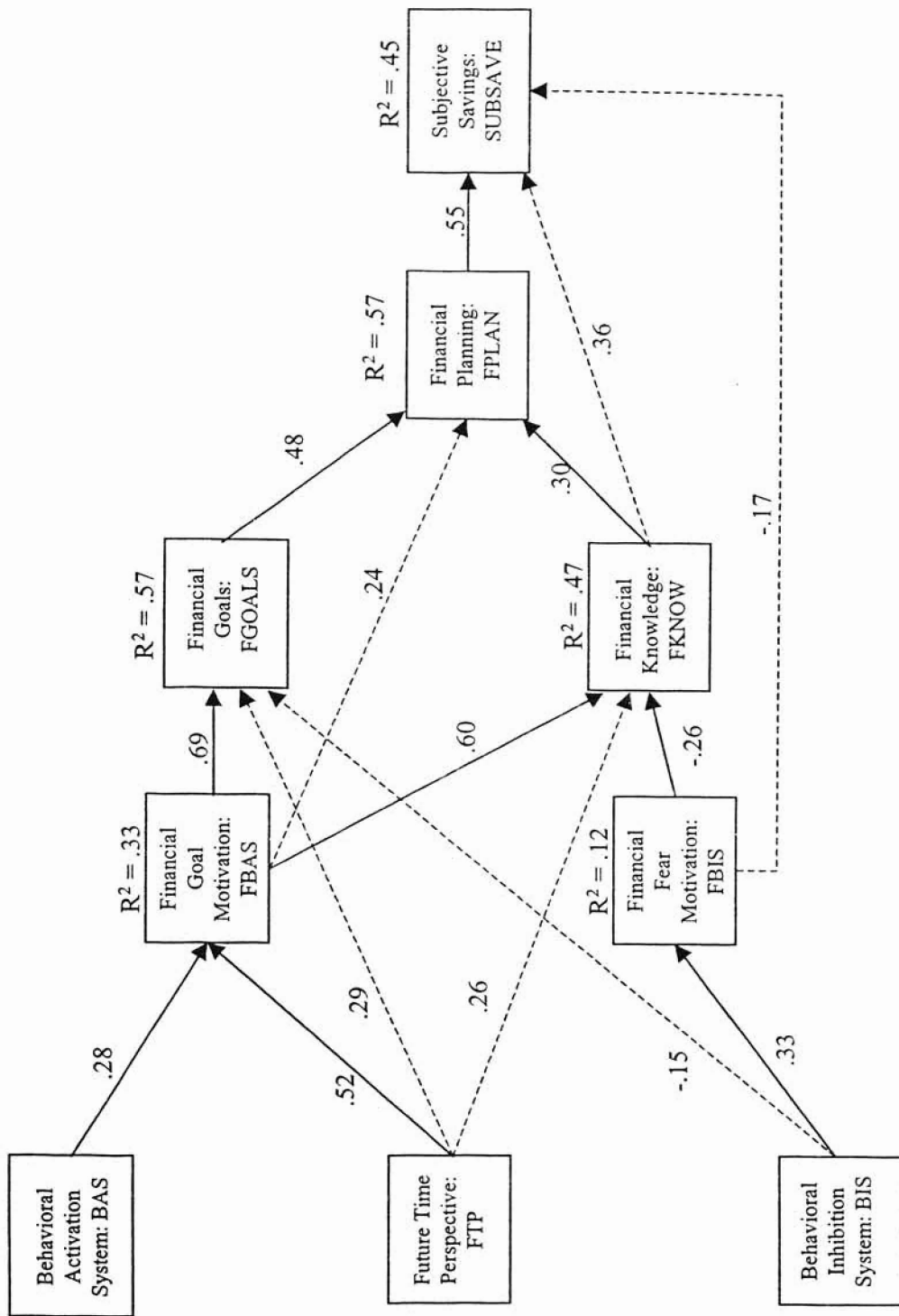
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Figure 2: The solid lines indicate a priori hypotheses. Dotted lines indicate additional significant pathways

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and financial goals were regressed on the criterion. The standardized beta weight for FKNOW was found to be significant ($\underline{B}$ = .36, $\underline{p}$ < .01), however the weight for FGOALS failed to obtain ($\underline{B}$ = .15, n.s.). The incremental change in variance accounted for over and above the first level ($\underline{R}^2$ change = .12) was significant, $\underline{F}$ (2, 146) = 15.40, $\underline{p}$ < .01. In the third block, FBIS and FBAS scores were regressed on the criterion. The standardized beta for FBIS was significant ($\underline{B}$ = -.17, $\underline{p}$ < .01), however the beta for FBAS failed to obtain ($\underline{B}$ = .16, n.s.). The incremental change in variance accounted for at this level was .03, which was found to be statistically significant, $\underline{F}$ (2, 144) = 4.53, $\underline{p}$ < .01. In the fourth and final step, BAS, BIS, and FTP were regressed on the criterion. The incremental change in variance associated with this level was not found to be statistically significant, $\underline{F}$ (3, 141) = 1.62, n.s., leading to the conclusion that these three variables did not meaningfully contribute any more to the prediction of the criterion. The total variance accounted for in subjective savings based on the three significant blocks of predictors was .45.

The second regression employed the financial planning measure as the criterion, which was estimated based on three blocks of predictors. In the first block, scores on the financial goals and financial knowledge measures were regressed on the criterion using the enter method. The standardized beta for FGOALS was .48 ($\underline{p}$ < .01) and the standardized beta for the FKNOW was .30 ($\underline{p}$ < .01), which together accounted for .51 of the variance. In the second level, FBIS and FBAS scores were regressed on the criterion. The standardized beta for FBAS was significant ($\underline{B}$ = .24, $\underline{p}$ < .01), however the beta for FBIS failed to obtain ($\underline{B}$ = -.04, n.s.). The incremental change in variance accounted for at this level was .03, which was found to be statistically significant, $\underline{F}$ (2, 145) = 4.25, $\underline{p}$ <

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.05. In the third and final step, BAS, BIS, and FTP were regressed on the criterion. The incremental change in variance associated with this level was found to be statistically significant, F (3, 142) = 3.61, p < .05; however, none of the three individual variables at this level were found to be statistically significant, leading to the conclusion that as a group, they did contribute to the prediction of FPLAN, but individually, they were not found to be significant predictors. It is worth mentioning, however, that BAS and BIS showed a significant trend at predicting FPLAN (p < .06). The total variance accounted for in financial planning based on the two significant blocks of predictors was .54.

Model three employed the financial goals measure as the criterion, which was estimated on the basis of two blocks of predictors. In the first level, FBIS and FBAS scores were regressed on the criterion using the enter method. The standardized beta for FBAS was found to be statistically significant (B = .69, p < .01), however the beta for FBIS failed to obtain (B = .02, n.s.). The variance accounted for at this level was .48. In the second block, BAS, BIS, and FTP were regressed on the criterion. The standardized beta for FTP and BIS were both found to be statistically significant (B = .29 and B = -.15, respectively, p < .01); however, the weight for BAS failed to obtain (B = .05, n.s.). The incremental change in variance accounted for at this level was .09, which was found to be statistically significant, F (2, 144) = 8.97, p < .01. The total variance accounted for in financial goals based on the two significant blocks of predictors was .57.

Model four employed the financial knowledge measure as the criterion, which was estimated based on two blocks of predictors. In the first level, FBIS and FBAS scores were regressed on the criterion using the enter method. The standardized beta for FBAS and FBIS were found to be statistically significant (B = .60 and B = -.26,

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respectively, $p < .01$), and the variance accounted for was .40. In the second block, BAS, BIS, and FTP were regressed on FKNOW. The standardized beta for FTP was found to be statistically significant ($\underline{B} = .26$, $p < .01$); however, the weights for BAS and BIS failed to obtain ($\underline{B} = -.02$ and $\underline{B} = -.13$, respectively, n.s.). The incremental change in variance accounted for at this level was .07, which was found to be statistically significant, $\underline{F}$ (2, 144) = 5.92, $p < .01$. The total variance accounted for in financial knowledge based on the two significant blocks of predictors was .47.

Model five employed FBAS as the criterion with BAS and FTP as predictors entered in a single block. The standardized betas for both FTP and BAS were found to be statistically significant ($\underline{B} = .52$, and $\underline{B} = .28$, respectively, $p < .01$). The total variance accounted for in FBAS based on the pair of predictors was .33.

The sixth and final model employed FBIS as the criterion with BIS and FTP as the predictors entered as a single block. The standardized beta for BIS was found to be statistically significant ($\underline{B} = .33$, $p < .01$); however, FTP failed to obtain (B = -.07, n.s.). The total variance accounted for in FBIS based on the pair of predictors was .12.

DISCUSSION

The major goal of this project was to examine the underlying psychomotivational factors that influence individuals' decisions to save for retirement. It was argued in the introduction that there were two types of motives that affect the extent to which individuals engage in financial planning for retirement: those who avoid planning on the basis of fear motives, and those who actively engage in planning on the basis of goal/achievement motives. The study measured eight separate psychological constructs as well as the amount of saving conducted by individuals thus far (SUBSAVE). The eight constructs included three personality measures (BIS, BAS, and FTP), two domain-specific motivational measures (FBIS and FBAS), two cognitive factors (FKNOW and FGOALS), and an indicator of prior financial planning behaviors (FPLAN).

The factor-analytic and hierarchical regression efforts revealed substantial support for the set of expected findings outlined earlier in this study. Nine of the eleven a priori pathways within the hypothesized model were supported, and 6 additional significant pathways were added to the model (see Figure 2). As predicted in Hypothesis 1, self-reported planning practices were positively related to financial savings. In fact, planning practices conducted during the preceding 12 months was an excellent predictor of how much individuals had saved ($\underline{B}$ = .55). People who report planning more for retirement also believe they are adequately saving for the future. These findings are consistent with those of Hershey and Mowen (2000) and Stawski and Hershey (2001). Additionally, the findings indicate that strategies designed to increase individuals' planning behaviors should have the beneficial effect of increasing individuals' savings.

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Hypothesis 2, which predicted a positive relationship between FKNOW and FPLAN, as well Hypothesis 3, which predicted a positive relationship between the FGOALS and FPLAN, were also supported. People who believe they possess more knowledge regarding financial planning are more likely to engage in planning behaviors than individuals who are less knowledgeable. Likewise, individuals who have clearly defined retirement goals are more likely to engage in planning behaviors than those with ill-defined goals. This suggests that cognitive factors are strong predictors of behavioral patterns as proposed in the present model. These findings are consistent with the work of Hershey and Mowen (2000) and Stawski and Hershey (2001). An unexpected finding was that FKNOW had a direct effect on SUBSAVE beyond the influence knowledge exerted through FPLAN. This strengthens the idea that financial knowledge is an important variable to consider when determining why certain individuals are saving for retirement while others are not. Additionally, the results suggest that training and intervention programs designed to boost financial knowledge and goal clarity should help improve financial preparedness by triggering individuals to engage in advanced planning activities.

As stated in earlier, it was expected that FBAS and FBIS would be significant predictors of FGOAL (Hypotheses 4 and 5), however, only Hypothesis 4 was supported. Individuals who possessed high levels of financial goal motivation also possessed high levels of goal clarity. Hypothesis 5, which predicted FBIS would be positively related to FGOAL, was not supported. Individuals who had high levels of financial fear motivation did not report correspondingly high levels of goal clarity.

Persons who possessed strong financial goal motives also reported having a significant amount of financial knowledge, which supports Hypothesis 6. In fact, FBAS was a strong predictor of both FGOALS ($\underline{B}$ = .69) and FKNOW ($\underline{B}$ = .60). Additionally, FBAS had a direct effect on FPLAN, above and beyond the influence it exerted through FGOALS. This leads to the conclusion that goal-based motives (FBAS) is a key construct in determining whether one is likely to plan for retirement. Carver and Scheier (1985) and Gray (1987) suggested that motivational systems drive our behavioral patterns, an assertion which is consistent with the findings of the present study.

With respect to fear motives, Hypothesis 7, which predicted a negative relationship between FBIS and FKNOW, was supported. Individuals who possess strong fear motives toward financial planning were found to have lower levels of financial knowledge Additionally, a direct negative relationship was found between FBIS and SUBSAVE, above and beyond the direct influences of FKNOW and FPLAN. This finding is consistent with the ideas proposed by Manion (1974), who argued that avoidance is often the chosen response of people nearing retirement age. Thus, fear can be a strong reason why individuals fail to save for retirement, beyond an insufficient knowledge level and a failure to plan.

In light of this empirical evidence, however, it has yet to be determined whether fear-based motives toward financial planning for retirement predict individuals' financial knowledge and savings (e.g., Is FBIS the cause or outcome?). It could be argued that a lack of knowledge towards retirement planning would create high fear motives among individuals, and subsequently, cause them to not save. Such a position would suggest that the FBIS scale should be positioned further ahead in the model (i.e., to the right of

knowledge is Figure 2). Alternatively, it could be argued that a lack of planning and savings creates high fear motives towards retirement. In the hypothesized model shown in Figure 1, it was argued that high fear-based motives would predict individuals' level of financial planning knowledge. It was also argued on theoretical grounds that individuals' general personality characteristics would influence their fear- and goal-based motives towards retirement. In light of this question over placement of the FBIS scale, alternative models were analyzed and interpreted (not reported in this document). These alternative models failed to be superior to the model shown in Figure 2, particularly given the strong theoretical basis for the organization of the model shown in Figure 1. In the future, researchers should further investigate the causal relationships between fear-based motives and financial knowledge of retirement planning.

The findings presented above lead to the conclusion that individuals' financial motives (whether fear- or goal-based) are strong indicators of savings habits. Individuals who are driven by achievement motives tend to have clearly defined goals, large amounts of financial knowledge, and engage in a wide range of planning behaviors. Those who are motivated based on their fears may or may not have clearly defined goals, have little domain specific knowledge, and have weak planning and saving practices. The implications of these findings suggest that it would be wise to design intervention programs that take into account the motivational orientation of the individual before attempting to modify his or her knowledge, goals, or planning practices. The findings from this study indicate that the two subgroups of individuals have different requirements that need to be addressed when attempting to change their savings patterns.

Hypotheses 8 and 9, which stated that BAS and FTP would be positively related to FBAS (pathways h and i, respectively), were both supported. People who were found to have high goal orientation levels were also found to have high financial goal motivational levels. Additionally, those who possessed a high future time perspective also possessed high financial goal motives. In fact, FTP was a particularly strong predictor of FBAS ($\underline{B}$ = .52), which suggests that those who look to the future, set goals for the future (c.f., Bell & Mau, 1971).

The idea that individuals' fear-based motives toward planning would be predicted on the basis of their FTP and a general fear orientation, BIS, (as stated in Hypotheses 10 and 11, respectively) was only partially supported. The only predictor that indicated whether individuals would possess high FBIS scores was their general fear orientation (i.e., BIS, Hypothesis 11). The findings from the present study support the notion that domain specific motivational constructs are derived from general personality constructs. In fact, significant variance in both FBAS and FBIS was explained based on the general personality constructs they were model after – Carver and White's (1994) BAS and BIS scales.

The FTP construct revealed two additional pathways that were not hypothesized, one of which was a positive direct effect on FGOALS, and the other, a direct effect on FKNOW (beyond the influence exerted through FBAS). This latter effect is similar to the findings of Hershey and Mowen (2000), who reported that FTP was a strong predictor of several variables that predicted savings practices including financial knowledge. Carstensen, Isaacowitz, and Charles (1999) found that as an individual's FTP increases, his or her goals become stronger and more clearly defined. This general finding mirrors

the significant FTP to FGOAL link identified in the present study. Thus, for intervention specialists and retirement counseling practitioners, FTP should be considered an important assessment dimension when attempting to determine why individuals are not saving for retirement.

The general limitation of using survey research techniques apply to the findings from the present study. In particular, the use of subjective indicators within the proposed model may have led to social desirability effects, or other unknown biases. Individuals' perceptions of their knowledge level, goal clarity, planning behaviors, and savings practices may not be representative of their actual behavior. Additionally, the fact that the sample was self-selected may have contributed to some unknown response bias. Those who choose to complete the survey may have differed in some important respects from non-respondents. In light of these limitations, the findings from the present study should be appropriately considered exploratory in nature, awaiting confirmatory evidence from an independent replication effort.

The present findings suggest profitable future research directions in both theoretical and applied arenas. From a theoretical standpoint, it would be beneficial to further examine the effects of fear- and goal-based financial savings motives. The findings from this study suggest that financial fear motives have a direct effect on savings behaviors, whereas financial goal motives have a direct effect on planning behaviors. Perhaps future studies could examine the effects of FBAS and FBIS on planning and savings behaviors among individuals representing a wider range of ages and income levels.

From an applied perspective, the findings from the present study suggest that it may be shortsighted to focus solely on one type of intervention strategy as a method of inspiring individuals to save for retirement. The model suggests that goal oriented individuals would benefit from a seminar that combines goal clarity exercises with financial information. Those who possess a high financial fear motives, in contrast, present a greater intervention challenge. There seems to be no relationship between fear motives and retirement goal clarity; however, fear motives were negatively related to knowledge levels and savings behaviors. Thus, these individuals may benefit from an intervention designed to decrease fears, rather than one designed to "scare" or further "intimidate" individuals into saving.

As stated earlier, financial planning for retirement is an area in which many individuals fall short of their ideal goals. Coupled with the rapidly changing demographic trends associated with the aging of the baby boom generation, the need for effective interventions has never been greater. Perry (1980) found that 53% of those surveyed had not made any plans for retirement, despite the growing number of industrial, governmental, and educational institutions that offer individual or group based intervention programs. Hopefully, the findings from the present study have helped to shed light on why certain individuals fail to plan and save for retirement, despite the availability of programs designed to assist them. Whether individuals possess fear- or goal-based retirement motives stands to have an important impact on their susceptibility to intervention. Those ruled by their fears are unlikely to increase practices by attending conventional programs that stress financial content. To best help those paralyzed by retirement anxiety (Hayslip et al., 1997), fears will first need to be reduced before goals

can be clarified and stimulated. Fortunately, those individuals lacking in goals can avail themselves of existing retirement goal-setting programs (Johnson & Jensen, 1989), which should serve to increase savings participation rates.

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SCALES EMPLOYED IN THE STUDY

<u>BIS</u> (Coefficient Alpha = .70)

1. If I think something unpleasant is going to happen, I usually get pretty "worked up".
2. I worry about making mistakes.
3. Criticism or scolding hurts me quite a bit.
4. I feel pretty worried or upset when I think or know somebody is angry at me.
5. Even if something bad is about to happen to me, I rarely experience fear or nervousness.(R)
6. I feel worried when I think I have done poorly at something.
7. I have very few fears compared to my friends. (R)

<u>BAS</u> (Coefficient Alpha = .85)

1. When I get something I want, I feel excited and energized.
2. When I'm doing well at something, I love to keep at it.
3. When good things happen to me, it affects me strongly.
4. It would excite me to win a contest.
5. When I want something, I usually go all-out to get it.
6. I go out of my way to get things I want.
7. If I see a chance to get something I want, I move on it right away.
8. When I go after something, I use a "no holds barred" approach.
9. I will often do things for no other reason than that they might be fun.
10. I crave excitement and new sensations.
11. I'm always willing to try something new if I think it will be fun.
12. I often act on the spur of the moment.
13. When I see an opportunity for something I like, I get excited right away.

<u>FTP</u> (Coefficient Alpha = .76)

1. I follow the advice to save for a rainy day.
2. I enjoy thinking about how I will live years in the future.
3. The distant future is too uncertain to plan for. (R)
4. The future seems very vague and uncertain to me. (R)
5. I pretty much live on a day-to-day basis. (R)
6. I enjoy living for the moment and not knowing what tomorrow will bring. (R)

FBIS (Full Scale Coefficient Alpha = .90)

Financial worry (Subscale Coefficient Alpha = .89)

1. I worry about my finances in retirement.
2. I am concerned about being dependant upon friends or family members for financial support after I retire.
3. I often find myself concerned about not having enough money in retirement.
4. I worry about making mistakes in my financial preparations for retirement.
5. I often feel that something bad will happen in retirement for which I will not have adequately saved enough money.
6. I am concerned about being financially stable in retirement.

Planning worry (Subscale Coefficient Alpha = .88)

7. I have a lot of fears toward financial planning for retirement compared to my friends.
8. I feel nervous and hesitant when doing financial planning for retirement.
9. I am hesitant about making retirement investment decisions because I am worried about making a mistake.

FBAS (Full Scale Coefficient Alpha = .85)

Financial Freedom (Subscale Coefficient Alpha = .77)

1. I desire financial freedom when I retire.
2. I have the desire to be able to do what I want financially in retirement.
3. When I retire, I want to have enough money to be able to participate in any leisure activities that I desire.
4. I want to have enough money in retirement to be able to purchase the items I wish without being concerned about my financial security.

Drive (Subscale Coefficient Alpha = .89)

5. When it comes to financial planning for retirement, I use a "no holds barred" approach.
6. When doing financial planning for retirement, I feel excited an energized
7. I go out of my way when it comes to financially planning for retirement.
8. I am highly active in my pursuits towards financial planning for retirement.
9. When I see the chance to further my retirement investments, I move on it right away.

FKNOW (Coefficient Alpha = .91)

1. I am very knowledgeable about financial planning for retirement.
2. I know more than most people about retirement planning.
3. I am very confident in my ability to do retirement planning.
4. When I have a need for financial services, I know exactly where to obtain information on what to do.

FGOAL (Coefficient Alpha = .88)

1. Set clear goals for gaining information about retirement.
2. Thought a great deal about quality of life in retirement.
3. Set specific goals for how much will need to be saved for retirement.
4. Have a clear vision of how life will be in retirement.
5. Discussed retirement plans with a spouse, friend, or significant other.

FPLAN (Coefficient Alpha = .90)

1. Discussed financial planning goals with a professional(s) in the field.
2. Tuned into television or radio shows on investing or financial planning.
3. Read brochures/articles on investing or financial planning.
4. Read one or more books on investing or financial planning.
5. Visited investing of financial planning sites on the World Wide Web.
6. Discussed financial retirement plans with employer's benefits specialist.
7. Gathered or organized your financial records.
8. Assessed your net worth.
9. Identified specific spending plans for the future.

Subjective Savings (Coefficient Alpha = .94)

1. Made voluntary contributions to a retirement savings plan.
2. Relative to my peers, I have saved a great deal for retirement.
3. Accumulated substantial savings for retirement.
4. Made a conscious effort to save for retirement.
5. Based on how I plan to live my life in retirement, I have saved accordingly.

Note: (R) indicates that an item is reversed scored.

APPENDIX B

Oklahoma State University
Institutional Review Board

Protocol Expires: 6/10/02

Date: Monday, June 11, 2001   IRB Application No   AS0170

Proposal Title: FEAR VS. GOAL-BASED PLANNING: A MOTIVATIONAL MODEL OF FINANCIAL
PLANNING

Principal
Investigator(s):

Kirstan Neukam   Douglas Hershey
215 N. Murray   201 N Murray
Stillwater, OK 74078   Stillwater, OK 74078

Reviewed and
Processed as: Expedited

Approval Status Recommended by Reviewer(s): Approved

Dear PI :

Your IRB application referenced above has been approved for one calendar year. Please make note of the
expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals
who may be asked to participate in this study will be respected, and that the research will be conducted in a
manner consistent with the IRB requirements as outlined in section 45 CFR 46.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol
   must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year.
   This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are
   unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB
procedures or need any assistance from the Board, please contact Sharon Bacher, the Executive Secretary to
the IRB, in 203 Whitehurst (phone: 405-744-5700, sbacher@okstate.edu).

Sincerely,

Carol Olson, Chair
Institutional Review Board

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VITA

Kirstan A. Neukam

Candidate for the Degree of

Master of Science

Thesis: FEAR AND GOAL-BASED PLANNING MOTIVES: A PSYCHOLOGICAL
MODEL OF FINANCIAL PLANNING FOR RETIREMENT

Major Field: Psychology

Biographical:

Education: Graduated for the University of Texas of the Permian Basin in May,
1998 receiving a Bachelor of Art degree in Psychology. Completed the
requirements for the Master of Science degree with a major in Psychology
at Oklahoma State University in May, 2002.

Experience: Employed as a research assistant at the University of Texas at the
Permian Basin in the summer of 1997; employed as a Qualified Mental
Health Professional by the State of Texas in Midland, Texas from May,
1998 until July, 1999; Employed by Oklahoma State University as a
graduate teaching assistant for Experimental Psychology (Fall 1999-
Spring 2000), an instructor for Introductory Psychology (Fall 2000-Spring
2001), a graduate teaching assistant for Quantitative Methods (Fall 2001),
and Instructor for Psychology and Human Problems (Current).

Professional Memberships: The American Psychological Association (2000-
Current), The Gerontological Society of America (2000-Current), The
Judgment and Decision-Making Society (2000- Current).