THREE ESSAYS ON SELF-ESTEEM AND RETIREMENT PLANNING BEHAVIORS

by

RONALD ALAN SAGES

M.B.A., University of Connecticut, 1979

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Family Studies and Human Services
College of Human Ecology

KANSAS STATE UNIVERSITY
Manhattan, Kansas

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Abstract

This dissertation, consisting of three studies, explores the influence of self-esteem upon retirement planning behaviors. Data for all three essays was obtained from the National Longitudinal Survey of Youth 1979 cohort (NLSY79). A Theory of Self-Esteem (Cast & Burke, 2002) served as a theoretical framework for each study.

The first essay examined the association between information search behaviors and retirement planning actions upon two dimensions of self-esteem, consisting of efficacy and worth. Both information search behaviors and retirement planning actions were found to be associated with both dimensions. Attained levels of education and the masculine gender were also found to be significantly associated with each self-esteem dimension.

Essay two explored creditworthiness as part of the identity self-verification (Stryker, 1980) and self-esteem buffer mechanism, and its association with pre-retirement planning behaviors. Higher levels of self-esteem, attained level of education, net worth, and net income were all found to be associated with individuals who were likely to engage in one or more pre-retirement planning behavior. Creditworthy practices, however, were not found to be associated with pre-retirement planning behaviors in this study.

Essay three postulated that respondents who possessed a composite psychosocial profile consisting of Rosenberg's self-esteem scale (Rosenberg, 1965), Pearlin's mastery scale (Pearlin & Schooler, 1978), and Rotter's locus of control scale (Rotter, 1966) would be associated with engaging in one or more retirement planning behavior. Results showed that a composite psychosocial profile is associated with individuals likely to engage in one or more retirement planning behaviors. Attained levels of education, net worth, net income, and age were found to be associated with individuals likely to engage in one or more retirement planning behaviors.

Results of these three studies demonstrate that an association exists between self-esteem and retirement planning behaviors. This study offers the first exploration of A Theory of Self-Esteem (Cast & Burke, 2002) in a consumer finance context since the theory's establishment ten years ago. These findings are important to academicians, financial planners, financial counselors, financial therapists, and policymakers in developing future research, strategies for financial success, and in the formulation of public policy to promote personal financial well-being.

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Dedication

This dissertation is dedicated to the memory of my parents, Danyel and Claire Chapin Sages, who taught me that education is a lifelong endeavor.

Chapter 1 - Introduction

According to the 2012 Retirement Confidence Survey (EBRI, 2012), major demographic and cultural shifts are occurring in the United States. For example, over the past 21 years, there has been a tripling in the number of individuals who expect to continue to work past age 65, the traditional standard for "normal" retirement, from 11% in 1991 to more than 33% in 2012 (EBRI). Frustrating this expectation is that employment uncertainty has been identified as one of workers' most significant financial concerns. Indeed, only 28% of workers are very confident that they will have paid employment for as long as they need it (EBRI). The economic recessions in 2001 and 2008 have coerced employers into reducing the size of their workforces, with little or no prospect of rehiring jettisoned employees in the foreseeable future.

At the beginning of the twentieth century, the percentage of individuals comprising all races born in the United States between 1900 and 1902 and who were expected to live to at least age 65 was 41% (National Vital Statistics Reports, 2011). At age 80, 14% of individuals born in this cohort were expected to still be living. At mid-century, individuals comprising all races born between 1949 and 1951 and expected to live to at least age 65 was 77%. At age 80, 29% of individuals in this cohort, or more than double those born 50 years earlier, were expected to still be alive. The percentage of individuals born 20 years later (1969 – 1971) and expected to live to at least age 65 had increased to 82%, with 35% expected to remain alive at age 80. For individuals born in 2007, the most recent year for which data is currently available, the number of individuals expected to live to at least age 65 had increased to 88%, with 54% expected to remain alive at age 80. Not only are life expectancies gradually increasing, but clearly more individuals will be spending a longer period of time in retirement, based on a traditional retirement age of 65, than their predecessors from earlier age cohorts. Longer retirements and

earlier retirements necessitate a larger pool of accumulated capital at the time of retirement in order to sustain retirees and their spouses to avoid outliving assets.

Throughout much of the first seven decades of the twentieth century, employees had become accustomed to traditional, non-contributory, employer-provided pension plans, usually supplemented by Social Security (Chu & FitzPatrick, 2007). This retirement fund was regarded as a defined benefit pension plan because it specified the benefit amount that each worker would receive in retirement (Bodie, Marcus, & Merton, 1988). Under such a traditional pension plan arrangement, employers were responsible for establishing a formula designed to replace a percentage of a worker's wage in retirement. Many defined benefit pension plan arrangements adopted a pension benefit formula based upon an average of an employee's final years of wages multiplied by years of loyal service. Responsibility for meeting each worker's retirement benefit, according to the adopted formula, rested solely with the employer. Funding amounts, the timing of contributions, and investment earnings all rested on the shoulders of the employer, not to mention the burdensome administrative costs associated with operating defined benefit plans.

Under the Revenue Act of 1978, pre-existing deferred compensation plan arrangements were given new life by Congress with the addition of Code Section 401(k), permitting employees to defer receipt of a portion of their wages, and therefore, the income tax liability on such wage deferrals, under the auspices of a qualified employee benefit plan arrangement. This section of the Internal Revenue Code became effective January 1, 1980, and the Treasury Department subsequently issued regulations governing the administration of salary reduction plans in November 1981. Shortly afterward, many Fortune 500 Corporations began amending their employee benefit plans to provide a less generous defined benefit plan formula coupled with an employee contributory defined contribution plan arrangement such as a salary reduction or

401(k) plan (Arkin, 1985). In 1986, the Congress of the United States adopted changes to its employee benefits program for federal employees to include a salary reduction arrangement, thereby providing additional impetus to Corporate America to follow suit.

Unlike a defined benefit plan, where responsibility for adequately funding retiree benefits rests solely with an employer, a defined contribution plan shifts the onus to employees to make ongoing contributions to an account exclusively for their benefit, and to select appropriate investment options for keeping contributions productive until needed in retirement (Bodie, Marcus, & Merton, 1988; Clark, d'Ambrosio, McDermed, & Sawant, 2003).

With slightly more than 30 years' history since the advent of the 401(k) plan arrangement, combined with the accelerating shift away from traditional employer-provided defined benefit plans toward defined contribution plans, research clearly indicates that many workers are not adequately saving for retirement or engaging in appropriate retirement planning activities (EBRI, 2012; Chu & FitzPatrick, 2007; Radner, 1998; Yuh, Montalto, & Hanna, 1998).

The purpose of this dissertation is to explore in detail factors that may be associated with a worker's propensity to either prepare for, or to defer or completely ignore, planning for and funding of one's retirement. Specifically, elements of self-esteem will be examined in all three papers as being associated with retirement planning behavior. Gaining an awareness of the role that self-esteem plays in personal financial decision making will provide a framework of understanding for personal financial planners and financial therapists when working with clients in guiding them to achieve long term financial goals. Further, this research may prove helpful from a public policy perspective by assisting policymakers in the design of appropriate and creative incentives to enhance the likelihood of workers engagement in retirement planning behaviors.

All three papers employ A Theory of Self-Esteem (Cast & Burke, 2002) as a theoretical framework for this dissertation. According to Cast and Burke, self-esteem has been conceptualized as a motivator, an outcome, and a buffer of behavior. Heretofore, self-esteem has been limited in its application, and examined as a cause and outcome related to a variety of human behaviors surrounding educational achievement, marriage, divorce, and risk-taking. Until recently, self-esteem has rarely been examined in the context of personal and household finance behaviors. This dissertation seeks to contribute to the literature by applying self-esteem and its dimensions as both a motive and as an outcome of pre-retirement planning behavior.

Description of Studies

This dissertation study examines various aspects and dimensions of self-esteem and their relationship to personal financial behaviors. Data for all three articles have been obtained from the National Longitudinal Survey of Youth 1979 (NLSY79) dataset. NLSY79 is a longitudinal study that began in 1979 (n = 12,686) when survey respondents were between the ages of 14 and 22. The NLSY79 survey is currently administered biennially; approximately 68% of the initial sample remains active in the study.

The first article, Chapter Two, explores associations between retirement planning actions, information search behaviors, changes in net worth and changes in net income, leading to the two dimensions of self-esteem, worth and efficacy, as dependent variables. This analysis incorporates common influencers of retirement planning behaviors, including gender, age, ethnicity, and education. The intended journal for the first article is *Social Forces*, which published Cast and Burke's (2002) landmark Theory of Self-Esteem.

Chapter Three examines credit self-verification as a proxy for identity verification. Identity verification is an essential element of the buffer aspect as postulated in A Theory of

Self-Esteem (Cast & Burke, 2002). The premise of the second paper is that individuals who manage credit prudently are more likely to experience increases in self-esteem and that high levels of self-esteem are positively associated with retirement planning behaviors. Conversely, individuals who are less diligent or derelict in the management of credit will be more likely to experience decreases or depletion in self-esteem reserves, which tend to be negatively associated with retirement planning behaviors. Once again, common influencers of retirement planning behaviors are included in the analysis. The intended journal for the second article is *Journal of Financial Counseling and Planning.*

Chapter Four assesses a comprehensive psychosocial profile consisting of locus of control (Rotter, 1966), the Pearlin mastery scale (Pearlin & Schooler, 1978), and Rosenberg's self-esteem scale (Rosenberg, 1965) as motivation for engaging in retirement planning behaviors. Through factor analysis, a comprehensive, stable, and reliable personality profile is anticipated that will serve as a basis for predicting individuals who are most likely to engage in retirement planning activities. The intended journal for the third article is *Journal of Financial Therapy*.

Each article comprising this dissertation seeks to test the conceptualization of the elements in A Theory of Self Esteem (Cast & Burke, 2002), as a motive, buffer, and outcome, in a retirement planning context, thereby providing a foundation for advances in future personal finance research involving personality characteristics.

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Chapter 2 - Information Search Behaviors, Retirement Planning Actions, and Self-Esteem

Introduction

According to the 2012 Retirement Confidence Survey (EBRI, 2012), more than one-half of survey respondents reported that neither they nor their spouses have attempted to calculate how much money they will need in retirement so that they will be able to retire in comfort. Calculating needed retirement savings is generally considered to be one of the first steps in retirement planning (Garman & Forgue, 2010). In contrast, those who do have a retirement savings goal report an increase in the amount they are personally saving for retirement (Mayer, Zick, & Marsden, 2011). Stawski, Hershey, and Jacobs-Lawson (2007) similarly linked retirement goal clarity with retirement planning practices, and retirement planning practices with the propensity to save. The practice of thinking about retirement, calculating retirement needs, and attending retirement planning informational sessions are all associated with positive levels of retirement satisfaction (Elder & Rudolph, 1999). Unfortunately, many retirees (38%) do nothing or very little to prepare for retirement (Jacobs-Lawson & Hershey, 2005).

In addition to the lack of general retirement preparedness, Americans are living longer and spending more time in their retirement years. According to the United States Department of Commerce (2010), more than 1 out of 5 persons will be over age 65 by 2030; whereas in 1994, only 1 out of 8 persons was over age 65. This increase in the proportion of U.S. retirees over the ensuing 30 years, many of whom will be ill-prepared financially for retirement, has the potential to result in significant public policy implications. According to a research study regarding proposed restrictive changes in Social Security Retirement Benefits entitlements, published more than a decade ago by the Social Security Administration Office of Research, Evaluation, and

Statistics, “it is uncertain whether the baby boom generation as a whole will have enough resources in retirement to maintain their pre-retirement standard of living, even in the absence of policy changes” (Radner, 1998, p. 39). Indeed, Yuh, Montalto, and Hanna (1998) found that a substantial proportion of households will not have adequate wealth to retire as planned, and that, “since average life expectancies have increased over time, future retirees need to be prepared to support their consumption over increasingly longer periods of retirement” (p. 10). The generational cohort now approaching retirement has had nearly a full career period to financially prepare for retirement, yet it appears that many have failed to take appropriate steps to do so (Radner; Yuh et al.).

As stated above, retirement planning actions (e.g., calculating projected income in retirement) (Garman & Forgue, 2010) and information search activities (e.g., consulting a personal financial planner and attending retirement planning seminars) (Elder & Rudolph, 1999) can have a positive effect on retirement planning outcomes. Lusardi and Mitchell (2007) observed that attending retirement seminars has a positive effect on wealth, as measured by net worth, and that this effect is especially pronounced at lower levels of net worth. Furthermore, Munnell, Sunden, and Taylor (2001) reported that income is an important variable in an employee’s decision to participate in 401(k) plans in that employees who are more resource-constrained are less likely to contribute to retirement planning arrangements.

What is unknown is how these activities, actions, and resource levels cumulatively influence individual psychosocial factors. For instance, why do individuals sometimes fail to take steps to prepare themselves adequately for retirement? One of the more recent innovative approaches to address post-career planning has been an effort to bring the field of behavioral finance together with retirement planning (NBER, 2008; Madrian & Shea, 2001; Thaler &

Sunstein, 2003). In each of these studies, the focus has been on retirement plan design modifications, specific to enrollment, that shift the default options in favor of the employee. Studies conducted, to date, have failed to account for the role psychosocial factors play in shaping post-career planning. That self-esteem is associated with individual behavior is undisputed (Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005); however, there has been virtually no research conducted to date that examines psychosocial factors, such as self-esteem, to ascertain what association, if any, may exist upon individual information search and planning behaviors to prepare for eventual retirement.

The principal objective of this study is to explore the role that retirement planning actions, information search behaviors, and changes in resources have upon two dimensions of self-esteem (i.e., efficacy and worth). The goal of this study is to provide practical implications to retirement planning professions in better understanding a holistic approach to retirement planning.

Theoretical Review

From a theoretical perspective, self-esteem is generally regarded as the assessment component of Self Concept Theory (Fleming & Courtney, 1984), while the self concept is much broader, relating to how an individual self-perceives in reference to myriad routine and non-routine activities. Self Concept Theory, which dates in its embryonic stage to Professor Sigmund Freud (circa 1900), is deemed to consist of multiple personality concepts, one of which is self-esteem (Fleming & Courtney). The thought that individuals evaluate their own self-worth and that they subsequently use this judgment as a factor influencing future behavior was once considered a novel hypothesis. It was not until the mid-1960s that researchers systematically began to study what is now known as self-esteem. Rosenberg (1965) is commonly credited with

identifying self-esteem as a psychological construct, which is generally defined as an individual's positive self-evaluation (Rosenberg, 1989), although others in the mid- to late-1960s were also engaged in examining the role self-worth, self-love, self-respect, and other related concepts play in shaping behavior (e.g., Branden, 1969; Coopersmith, 1967).

In addition to Self Concept Theory, self-esteem is also grounded in Identity Theory (Stryker, 1980), which defines individual identity as consisting of multiple elements, including "understandings, feelings, and expectations that are applied to the self as an occupant of a social position" (Cast & Burke, 2002, p. 1043). Burke (1991) noted that the elements of Identity Theory form reference points for an individual's role identity control system, which is considered to be the identity standard. When an individual is in a group or one-on-one setting, the resultant individual behavior seeks to bring harmony between the identity standard and the elements in the setting as part of the self-verification process (Cast & Burke). Further, the process of self-verification not only embraces each individual's separate behavior, but also each individual's separate behavior relative to others with whom there is an interaction. According to Stryker, people routinely and regularly seek to match their individual identities with perceived meanings in any given social position. When a positive match occurs, identity verification takes place, producing the outcomes of worth and efficacy, and self-esteem is increased (Stryker). However, when identity verification fails to occur, a person will typically feel less competent and worthy, thereby decreasing self-esteem.

Self-esteem refers most generally to an individual's overall positive evaluation of the self (Rosenberg, 1965). Self-esteem has been a widely used psychosocial concept and researchers have examined self-esteem as both a causal and outcome factor related to a number of human activities (Fitch, 1970; Rosenberg). Almost all behaviors studied, however, have been in the

context of individual and family social actions including marriage and divorce, educational achievement, violence, and youth risk taking (Amato & Keith, 1991; Baumeister, Smart, & Boden, 1996; Crocker & Major, 1989; Slavin, 1988).

More recently, Hira and Mugenda (1999) found that "self-worth, as a system of thoughts and feelings concerning or focused on self, may be a driving force in people's perceptions of their financial situation and their spending behavior" (p. 81). In their study, self-esteem was also found to be positively associated with financial satisfaction, optimism about the financial future, and future expectations of improvement in their financial situation. Conversely, Yurchisin and Johnson (2004) found that a negative relationship existed between individuals' level of self-esteem and their level of compulsive buying behavior.

Zagorsky (2007) found that three psychological variables consisting of self-esteem, locus of control, and mastery have a positive relationship with wealth. In a similar vein, Chatterjee, Finke, and Harness (2009) determined that individuals' self-esteem, measured between the ages of 13 and 21, impacted wealth accumulation and asset allocation decisions later in life when the same individuals ranged in age between 39 and 47 years of age.

Tests of self-esteem have generally conceptualized the construct as being (a) a self-motive in directing current and future behavior, (b) a buffer that provides protection from harmful behavior, or (c) an outcome of behavioral processes (e.g., exploring self-esteem as an outcome of retirement planning behaviors). According to Cast and Burke (2002), "little has been done to synthesize the three research streams into an overall integrated model" (p. 1042). In an attempt to unify these three areas of research, Cast and Burke developed a formal Theory of Self-Esteem (TSE) that integrates the motivational, buffering, and outcome aspects of self-esteem. Cast and Burke employed Stryker's (1980) Identity Theory in group interactions as a framework

for explaining the three aspects of self-esteem. They hypothesize that as individuals are able to verify their personal identities with identities associated in group settings, worth and efficacy are increased, thereby demonstrating that self-esteem can be an outcome associated with behavioral processes. In instances where identity verifications fail to materialize or are disturbed, accumulated self-esteem works to mitigate the effects of this failure or disturbance, thereby serving as a buffer in times of potential upset. During interactions where identity verifications are successful and self-esteem is increased, individuals are motivated to seek and engage in situations that are more likely to result in further positive identity verification outcomes. In this sense, past successful identity verification situations that led to self-esteem increases are likely to serve as a motive for future successful identity verification situations (Cast & Burke).

For the purposes of this study, in the context of pre-retirement planning, the following variables will be tested as predictors of efficacy-based and worth-based self-esteem: (a) information search behaviors, (b) retirement planning actions, and (c) changes in resources. This study hypothesizes that information search behaviors, retirement planning actions, and changes in resources will produce positive identity verification situations that will lead to increases in both efficacy-based and worth-based self-esteem.

Self-Esteem as Efficacy and Worth

Cast and Burke (2002) noted that "self-verification of an identity produces feelings of competence and worth, thereby increasing self esteem" (p. 1043). Thus, Cast and Burke conceptualized self-esteem, within TSE, as having two dimensions, consisting of *efficacy* or competence and *worth*. The competence/efficacy dimension represents a measurement of how competent and capable an individual is, while the worth dimension pertains to a perceived self-assessment of value.

In instances where the self-verification process cannot be completed or is derailed, stress results, which, if not reduced, can potentially lead to less desirable behaviors, "including depression, anger, and anxiety" (Cast & Burke, 2002, p. 1045). According to Cast and Burke, many such disturbances in the self-verification process are of a nature that individuals will subconsciously and routinely seek to either reduce the circumstances or avoid the conditions leading to the creation of the disturbance. In these situations, the buffering aspect of self-esteem, unless depleted, comes into play as a means of moderating the negative effects of a disturbance in the self-verification process. The process of self-verification is an integral component of each concept of self-esteem as: (a) an outcome of behavioral processes, (b) a buffer guarding against inappropriate behaviors, and (c) a motive in guiding current and future behaviors. Self-esteem can therefore increase or decrease based on the extent to which self-verification takes place.

Personal Characteristics

Yao, Gutter, and Hanna (2005) pointed out that race and ethnicity often work to shift preferences. Within a consumer behavior framework, race and ethnicity can represent cultural influences, as well as an information and resource barrier (Burlew, Banks, McAdoo, & Azibo, 1992). Yao and her associates noted that Blacks, Hispanics, and Whites have different perceptions of what it means to be financially responsible. These differences stem from cultural variations (Gutter & Fontes, 2006). It has been hypothesized in the literature that Hispanics and Blacks, compared to Whites, have a financial acculturation deficit resulting from a limited exposure to the credit, investment, and general financial markets. This has traditionally resulted in Whites exhibiting greater financial risk tolerance (Coleman, 2003), increased equity ownership, and more proactive financial planning behavior than other racial/ethnic groups.

Other factors, such as gender, age, education, and marital status are known to be associated with information searches and retirement planning actions. For example, Joo and Pauwels (2002) noted that women, for instance, face unique barriers to retirement. These obstacles stem from a combination of factors, such as gender role identification that leads some women to accumulate less financial knowledge over the lifespan. Kim and Kim (2010) found that age is negatively associated with information search behaviors. Older individuals tend to be less likely to engage in intensive information searches, but more likely to rely on advice proffered in the media (Lee & Cho, 2005). Younger consumers, by contrast, utilize social media and the internet to a greater extent in their search for information on consumer topics (Bei, Chen, & Widdows, 2004). Joo and Pauwels reported that younger individuals were more likely to be confident about their retirement preparation, as were those with more education. Mastin (1998) linked education with knowledge and noted that those with less education were less likely to be knowledgeable about retirement planning issues. Lee and Cho also found that education levels were positively associated with information searches, and that individuals possessing higher levels of education were able to parse and apply information that was collected. Married individuals, on the other hand, may have an incentive to be proactive in their retirement planning. Rather than needing to worry about the adequacy of assets in retirement for one person, married couples need to plan for the preservation of capital for two people. As Li, Montalto, and Geistfeld (1996) pointed out, wealth, in addition to other factors (e.g., age and education), were positively associated with retirement preparation.

Associations Between Retirement Planning Information Search Behavior and Self-Esteem

According to Gecas and Schwalbe (1983), "Human beings derive a sense of self not only from the reflected appraisals of others, but also from the consequences and products of behaviors that are attributed to the self as an agent in the environment" (p. 79). Cast and Burke (2002) built upon this concept by stating that "efficacy-based self-esteem is more likely to result from self-attributions" (p. 1047). Cast and Burke argued that "when individuals reflect upon their behavior and observe that they have been successful at maintaining a match between situational meanings and identity standards, efficacy-based self-esteem results from such "successful behaviors" (p. 1047).

Another necessary and recommended aspect of post-career retirement planning today is locating, filtering, evaluating, selecting, and applying the wealth of available information to guide the development of a workable and durable retirement plan. As Lee and Cho (2005) noted, the availability of information due to the growth and popularity of the Internet has been more than abundant. Further, Lee and Cho found that the use of information searches by consumers is associated with the likelihood in use of other information sources. Similarly, the number of financial options available to consumers, information about these options, and the number of firms offering them for sale has exploded (Campbell, Jackson, Madrian, & Tufano, 2011). Consumers must now filter, condense, and categorize the wealth of information into helpful, meaningful and usable segments.

Income and gender tend to be positively associated with more in-depth information searches (Kim & Kim, 2010), while media and professional services were the most favored sources of retirement planning information among financially distressed consumers. Further, high-confidence consumers are more likely to engage in more expansive information search

behaviors prior to implementing their decisions (Loibl, Cho, Diekmann, & Batte, 2009). For example, Chang (2005) found that as socioeconomic status increases, wealthier households were more likely to employ paid financial professionals in their quest for savings and investment information. As Lee and Cho (2005) observed, the use of information searches is perceived to be more valuable the higher the value of financial assets held by a consumer coupled with greater demands on consumers' time.

In the context of pre-retirement planning and efficacious self-esteem, past behaviors can have a profound effect upon current and future behaviors. According to Moen, Fields, Quick, and Hofmeister (2000), "whether retirement affects a person's sense of psychological self-worth and well-being may well depend on the degree of planning regarding the retirement transition, its timing and the reasons why the individual is retiring" (p. 82). Thus, engaging in pre-retirement information search behaviors, and retirement planning activities, such as consulting a financial planner, reading books or magazines on retirement planning, and attending retirement planning seminars may have a significant impact on self-esteem. After engaging in one, several, or all of these actions, and reflecting upon them, it is hypothesized that individuals will be more satisfied with the pre-retirement planning process and the progress being made toward reaching retirement goals. As a result, efficacy-based and worth based self-esteem may increase through this determination to plan for retirement. Thus, in this paper the following hypothesis is proposed:

> Hypothesis 1: Pre-retirement planning information search behaviors will be positively associated with worth-based and efficacy-based self-esteem.

The first hypothesis is premised on the assumption that information search behaviors increase decision-making clarity by providing context for future behavior (Lee & Cho, 2005; Loibl, Cho, Diekmann, & Batte, 2009). In other words, the process of obtaining information

increases a person's reservoir of self-esteem. An opposite effect may exist when someone engages in behavior that depletes the self-esteem reservoir. As Cast and Burke (2002) noted, self-esteem can function as a buffer between behavior and distress that might occur when self-verification processes fail. Cast and Burke also noted that negative emotional consequences can result when the self-verification process is disturbed, resulting in depression, anxiety, and stress. As a key proposition of TSE, self-esteem can be seen as a flexible personal resource. Each person's "reservoir" can increase when self-verification is successful, but it can also decrease (i.e., be used up) when self-esteem is used as a buffer. Therefore, it is hypothesized that:

Hypothesis 2: Engaging in retirement planning actions will be positively associated with worth-based and efficacy-based self-esteem.

Self-Esteem as a Worth-Based and Efficacy-Based Outcome of Behaviors

Cast and Burke (2002), quoting James (1890, 1950, p. 193), noted that "self-esteem is the ratio of successes to pretensions implying a relationship between what individuals accomplish and their goals" (p. 1046). Rosenberg (1989) observed that an individual's perceptions of accomplishments are generally attributable to three processes found in group interactions: (a) reflected appraisals, (b) social comparisons, and (c) self-attributions. According to Cast and Burke, reflected appraisals and social comparisons are tied more closely to worth-based self-esteem, and are more likely to occur in group settings or as a result of group interactions. The third process of self-attributions is more likely to be associated with efficacy-based self-esteem (Cast & Burke). Taking proactive steps to educate oneself by consulting a financial planner, reading books and magazines on retirement planning, attending meetings on retirement planning, calculating needed retirement income, and using a computer program are hypothesized to be

more closely tied to self-attributions of successful behaviors than from social comparisons or reflected appraisals. Therefore, it is hypothesized that:

Hypothesis 3: In a pre-retirement planning context, efficacy-based self-esteem is more influenced by self-attributions than worth based self-esteem.

According to Leary and Downs (1995), worth-based self-esteem is most at risk when an individual is faced with possible exclusion from social groups. Positive self-verifications are expected to contribute to an increase in self-esteem (Cast & Burke, 2002), and in cases involving worth-based self-esteem, individuals are most likely to receive self-verifying feedback from groups with which they regularly associate. According to Burke and Stets (1999), individuals will make comparisons and assess situations as being beneficial or harmful based on how they perceive others will value these situations and environments. Munnell, Sunden, and Taylor (2001) found a positive association between increases or changes in income and the likelihood of an employee's participation in a 401(k) plan. Williams and Manning (1972) noted that positive changes in net worth are attributable to a decrease in spending or consumption relative to net income, a greater increase in net income relative to increases in spending, or an increase in net income relative to a decrease in consumption. Positive changes in net worth over time constitute savings, which contribute to overall economic security (Williams & Manning). In this study the following hypotheses are proposed:

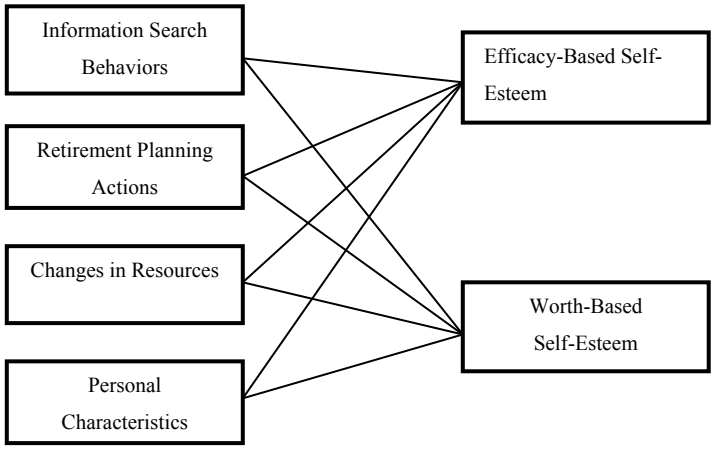
Hypothesis 4: Changes in net income will be associated with worth-based and efficacy-based self-esteem.

Hypothesis 5: Changes in net worth will be associated with worth-based and efficacy-based self-esteem.

Summary

This research study was designed to test components of the Theory of Self-Esteem (TSE) in relation to pre-retirement planning behaviors. Figure 2.1 shows the conceptual framework underlying the research. In effect, pre-retirement planning actions are depicted as two primary independent variables: information search behavior and pre-retirement planning actions. These factors are hypothesized to be directly associated with efficacy-based and worth-based self-esteem. Changes in resources are shown in the framework to be directly associated with both efficacy-based and worth-based self-esteem. Personal characteristics are also included as control variables in the model.

Figure 2.1 Conceptual Model Applying a Theory of Self-Esteem (Cast & Burke, 2002)



Methods

Sample Description

Data for this study were obtained from the National Longitudinal Survey of Youth 1979 (NLSY79). The NLSY79 was established in 1979 and consists of a random sampling of resident

individuals (N = 12,686) in the United States of America between the ages of 14 and 22 at the beginning of the survey process. At inception, the survey was conducted annually, and contained an oversampling of minority individuals (i.e., Blacks and Hispanics), economically disadvantaged Whites, and military youth. The oversampling process of economically disadvantaged Whites was discontinued in 1984, and the oversampling of military youth was discontinued in 1990, both due to budgetary considerations. The frequency of surveys was changed in 1994 from an annual to biennial process.

Using data collected during the 2006 survey of the National Longitudinal Survey of Youth 1979 (NLSY79), this study applies TSE (Cast & Burke, 2002) as the theoretical framework to study the effect of the theory's two principal dimensions of self-efficacy and self-worth as factors associated with pre-retirement planning behaviors. The sample (N = 4,454) consists of all respondents who answered the 2006 Rosenberg (1965) scale of self-esteem items, the 1992 Pearlin scale of mastery (Pearlin & Schooler, 1978) items, the 2008 retirement planning items, and all other variables used in the model. Missing data was deleted from the analysis. As discussed below, 1992 was the sole administration of the Pearlin mastery questions to the sample since the inception of the NLSY79 survey. Although the five retirement planning questions of interest were asked in 2006, fewer than 1,000 respondents answered these questions. During the 2008 data collection process, more than 7,500 respondents answered the retirement planning questions, from which more than 4,400 were retained for this study in combination with the remaining variables discussed above. In 2006, respondents were between 41 and 49 years of age. A correlation of all variables was conducted to assess for multicollinearity issues (see Appendix A Table A-1). No multicollinearity issues were found.

Outcome Variables

According to the theoretical framework for this study, self-esteem consists of two dimensions relating to efficacy and worth (Cast & Burke, 2002). Prior research studies involving self-esteem have measured the concept according to one or more scales developed by Rosenberg (1965) or Pearlin (Pearlin & Schooler, 1978). The Rosenberg self-esteem scale (most recently asked of respondents in 2006) consists of 10 statements that are self-assessed on a four point Likert-type scale ranging from strongly disagree to strongly agree.

1. On the whole I am satisfied with myself.;
2. At times I think that I am no good at all.;
3. I feel that I have a number of good qualities.;
4. I am able to do things as well as most other people.;
5. I feel I do not have much to be proud of.;
6. I certainly feel useless at times.;
7. I feel that I am a person of worth, at least the equal of others.;
8. I wish I could have more respect for myself.;
9. All in all, I am inclined to feel that I am a failure.; and
10. I take a positive attitude toward myself.

Statements 2, 5, 6, 8 and 9 were reverse coded so that higher scores represent higher self-esteem.

The Pearlin mastery scale (Pearlin & Schooler, 1978) was originally designed to assess how well individuals cope with life events. Various research studies have explored the stability of this construct over time; however, a consensus has failed to emerge with concrete evidence of such stability (Finch, Shanahan, Mortimer, & Ryu, 1991; Jang, Haley, Small, & Mortimer, 2002; Brady, 2003). Inasmuch as the variables and data for this study are limited to the periodic

administrations of the NLSY survey, the Pearlin mastery scale (Pearlin & Schooler) was incorporated into this study utilizing the sole data collected from the questions posed in 1992. Seven statements were self-rated by respondents on a four point Likert-type scale ranging from strongly disagree to strongly agree. The following statements were asked of the survey respondents:

1. There is no way I can solve the problems I have.;
2. I sometimes feel I'm being pushed around.;
3. I have little control over what happens to me.;
4. I can do just about anything I really set my mind to.;
5. I often feel helpless in dealing with problems of life.;
6. What happens to me in the future mostly depends on me.; and
7. Little I can do to change important things in my life.

Statements 1, 2, 3, 5, and 7 were reverse coded so that higher scores represent mastery over one's domain.

According to Cast and Burke (2002), the Pearlin mastery scale (Pearlin & Schooler, 1978) principally measures efficacy-based self-esteem, while the Rosenberg self-esteem scale (Rosenberg, 1965) does not distinguish between the two self-esteem dimensions. Accordingly, an exploratory factor analysis of the 17 statements from both scales was used to reveal the grouping of specific statements as factors representing efficacy or worth-based self-esteem.

Predictor Variables

Information search behaviors and retirement planning actions represent separate, summed scores across a sequence of five dichotomous statements for each independent variable. Data were utilized from the 2008 NLSY79 survey wave. Five retirement planning statements were

subjectively parsed into information search behaviors and retirement planning actions. Information search behaviors measure individual behaviors that enhance knowledge of post-career retirement planning including: (a) consulting with a financial planner, (b) attending retirement planning seminars, and (c) reading retirement planning magazines and books (total score ranges from 0 to 3). Retirement planning actions measure individual actions taken to: (a) use a computer program to help plan, and (b) calculate cash flow needed in retirement (total score ranges from 0 to 2).

Positive changes in net worth and income between calendar years 2000 and 2008 were hypothesized to be associated with worth-based and efficacy-based self-esteem. Responses to estimated net worth and net income for the time period being measured were used to calculate in nominal dollars the changes in each category. Family net worth for each respondent consists of the summated total of all asset values, including residence, cash savings, stock and bond portfolio, interests in estates and trusts, business and farming ventures, automobiles and other assets over $1,000 in value, minus all debts. Family net income for each respondent consists of the summated total of all forms of income, including traditional wages and salaries, self-employment, unemployment compensation, child support, food stamps, and other forms of welfare and supplemental social security-related income. Family net income is reported gross of applicable federal, state, and local income taxes for the periods being analyzed. Dollar amounts reported by respondents were adjusted (i.e., divided) by 10,000 prior to computing the percentage change for ease of interpretation of results.

Personal characteristics consisted of race, gender, age, and education. Race/ethnic background is grouped into three categories of Hispanic, Black, and non-Hispanic, non-Black in the NSLY79 data set. Hispanic and Black respondents were grouped as one variable (coded 0) in

the multivariate analysis, with Non-Black, Non-Hispanic being coded 1. Ethnicity was transformed and coded in this fashion in order to capture differences in two primary categories. Gender was coded 1 = male and 0 = female. Age and education were captured as continuous variables.

Data Analysis

Exploratory factor analysis was selected to hone in on a smaller set of factors that can be used to explain the relationships among the 17 variables comprising both measures of self-esteem. According to Field (2009), exploratory factor analysis focuses on all the shared or common variance among the variables, while ignoring unique and residual variance. An oblique rotation of the factors was undertaken to optimize the loading of factors (Field). Multiple regression analysis employing each factor, representing efficacy-based self-esteem and worth-based self-esteem as dependent variables, was conducted using SPSS version 18.0.

Results

Results from the descriptive statistics are contained in Table 2.1 reflecting an almost even split between men (47.62%) and women (52.38%) in the sample. Approximately 56.47% were non-Black, non-Hispanic and the mean age among the sample was 44.63 years. The mean number of years of completed schooling was 13.58 years. Among information search behaviors, the most frequently used reference source was reading retirement planning books and magazines (31.93%), followed by consulting a financial planner (17.36%), and attending retirement planning seminars (15.43%). Retirement planning actions consisted of calculating needed income in retirement (24.36%) and using a computer program to help plan retirement (12.42%).

Table 2.1 Descriptive Statistics

N = 4,454

Variable	%	N	Mean	Range
Efficacy-Based Self-Esteem		4,454	22.04	7 - 28
Worth-Based Self-Esteem		4,454	33.48	10 - 40
Information Search Behaviors				0 - 3
1 or more	44.52%	1,983		
None	55.48%	2,471		
Consulted with a Financial Planner	19.04%	848		
Attended Retirement Planning Seminars	17.33%	772		
Read Retirement Planning Magazines and Books	34.51%	1,537		
Retirement Planning Actions				0 - 2
1 or more	30.56%	1,361		
None	69.44%	3,093		
Calculated Needed Retirement Income	26.47%	1,179		
Used a Computer Program to Help Plan	14.39%	641		
Personal Characteristics				
Female	52.38%	4,454		
Male	47.62%			
Non-Black, Non-Hispanic	56.47%	4,454		
Black or Hispanic	43.53%			
Age		4,454	44.63	41 - 49
Years of Education		4,454	13.58	1 - 20

An exploratory factor analysis (EFA) of the Rosenberg self-esteem scale (Rosenberg, 1965) and the Pearlin mastery scale (Pearlin & Schooler, 1978) were employed to develop a self-efficacy factor and self-worth factor as dependent variables. All 17 items of self-esteem were incorporated into the exploratory factor analysis. Since there is reason to believe, according to A Theory of Self-Esteem (Cast & Burke, 2002), that the individual variables may be correlated, the factors were rotated using an oblique rotation (e.g., direct oblimin) method to ascertain the optimal loading of factors on the axes (Field, 2009; Pett, Lackey, & Sullivan, 2003). The factor

loadings are shown in Table 2.2. The Cronbach alpha was .79 for the self-efficacy factor and .89 for the self-worth factor. Upon identification and extraction of factors representing efficacy and worth, an ordinary least squares regression analysis was conducted employing information search behaviors, retirement planning actions, changes in resources, and personal characteristics as predictor variables of both efficacy-based and worth-based self-esteem all using SPSS version 18.0.

Table 2.2 Factor Loadings for Dimensions of Self-Esteem

Variable Description	Self-Efficacy α = .79 *M* = .07	Self-Worth α = .89 *M* = .05
I take a positive attitude toward myself and others (Rosenberg)		.74
I have a number of good qualities (Rosenberg)		.74
I am a person of worth (Rosenberg)		.72
I am inclined to feel like a failure (Rosenberg)		.70
I do things as well as others (Rosenberg)		.68
I think I am no good at all (Rosenberg)		.68
I do not have much to be proud of (Rosenberg)		.65
I am satisfied with myself (Rosenberg)		.64
I feel useless at times (Rosenberg)		.61
I wish I could have more respect for myself (Rosenberg)		.54
I have little control over what happens to me (Pearlin)	.72	
I often feel helpless in dealing with problems of life (Pearlin)	.70	
No way I can solve the problems I have (Pearlin)	.65	
Little I can do to change important things in my life (Pearlin)	.64	
I sometimes feel I am being pushed around (Pearlin)	.60	

Note: Two of the Pearlin Mastery items did not load onto either factor at the .40 level or above and were dropped from further analyses.

Two ordinary least squares regression analyses were conducted to determine the predictors of efficacy-based and worth-based self-esteem in a pre-retirement planning context. Both models were statistically significant at the $p < .001$ level.

Results of the regression analyses (Table 2.3) indicated that higher levels of education, information search behaviors, retirement planning actions, and being male were positively associated with both dimensions of self-esteem. Changes in net worth and changes in income had no effect on either efficacy-based or worth-based self-esteem. Black and Hispanic respondents as a group were found to be more associated with worth-based self-esteem ($b = .06$, $p < .05$). Conversely, younger respondents ($b = -.03$, $p < .001$) were found to be more likely to be associated with efficacy-based self-esteem. Six percent of the variance in worth-based self-esteem and 9% of the variance in efficacy-based self-esteem was explained by the regression models. In order of importance to the efficacy-based self-esteem model, years of education was the largest contributor, followed by age, gender, information search behaviors, and retirement planning actions. The largest contributor to the worth-based self-esteem model was also years of education, followed by information search behaviors, gender, retirement planning actions, and ethnicity.

Table 2.3 Regression Results for Dimensions of Self-Esteem

Variable	Efficacy Based Self-Esteem		Worth Based Self-Esteem	
	Coefficient Ь	Standardized Beta Estimate β	Coefficient Ь	Standardized Beta Estimate β
Information Search Behaviors	.05**	.06	.080***	.08
Retirement Planning Actions	.07**	.05	.07**	.05
Net Worth Change	.00	-.03	-.00	-.01
Net Income Change	-.00	.01	-.00	-.01
Non-Black, Non-Hispanic	.02	.01	-.06*	-.03
Male	.11***	.06	.10***	.05
Age	-.03***	-.06	.00	.01
Years of Education	.08***	.24	.07***	.19
N		4,454		4,454
F		55.41***		38.50***
R^2		.09		.06

Note: *$p < .05$; **$p < .01$; ***$p < .001$

Discussion

This research study explored pre-retirement planning factors influencing the efficacy and worth dimensions of self-esteem. Prior research on self-esteem has largely centered around marital relations, adolescent risk-taking behaviors, and other non-financial issues (Amato & Keith, 1991; Baumeister, Smart, & Boden, 1996; Crocker & Major, 1989; Slavin, 1988). This study was conceptualized to address the gap between consumer finance behaviors and self-esteem. Despite the low explained variance in the models, the results provide a meaningful contribution to the literature.

Results of the regression analyses supported the first hypothesis. Pre-retirement information search behaviors were positively associated with both efficacy-based and worth-based self-esteem. Engaging in information search behaviors, consisting of attending retirement planning seminars, reading books and magazines, and consulting a financial planner, are associated with both efficacy-based and worth-based self-esteem.

Hypothesis 2, which proposed that engaging in retirement planning actions would also be found to be associated with efficacy-based self-esteem or with worth-based self-esteem, was supported. For this study, retirement planning actions were defined as using a personal computer to help plan, and calculating income needed in retirement. Associations were found between retirement planning actions and both dimensions of self-esteem. This result suggests, as far as pre-retirement planning and self-esteem is concerned, there is a similarity in associations between gathering or researching information, and actual implementation. As noted above, retirement planning actions consisted of two specific activities that individuals might undertake to assess their preparedness for retirement. Using a personal computer to plan, and calculating projected income needed in retirement are more concrete, definitive, cognitive endeavors than merely searching for information to enhance knowledge surrounding a topic. Consequently, this outcome might be the result of a demographic (41 – 49) that has been repeatedly placed on notice by the United States government, employers, and the media that responsibility for ensuring a comfortable, or at least an adequate, retirement rests on their shoulders.

Hypothesis 3 postulated that efficacy-based self-esteem is more influenced by self-attributions than worth-based self-esteem. This hypothesis was supported. Cast and Burke (2002) noted that self-attributions tend to be more closely associated with efficacy-based self-esteem, while reflected appraisals and social comparisons are more closely associated with worth-based

self-esteem. The variables used in the regression analyses explained 9% of the variance of self-efficacy and 6% of the variance of self-worth.

Hypotheses 4 and 5 were rejected as predictors of worth-based self-esteem and efficacy-based self-esteem. These hypotheses predicted that changes in net worth and changes in net income would be associated with both dimensions of self-esteem. The results of the regression analysis were surprising since prior research suggested that changes in these measures constitute a family's financial progress associated with patterns of prudent financial behaviors over time, as opposed to the strength of a family's situation at a given point in time (Fitzsimmons & Leach, 1994). As noted by Yuh, Montalto, and Hanna (1998), income was significantly associated with retirement wealth adequacy. Income in excess of expenditures translates into savings, which in turn, builds wealth. Changes in family net income, then, should theoretically be a barometer of asset accumulation or wealth building. Changes in net worth, both increases and decreases, were theorized to be a proxy for a family's financial progress, or lack thereof. In turn, the degree of financial progress would be an ongoing component of reflected appraisals, social comparisons, and self-attributions, thereby influencing individual levels of self-esteem.

In addition, it was found that among Black or Hispanic males, possessing higher levels of attained education, engaging in information search behaviors, and retirement planning actions are associated with worth-based self-esteem. This was a unique and unexpected finding. Prior literature exploring cultural and minority personal financial behaviors reported contrary outcomes (Gutter & Fontes, 2006; Yao, Gutter, & Hanna, 2005; Coleman, 2003). Results also indicate that younger men, educated respondents, and respondents who engage in information search behaviors and retirement planning actions have higher efficacy-based self-esteem. Arguably, as individuals engage in information search behaviors, they derive feelings of

accomplishment and satisfaction stemming from their investigative efforts. It is also possible that such behaviors are consistent with similar behaviors exhibited by other individuals within a common sphere of influence or socioeconomic status, providing a mechanism for social acceptance or reinforcement of these behaviors. As Cast and Burke (2002) noted, self-attributions, reflected appraisals and social comparisons stemming from, and associated with, successful past behaviors lead to a match within the identity standard, thereby increasing self-esteem.

The results of this study suggest that two dimensions of self-esteem do exist and that the independent variables studied are not associated with each self-esteem dimension in precisely the same manner. Youth and being male were more strongly associated with efficacy-based self-esteem, while being male, Black, or Hispanic was more strongly associated with worth-based self-esteem. However, the key variables of interest (i.e., retirement planning activities and information search behaviors) were found to be positively associated with both efficacy-based self-esteem and worth-based self-esteem.

Conclusion

From a practitioner perspective, this research study has implications in identifying characteristics that are associated with both self-esteem dimensions. It is noteworthy that higher levels of attained education were positively associated with self-esteem. Lusardi (2003) found that households headed by individuals who have higher levels of attained education were more likely to engage professionals and to self-educate through research in the retirement planning process.

The results obtained from this analysis are limited in several respects. First, the dimensions of self-esteem were extracted based on data collected at two different time periods.

The Pearlin mastery data (Pearlin & Schooler, 1978) was obtained in 1992 and the most recent administration of the Rosenberg self-esteem scale questions (Rosenberg, 1965) occurred in 2006. In 1992, the age range of the NLSY79 cohort was from 27 years of age to 35 years of age. In 2006, the most recent date of the Rosenberg self-esteem data collection, NLSY79 respondents were between the ages of 41 and 49. In each instance, the respondents arguably would be deemed to be between young adult and mid-life. Trzesniewski, Donnellan, and Robins (2003) conducted a dual longitudinal study consisting of a meta-analysis of 50 published articles, followed by an analysis of four large national databases, all of which employed some variation of the Rosenberg self-esteem scale. The databases examined (n = 74,381) consisted of the National Educational Longitudinal Study (NELS), the High School and Beyond Study (HSB), the National Longitudinal Study (NLS), and the Americans' Changing Lives study (ACL). Trzesniewski et al. found that the stability of self-esteem tends to be curvilinear in nature, with increasing stability between adolescence and young adulthood, and decreasing stability between midlife and old age. Earlier, Robins, Trzesniewski, Tracy, Gosling, and Potter (2002) found that self-esteem rose gradually throughout adulthood utilizing the single-item self-esteem scale (SISE). Correlations between the SISE and Rosenberg self-esteem scale were previously explored by Robins, Hendin, and Trzesniewski (2001) and were found to range from .74 to .80 in three studies. Thus, it appears that stability of the Rosenberg self-esteem scale may depend on the age cohort being studied. As noted earlier, there is debate among researchers surrounding the stability of the Pearlin mastery scale (Brady, 2003; Finch, Shanahan, Mortimer, & Ryu, 1991; Mortimer & Finch, 1986). The Rosenberg self-esteem scale, perhaps due to its wider use in research studies to date (Robins, et al., 2001), has been found to be a more stable concept over time in research involving adults.

Since this study was constrained by the availability of data as collected, the absence of a more recent dataset on which to test hypotheses necessarily limits the applicability and generalization of results. Future studies may wish to measure self-esteem on a longitudinal basis from young adulthood to age of retirement in order to more precisely pinpoint associations of information search behaviors and retirement planning actions with self-esteem.

A second limitation of this research study concerns the data collected on information search behaviors and retirement planning actions. Again, due to constraints within the NLSY79 dataset, an accurate picture of what activities and behaviors individuals in this cohort are engaging in to prepare themselves for retirement may not be fully represented in this dataset. For instance, respondents may be utilizing the myriad resources available on the World Wide Web today to plan for retirement or using social media tools to self-educate. Gauging Social Security wealth or the potential elimination of Social Security retirement benefits for specific income groups has not been explored in this study. Last, family and friends, as an information source, has not been recorded. Lusardi (2003) noted that both high and low education groups rely on family and friends for decision-making on savings. None of these potential retirement planning resources is captured in the NLSY79 dataset.

A third limitation of this study concerns the directionality of information search behaviors and retirement planning actions vis-à-vis efficacy-based and worth-based self-esteem. While Cast and Burke (2002) conceptualized self-esteem as an outcome associated with prior behaviors, in addition to a buffer and a motive for future behaviors, it is entirely possible that increases in efficacy-based and worth-based self-esteem could be associated with information search behaviors and retirement planning actions, thereby contributing to overall retirement preparedness.

Fourth, this study only included those individuals who provided responses to each of the variables that were analyzed. It is possible that respondents who omitted data may have answered survey questions differently, thereby possibly causing associations to be at variance with these reported results. Computations involving changes in income and net worth were not adjusted for the effects of inflation between calendar years 2000 and 2008. It is possible that such adjustments may have impacted the results obtained.

Fifth, this study tested associations between the aforementioned independent and dependent variables. Therefore, the results are limited to the supported correlations and no causal inferences may be made from this study.

Results from this study are necessarily limited to the cohort that was analyzed at this particular point in their lifecycle. It is entirely possible that a different set of associations may be found, or that no associations may be found, had another cohort been analyzed at an earlier or later stage of life.

The above limitations notwithstanding, this study demonstrates that an association exists between information search behaviors, retirement planning actions, and efficacy-based and worth-based self-esteem. From a practical perspective, financial planners, counselors, and therapists may be able to play an integral role in influencing individual behaviors by recognizing personality characteristics and attributes that are more commonly associated with efficacy-based and worth-based self-esteem among prospects and clients.

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Chapter 3 - Self-Verification, Self-Esteem, and Retirement Planning Behavior

Introduction

Self-esteem is a familiar term that is used routinely in every day communication, yet it was not until the mid-1960s that researchers systematically began the study of self-esteem. Rosenberg (1965) is commonly credited with identifying self-esteem as a psychological construct, which is generally defined as an individual's positive self-evaluation (Rosenberg, 1981), although others in the mid- to late-1960s were also engaged in examining the role self-worth, self-love, self-respect, and other related concepts play in shaping behavior (e.g., Branden, 1969; Coopersmith, 1967).

According to Gecas (1982) and Cast and Burke (2002), self-esteem can be conceptualized as consisting of two dimensions. The first is competence. Competence refers to how someone perceives his or her overall capability and effectiveness. This is sometimes referred to as efficacy-based self-esteem. The second dimension is worth-based self-esteem. Worth is defined as the degree to which a person believes that they are an individual of value. When viewed together, self-efficacy and worth combine to shape a person's self-verification.

Research incorporating self-esteem has generally conceptualized the construct as being (a) an outcome of behavioral processes, (b) a buffer that provides protection from harmful behavior, or (c) a self-motive in directing current and future behavior. According to Cast and Burke (2002), "little has been done to synthesize the three research streams into an overall integrated model" (p. 1042). In an attempt to unify these three areas of research, Cast and Burke developed a formal theory of self-esteem (TSE) that integrates the motivational, buffering, and

protection aspects of self-esteem. Their theory was established within the framework of Stryker's (1980) Identity Theory.

Purpose

While the study of self-esteem has a long and robust history, there have been few applications of TSE, especially in the financial planning domain. The current study attempts to add to the existing body of literature by providing a formal application of TSE in the context of consumer financial and retirement planning behavior. Prior research has shown that self-esteem plays an important and significant role in influencing individual behaviors (Rosenberg, 1965; Swann, Chang-Schneider, & McClarty, 2007), so understanding the influence of self-esteem in a financial planning and counseling setting is worthy of further investigation.

More specifically, the current study seeks to determine the role of self-esteem and identity in shaping retirement planning behavior. Successful verification of an identity through prior period positive behaviors has been found to result in repeat positive behaviors in subsequent periods (Cast & Burke, 2002). Creditworthiness is hypothesized to be an indicator for one of many possible personal identities as conceptualized in Stryker's (1980) Identity Theory. Successful credit verification from a prior time period may be associated, therefore, with a propensity to engage in future period financial behaviors, such as pre-retirement planning. According to Lauer (2008), "one's reputation for honesty and respectability in the determination of creditworthiness reveals the moral underpinnings of financial identity" (p. vi); "financial identity…is a form of moral identity" (p. 263). Being regarded as a trustworthy and morally upright citizen via one's capacity to borrow is hypothesized to serve as an identity verification mechanism. Applying for credit and being approved should contribute to an individual's self-perceptions as having an efficacious and worthy identity (i.e., it should boost self-esteem).

Conversely, being declined for credit, or approved in a lesser amount than that which was requested, will result in a disturbance between the individual's self-perception of identity and the perceived identity standard of being credit worthy (i.e., it will reduce or deplete self-esteem).

Results of the analysis indicate that the TSE provides a meaningful way to better understand the linkages between and among behavioral processes. Providing evidence of the efficacy of TSE in a consumer behavior context adds to the empirical justification of the use of psychosocial factors as determinants of consumer actions.

Literature Review

Creditworthiness and Retirement Planning Behavior

According to Stryker (1980), the self is a multidimensional conglomeration of many identities. Each identity reflects how a person fits into the larger society. In the broadest of terms, this framework of the self is captured in Identity Theory. A key element of Identity Theory is that individuals seek out self-verifications of their identity. This self-verification process both produces and reproduces social meanings for individuals and society. Cast and Burke (2002) formulated TSE upon the concept of self-verification. They noted that "verification of an identity produces feelings of competency and worth, increasing self-esteem" (p. 1043).

Self-verification, by definition and necessity, occurs within group environments. As such, "self-verification within a group is not just a function of one's own activity but of one's activity in relation to others' activity" (Cast & Burke, 2002, p. 1044). Often, self-verification is measured and evaluated in dyadic settings; however, individuals commonly gauge their behavior against role expectations using a broader group as the assessment measure.

Individuals seek out situations that enhance positive self-verification and consequently increase self-esteem. For example, people often make social comparisons and appraise situations

as being either positive or negative based on their perception of the value others place in a behavior or action. Sometimes the comparison is to a personal reference point, but as suggested above, the comparison can also be to a societal norm. In the current study, it is hypothesized that self-verification, within the consumer behavior domain, can be proxied by an objective measure, such as creditworthiness.

Consider the best-selling parental reference book titled, *Money Still Doesn't Grow on Trees: A Parent's Guide to Raising Financially Responsible Teenagers and Young Adults* (Godfrey, 2004). Although any number of other books and publications could also serve as an example (e.g., Harris, 1998), Godfrey outlined her opinions of what are considered to be societal norms of financial responsibility for people living in the United States in her book. The cultural consensus suggests that financially prudent persons do not declare bankruptcy, they manage their credit wisely and avoid carrying large credit balances from month-to-month, they save money on a regular basis, and they are basically financially literate. When combined together, those fitting the definition of financially responsible exhibit this characteristic through high credit scores and the ability to purchase goods and services through borrowing (even if they actually forgo the use of credit).

Godfrey (2004) further explained that one way to help children develop positive behaviors related to money involves parents exhibiting financially responsible behavior. She also argued that it is appropriate to point out how financial mismanagement at the household level can lead to dysfunction, unhappiness, and overall distress. Because few aspire to attain anger, depression, and anxiety—all presumed outcomes associated with financial irresponsibility—it follows logically, if the social norm is accepted, that consumers should strive to be financially responsible. It is worth noting that in some countries (e.g., England), social norms associated

with financial responsibility have been codified into standards of citizenship (Odih & Knights, 1999), making self-verification of creditworthiness even more distinct.

In the current study, it was hypothesized that credit self-verification would be positively associated with retirement planning behavior. This stems from insights from Bandura (1977), Gecas and Schwalbe (1983), and others who have noted that when people assess their behavior as successful they tend to conclude that they have played an important role in shaping personal outcomes. That is, successful behavior leads to positive self-verification. Those who have good credit can verify this by applying for a loan. Self-verification occurs when their credit score is high enough to obtain credit at the amount and cost desired. In effect, the ability to obtain a loan provides an objective measurement that someone can use to verify how close they are to meeting societal norms of financial responsibility.

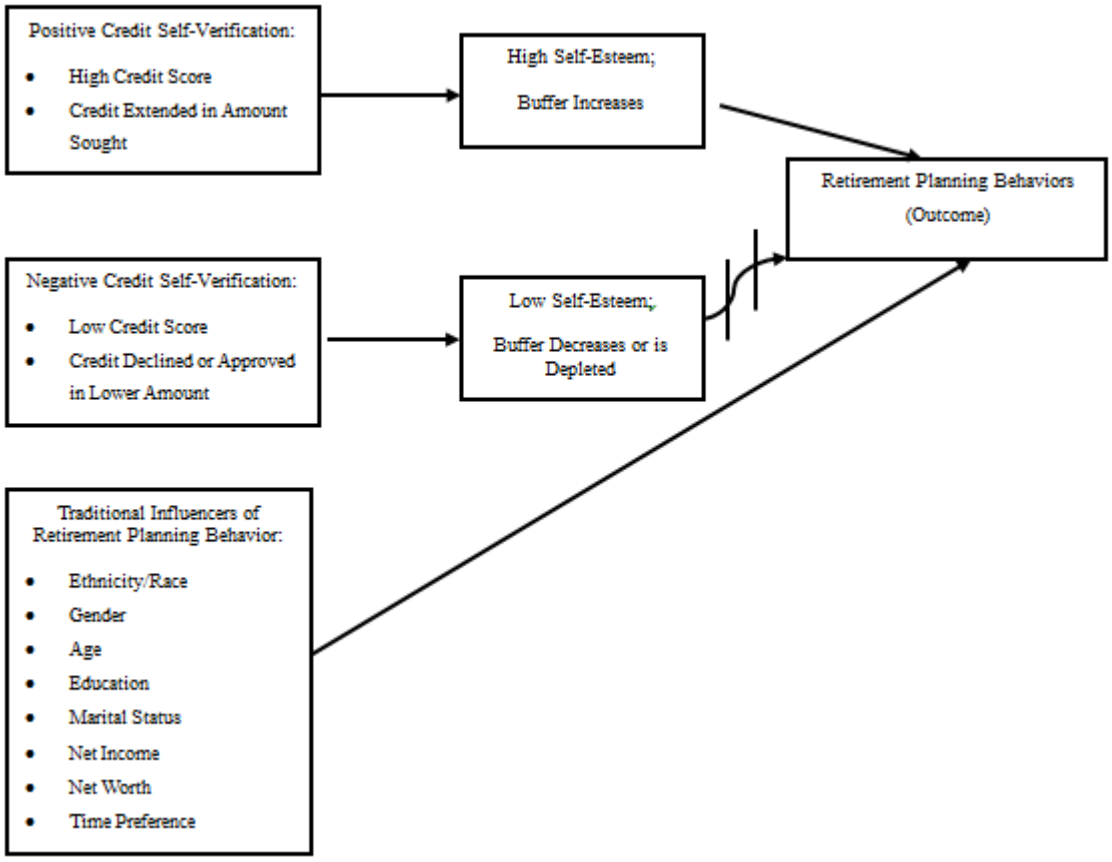
The concept that previous behavior can serve as a self-verification mechanism offers an insight into why some consumers appear to exhibit recurring negative (or positive) behavioral outcomes. Consider the management of debt at the household level. Debt, as a consumer finance tool, allows individuals and families to consume products and services today while paying for the benefits received at a later date. In the majority of cases, the use of debt at the household level serves as a way to increase current and future levels of living. For example, credit card debt can be managed to allow the purchase of goods and services today that might otherwise be unaffordable but necessary. The prudent and effective management of debt can be seen as a positive self-verification process within the broader definition of TSE. The mismanagement of debt, and engaging in problematic financial behavior (e.g., making late loan payments), on the other hand, can be viewed as behavior that may serve to reduce self-verification. Linking financial behavior to self-verification, either positive or negative, is premised on the notion that

within the broader U.S. society those who exhibit reckless borrowing and saving behavior tend to be viewed disapprovingly. Since people prefer to maintain a place in society, be it globally or situationally, that is compatible with their self-conceptions (Swan, 1983), those who exhibit harmful financial behaviors may receive negative self-verification by thinking they have been somehow distanced from the larger socioeconomic system. Being turned down for a consumer loan is an objective measure of this disenfranchisement.

Self-Esteem and Retirement Planning Behavior

An important element in TSE is the concept that self-esteem acts as a reservoir of emotional energy (Cast & Burke, 2002). This definitional framework fits well with the thoughts of those who view self-esteem as a buffer between past and future behavior. As a key proposition of TSE, self-esteem can be seen as a flexible personal resource. Each person's "reservoir" can increase when self-verification is successful, but it can also decrease (i.e., be depleted) when self-esteem is used as a buffer. One can potentially achieve positive retirement planning behaviors based upon positive credit self-verification and high self-esteem. In addition, existing research has established strong relationships for other influencers of retirement planning behaviors as shown in the following section (see Figure 3.1 for conceptual model).

Figure 3.1 Conceptualization of Self-Verification Processes in Pre-Retirement Planning



Traditional Influencers of Retirement Planning Behavior

Yao, Gutter, and Hanna (2005) pointed out that race and ethnicity often work to shift preferences. Within a consumer behavior framework, race/ethnicity can represent cultural influences, as well as an information and resource barrier (Burlew, Banks, McAdoo, & Azibo, 1992). Yao and her associates noted that Blacks, Hispanics, and Whites have different perceptions of what it means to be financially responsible. These differences stem from cultural variations (Gutter & Fontes, 2006). It has been hypothesized in the literature that Hispanics and Blacks, compared to Whites, have a financial acculturation deficit resulting from a limited exposure to the credit, investment, and general financial markets. This has traditionally resulted in Whites exhibiting greater financial risk tolerance (Coleman, 2003), increased equity

ownership, and more proactive financial planning behavior than other racial/ethnic groups. As such, in this study, it was hypothesized that Hispanics and Blacks would be less likely to engage in retirement planning behavior.

Other factors, such as gender, age, education, marital status, net worth, and time preference are known to be associated with retirement planning behavior. In general, these personal characteristics represent impediments for some individuals when thinking about and planning for retirement. Joo and Pauwels (2002) noted that women, for instance, face unique barriers to retirement. These obstacles stem from a combination of factors, such as gender role identification that leads some women to accumulate less financial knowledge over the lifespan. Joo and Pauwels reported that younger individuals were more likely to be confident about their retirement preparation, as were those with more education. Mastin (1998) linked education with knowledge and noted that those with less education were less likely to be knowledgeable about retirement planning issues. Married individuals, on the other hand, may have an incentive to be proactive in their retirement planning. Rather than needing to worry about the adequacy of assets in retirement for one person, married couples need to plan for the preservation of capital for two people. As Li, Montalto, and Geistfeld (1996) pointed out, wealth, in addition to other factors (e.g., age and education), should be positively associated with retirement preparation. Lusardi (2003) found that workers with a short-term time horizon tend to accumulate a lower net worth and expect a lower income from personal savings at retirement. Similarly, Jacobs-Lawson and Hershey (2005) found that time preference, individually and in combination with financial knowledge and risk tolerance, is positively associated with retirement savings. Based on these associations, in this study, the following hypotheses are presented for analysis:

H_1: Respondents who demonstrate responsible credit management are likely to engage in more pre-retirement planning behaviors.

H_2: Respondents who possess higher levels of self-esteem are likely to engage in more pre-retirement planning behaviors.

H_3: Non-Black, Non-Hispanic respondents are more likely to engage in more pre-retirement planning behaviors.

H_4: Men are likely to engage in more pre-retirement planning behaviors.

H_5: Older respondents are likely to engage in more pre-retirement planning behaviors.

H_6: Respondents with higher levels of education are likely to engage in more pre-retirement planning behaviors.

H_7: Married respondents are likely to engage in more pre-retirement planning behaviors.

H_8: Respondents with higher net worth are likely to engage in more pre-retirement planning behaviors.

H_9: Respondents with higher net income are likely to engage in more pre-retirement planning behaviors.

H_{10}: Respondents who exhibit a patient time preference are likely to engage in more pre-retirement planning behaviors.

Methods

Dataset and Respondents

Data for this study was obtained from the National Longitudinal Survey of Youth, 1979 cohort, consisting of young men and women (n = 12,686) who were born between January 1, 1957 and December 31, 1964 (between ages of 14 and 22 years of age). Individuals in this sample were interviewed annually from inception through 1994, and biennially thereafter. The

initial survey sample consisted of three subsets representing: (a) a cross-section sample designed to represent noninstitutionalized, civilian population of youths living in the United States (*n* = 6,111); (b) a supplemental oversample of minority youths and economically disadvantaged non-minority youths residing in the United States (*n* = 5,295); and (c) a military sample of enlistees in the Army, Air Force, Navy or Marine Corps as of September 30, 1978 (*n* = 1,280).

Beginning in 1985, all but 201 randomly selected respondents in the military subsample were dropped from the survey, and the economically disadvantaged non-minority subsample was discontinued in its entirety in 1991, to reduce sampling costs. The first subset, the supplemental oversample of minority youths in the survey, and 201 randomly selected military participants remained at the time of this study (*n* = 9,964). During the latest survey, 7,654 individuals responded, representing a 77% retention rate. For the purpose of this study, the most recent NSLY data was retained. A correlation of all variables was conducted to assess for multicollinearity issues (see Appendix A, Table A-2). No issues were found.

Outcome Variable

Pre-Retirement Planning Behavior

Pre-retirement planning behavior in the NLSY79 was assessed by asking respondents a series of questions related to their planning actions as of 2008. The following questions were asked: (a) Have you ever calculated how much retirement income you would need at retirement?, (b) Have you consulted a financial planner about how to plan your finances after retirement?, (c) Have you read any books or magazines on retirement planning?, (d) Have you used a computer program to help you plan your retirement?, and (e) Have you ever attended any meetings on retirement or retirement planning? A summated variable was calculated based on responses, which were coded dichotomously as 1 = yes or 0 = no. Scores ranged from 0 to 5 with a mean

and standard deviation to be calculated and reported. Relying on research conducted by Rosenkoetter and Garris (2001), respondents were assigned to one of two groups consisting of: (a) individuals who have engaged in one or more retirement planning behaviors (1 = yes), and (b) individuals who have not engaged in any retirement planning behaviors (0 = no). Rosenkoetter and Garris, in their research study involving psychosocial adjustment among retirees, explored the number and effect of nine pre-retirement planning activities upon recent retirees. A portion of the research study analysis separated respondents who had not participated in any pre-retirement planning activities from those who had participated in none, some, many or most planning activities in terms of the effect in post-retirement attitudes and behaviors. Approximately 33% of the Rosenkoetter and Garris study sample (n = 764) reported that they had not engaged in any pre-retirement planning activities.

Credit Self-Verification

Responses to the following 2004 question was used to proxy credit self-verification (i.e., creditworthiness): "In the past five years, has a lender or a creditor turned down you or your spouse's request for credit or not given you as much credit as you applied for?" Answers were coded dichotomously, with 1 = yes and 0 = no.

Self-Esteem

Self-esteem was measured using the Rosenberg (1965) self-esteem scale. Questions were most recently asked in 2006. The individual variables comprising the self-esteem scale consisted of 10 statements measured on a 4 point Likert-type scale, ranging from strongly agree (4) to strongly disagree (1). Each statement listed below was self-assessed by the respondent.

1. On the whole I am satisfied with myself.;
2. At times I think that I am no good at all.;

3. I feel that I have a number of good qualities.;
4. I am able to do things as well as most other people.;
5. I feel I do not have much to be proud of.;
6. I certainly feel useless at times.;
7. I feel that I am a person of worth, at least the equal of others.;
8. I wish I could have more respect for myself.;
9. All in all, I am inclined to feel that I am a failure.; and
10. I take a positive attitude toward myself.

Statements 2, 5, 6, 8 and 9 were reverse coded. Scores were summed with high scores suggesting high self-esteem.

Traditional Influencers

Race/ethnic background is grouped into three categories of Hispanic, Black, and non-Hispanic, non-Black in the NSLY79 data set. Hispanic and Black respondents were grouped as one variable (coded 0) in the multivariate analysis, with Non-Black, Non-Hispanic being coded 1. Gender was coded 1 = male and 0 = female. Age and education were captured as continuous variables. Marital status was coded dichotomously. Those who were currently married were coded 1, otherwise 0. Net worth and net income were reported on a continuous basis.

In 2006, respondents were asked: "Suppose you have won a prize of $1,000, which you can claim immediately. However you have the alternative of waiting one year to claim the prize. If you do wait, you will receive more than $1,000. What is the smallest amount of money in addition to the $1,000 you would have to receive one year from now to convince you to wait rather than claim the prize now?" Responses to this question were converted to a discount factor (Courtemanche & McAlvanah, 2011) based on the additional amount sought as a percentage of

the $1,000 [e.g., 1000/(1000 + amount sought)]. Low discount factor responses on a continuum of from zero to one indicate impatience.

Data Analysis

The research hypotheses were tested using a logistical regression with SPSS version 18.0. Retirement planning behaviors was the dependent variable analyzed in this study. As previously discussed, this variable consisted of five dichotomous categorical statements that were summed into a combined variable. The summed variable was subsequently parsed into two groups (0 = individuals who have engaged in no retirement planning behaviors; 1 = individuals who have engaged in one or more retirement planning behaviors), thereby capturing the extremes of those who plan versus those who do not plan. Since retirement planning has been associated with retirement savings (Lusardi, 2003), the ability to focus on variables associated with planning behaviors will enable financial planners and counselors to more accurately gauge an appropriate blend of techniques and level of guidance needed to successfully assist those individuals who are least likely to plan. However, types of planning activities are categorical in nature, and the relationship between the categories is not linear. A logistical regression analysis method will enable the conversion of a categorical variable into log format, thereby transforming a non-linear variable into linear form in order to analyze associations, and the explained and unexplained variances between independent and dependent variables (Field, 2009).

Results

Results from the descriptive statistics analysis (Table 3.1) indicate that the sample was nearly even in gender with women representing 51.69% of the sample, non-Black, non-Hispanic respondents constituted 66.14% of the sample, and 70.92% of the sample was married. The mean age of the sample was 48.69 years and the mean level of education attained was 14.01 years. The

mean net worth and net income of the sample in 2008 were $373,767, and $94,776, respectively. The average time preference score was .59 on a continuum of impatience (calculated minimum value = 0.01) to patience (calculated maximum value = 1.00), meaning that the sample was modestly more patient.

Approximately 40.25% of the sample did not engage in any retirement planning behaviors, while the balance of 59.75% of respondents had engaged in one or more retirement planning behaviors. Within the past five years, 77.31% of the sample had approved credit applications, while the balance (22.69%) had either been declined credit or had been approved in a lesser amount than what was requested on a credit application. Mean self-esteem score was 34.20.

Table 3.1 Descriptive Statistics

N = 2,283

Variable	%	N	Mean	Range
No RP Activities	40.25%	919		
1 or more RP Activities	59.75%	1,364		
Declined/Reduced Credit	22.69%	518		
Credit Approved (2004)	77.31%	1,765		
Self-Esteem		2,283	34.20	10 – 40
Non-Black, Non-Hispanic	66.14%	1,510		
Black, Hispanic	33.86%	773		
Female	51.69%	1,180		
Male	48.31%	1,103		
Years of Education		2,283	14.01	4 – 20
Age		2,283	44.69	41 – 49
Married	70.92%	1,619		
Other	29.08%	664		
Net Worth (2008) (in $10,000ths)		2,283	$37.38	$0 - $344.82
Net Income (2008) (in $10,000ths)		2,283	$9.48	$0 - $45.47
Patient Time-Preference			.59	.01 – 1.00

A forced entry logistic regression model was developed for the purpose of predicting the likelihood of individuals engaging in one or more retirement planning behaviors (Table 3.2). The Log Likelihood Ratio (2797.57) was significant at the $p < .001$ level. The model indicated that it accurately predicts the likelihood of individuals who will engage in one or more retirement planning activity 79.03% of the time, and overall the model accurately predicts the likelihood of those individuals who will or will not engage in one or more retirement planning activity 65.80% of the time.

Results from the model demonstrated that self-esteem, attained level of education, net income, and net worth were statistically significant predictors of individuals who were more likely to engage in one or more retirement planning behaviors. Individuals who have attained higher levels of education are 18.20% more likely to engage in one or more retirement planning behavior. Also contributing to the model was net income; as net income rises in $420 increments, individuals are 4% more likely to participate in one or more retirement planning behavior. Individuals who possess higher levels of self-esteem are 3.00% more likely to engage in one or more retirement planning behaviors. Last, net worth was found to be a significant contributor to the model providing that for each $60 increase in net worth, individuals are 1.0% more likely to have engaged in one or more retirement planning behaviors. Time preference, age, gender, marital status, ethnicity, and creditworthiness did not have any statistically significant bearing on the model.

Table 3.2 Logistic Regression – Engaging in Retirement Planning Behaviors

N = 2,283

Variable	Coefficient b	Odds Ratio
Intercept	-4.83***	
Credit Verification	-.02	0.98
Self-Esteem	.03**	1.03
Non-Black, non-Hispanic	-.14	0.87
Male	.09	1.10
Education Level	.17***	1.18
Age	.03	1.03
Married	.18	1.20
Net Worth/10,000	.01***	1.01
Net Income/10,000	.04***	1.04
Patient Time Preference	.11	1.12

Discussion

Hypothesis 1 predicted that individuals who demonstrate responsible credit management would be more likely to engage in more pre-retirement planning behaviors. The results of the logistical regression model suggested that this hypothesis be rejected. This result was surprising since it was expected that respondents who behave in a more responsible fashion surrounding their levels of debt would be predisposed to exhibit a continuing pattern of personal financial responsibility by planning for their retirement.

Hypothesis 2, which postulated that respondents who demonstrate higher levels of self-esteem would be likely to engage in more retirement planning behaviors, was supported. This result is consistent with Cast and Burke's (2002) Theory of Self Esteem, providing that

individuals who possess greater self-esteem are more likely to exhibit more responsible behaviors in future periods. Financial planning professionals may wish to consider the design and implementation of a client profile document that incorporates personality trait elements, including self-esteem, to assist them in counseling their clients.

Hypotheses 3 and 4 postulated that Non-Black, Non-Hispanic respondents, and men, respectively, would be likely to engage in more pre-retirement planning behaviors. Both hypotheses were rejected by the model. The results obtained are also at variance with the findings of Yao, Gutter, and Hanna (2005), and Coleman (2003) that financially responsible behavior can be specific to, and influenced by, ethnicity and culture. Further, Joo and Pauwels (2002) observed that women tend to be less prepared for retirement as a result of traditional gender roles. It is possible that these results were due to limitations associated with the manner in which ethnicity was reported within the NLSY79 dataset.

Hypothesis 5 predicted that older respondents would be likely to engage in more pre-retirement planning behaviors. This variable was not found to be a significant factor in the model, and was a somewhat surprising result. As observed by Petkoska and Earl (2009), older individuals were more likely to engage in general financial planning, including planning for retirement. Reasons for this result may be the relatively narrow age range of respondents (41 – 49) used in this study, and their more youthful mean age.

Hypothesis 6 proposed that respondents with higher levels of education would be likely to engage in more retirement planning behaviors. This hypothesis was supported and is consistent with Mastin's (1998) findings that higher levels of attained education are positively associated with proactive retirement planning preparation. It may be possible that those with higher levels of attained education possess the cognitive ability to recognize and to understand

the need to take steps to plan for retirement rather than waiting until just before the beginning of the retirement phase of life to begin planning. Alternately, it is conceivable that survey respondents possessing higher levels of education may have been come from more affluent families which fully financed their education and provided more guidance on prudent personal financial management.

Hypothesis 7, projecting that married respondents would be likely to engage in more pre-retirement planning behaviors, was rejected. Since planning for two individuals requires greater coordination and funding than planning for a single person, it was theorized that married individuals would be likely to engage in more retirement planning behaviors. This outcome was not observed in this study.

Hypotheses 8 and 9 predicted that respondents with higher net worth and higher net income, respectively, would be likely to engage in more retirement planning behaviors. Both hypotheses were supported. Family net income was a stronger contributor to the model than family net worth; however, both variables were strongly associated with engaging in one or more pre-retirement planning behaviors. Prior research has demonstrated that wealth, defined as net worth (Li, Montalto, & Geistfeld, 1996), is positively associated with proactive retirement planning preparation.

Hypothesis 10, providing that respondents exhibiting a patient time preference would be likely to engage in more pre-retirement planning behaviors, was rejected. This outcome, while not precisely what was expected, is somewhat confounding based on the findings by Hershey and Mowen (2000) that time preference is positively associated with retirement preparedness. Additional studies (Jacobs-Lawson & Hershey, 2005; Lusardi, 2003) have noted that time preference is positively associated with retirement savings. Although this study was examining

factors associated with retirement planning behaviors as opposed to retirement savings, a positive association exists between planning behaviors and retirement savings, suggesting that patient individuals are more likely to engage in retirement planning behaviors. Responses to the NLSY79 survey question regarding time preference indicated that some respondents were highly impatient as evidenced by their rather extreme expectations of returns in exchange for the one year delay to receive the $1,000 prize amount. It is plausible that these respondents either may not have fully understood the question or were not as proficient in assessing mathematical returns. The measurement of time preference was constrained by a single question within the NLSY79 dataset. It is also possible that an alternate result may have been obtained if a different time preference scale had been available and had been used.

Conclusion

Cast and Burke (2002) devised A Theory of Self Esteem in which they integrated prior conceptualizations of the construct as an outcome of behavior, a buffer or reservoir designed to mitigate the effects of undesirable behavioral outcomes, and as a motive for future behavior. This study was undertaken to connect the buffer components of self-esteem in a consumer finance framework. Specifically, managing credit responsibly, as a prior period financial behavior, was hypothesized to be positively associated with increased levels of self-esteem that would boost individual self-esteem reserves as a guard against future negative behaviors. This association failed to be observed in this study; nevertheless, the study demonstrated that self-esteem plays a significant role connected to consumer financial behavior. Those who possessed high levels of self-esteem, had attained higher levels of education, and had accumulated higher levels of net worth and net income, were most likely to engage in one or more retirement planning behaviors. A reason for this result may have been the time period (1999 - 2004) during which respondents

were queried about their borrowing practices. The stock market bubble, largely driven by technology stocks, burst in the first quarter of calendar year 2000 (Stewart & Pavlou, 2002), and was followed by an economic recession within a fifteen month period, lasting for several years. The Federal Reserve was also engaged in a tightening of monetary policy in the latter part of the 1990s, and the ensuing Terrorist Attacks in September, 2001 may have contributed to a decline in borrowing activity. In addition, creditworthiness in this study was measured by a single question pertaining to whether or not respondents had been declined credit, or approved in a lesser amount than sought. While this question may be indicative of prudent credit management, there are other measures, such as FICO scores, which are not captured in the NLSY79 dataset, but may give a more accurate picture of responsible credit behavior.

The value of these findings makes a positive contribution to the literature in light of the sample employed in this research study. Data from the NLSY 1979 cohort that was primarily collected in the past decade was employed in this study. Participants in this cohort ranged in age between 43 and 51 years of age in 2008, which was the year data was collected on the five retirement planning behaviors. Individuals falling within this period of life are apt to be more cognizant of approaching retirement. Opportunities to save for retirement and to derive the benefits of compound investment returns dwindle rapidly as one approaches retirement age. Individuals who possess higher levels of self-esteem are more inclined to be proactive in preparing for their upcoming retirement.

Limitations of this study include the elimination of cases in the NLSY79 dataset from analysis in this study that contained missing data. It is possible that a more complete set of responses from omitted cases would have resulted in different findings. Additional limitations include the NLSY79 dataset in relation to the outcome variable consisting of pre-retirement

planning activities. Other datasets may consist of a broader range of variables that more succinctly capture this activity.

Results from this study are necessarily limited to the cohort that was analyzed at this particular point in their lifecycle. It is entirely possible that a different set of associations may be found, or that no associations may be found, if another cohort had been analyzed at an earlier or later stage of life.

The findings from this study can be of benefit to financial planners, financial therapists, and government policymakers. Financial planners are in a primary position to assess the adequacy of retirement preparation of their clients, and to assist them in making periodic mid-course corrections in order to enhance the likelihood of meeting retirement objectives. They are also in a unique position to recognize potentially harmful beliefs and behaviors that can inhibit financial goal attainment. Financial therapists provide a valuable service in helping clients confront potentially harmful beliefs and behaviors in a non-threatening or judgmental environment. Financial therapists have experience in helping clients work around these issues so that they may experience more fulfilling and comfortable lives as they approach retirement. As demonstrated in this study, self-esteem plays an important role in predicting who is more likely to engage in pre-retirement planning activities, and who may be in need of professional guidance. Policymakers can also play a key role in providing fiscal or tax incentives, adopting new regulations, and in the design of education programs that can support individuals who may need such professional assistance, before becoming dependent upon federal financial assistance in their golden years.

Future studies should consider exploring additional characteristics that may be associated with pre-retirement planning behaviors, and expanding the number of behaviors that individuals

may engage in preparation for retirement. Specifically, practitioners would be interested to know which pre-retirement planning behaviors are more efficacious in assisting clients for upcoming retirement. The identification and promotion of "high-yield" planning behaviors to the public, coupled with facilitating and expanding the availability of services guiding individuals toward high-yield planning behaviors, may serve as an impetus for a long overdue reengineering of the financial services profession.

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Chapter 4 - A Psychosocial Profile as it Relates to Pre-Retirement Planning Behavior

Introduction

Self-esteem as a psychosocial construct has been studied extensively over the past 50 years, leading to the development of many self-esteem assessments (Rosenberg, 1965; Rotter, 1966; Pearlin & Schooler, 1978; Gecas & Schwalbe, 1983). The main objective of each assessment is to determine an individual's overall evaluation of the self (Gecas, 1982). In general, self-esteem is conceptualized as consisting of the dimensions of worth and competence (Gecas; Cast & Burke, 2002).

Most social research involving self-esteem as a variable, conducted over the last 50 years, has entailed the employment of only a single self-esteem assessment in the study (Demo, 1985). Most often, the self-esteem assessment of choice among social science researchers has been the Rosenberg (1965) Self-Esteem Scale (Demo). The Rosenberg Self-Esteem Scale is considered to be a *global* self-esteem measurement, meaning that self-esteem is an overall, non-specific measurement which serves as a general indication of how individuals respond and react to new situations and environments (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995). Thus global self-esteem tends to be a relatively stable construct from one situation to the next (Demo). However, Coopersmith (1967), Rosenberg (1965), and Rotter (1966), among a vast pool of social scientists, acknowledge that self-esteem is also subject to "situational variability" (Demo, p. 1491). Given the complexity and situational variability of self-esteem, Wells and Marwell (1976) have questioned and criticized the notion that self-reporting surveys are sufficiently comprehensive in the measurement of situational dimensions of the self-esteem construct. For example, Wells and Marwell noted that every instrument that is dependent upon a single form of

measurement (i.e., self-reporting) contains various biases, thereby rendering the measurement as "inadequate" in terms of measuring a broader self-esteem construct.

Research studies in the past and present continue to explore ways of obtaining a more precise assessment of individual self-esteem. For example, Demo (1985) hypothesized that a more accurate measurement would include multiple self-reporting scales combined with objective judgments made by observers. Tafarodi and Swann (2001) proposed a two-dimensional approach to measurement of global self-esteem including traditional self-report instruments and parental observers. Heatherton and Polivy (1991) developed a scale for measuring *state* self-esteem (e.g., situational-specific self-esteem), reflecting short-lived changes in self-esteem that may be influenced by current mood.

However, the ability to (a) obtain a more comprehensive measurement of self-esteem dimensionality, and (b) accomplish this measurement utilizing a more substantial sample size on a comprehensive, cost-effective, and longitudinal basis, has proven rather elusive. To help address the problems associated with using just one self-assessment measurement, though not fully addressing the other, more expensive issues, the current study attempts to build a more comprehensive measure of one's psychosocial characteristics.

Pre-retirement planning behavior is hypothesized to be associated with high levels of self-esteem as theorized in A Theory of Self-Esteem (Cast and Burke, 2002). High self-esteem has been related to well-planned and deliberate purchasing decisions (Desarbo & Edwards, 1996); whereas low self-esteem, in combination with depression, fantasy and dependence on others, has been associated with compulsive buying tendencies (Yurchisin & Johnson, 2004). Pre-retirement planning behaviors consist of preliminary actions and steps taken by individuals to prepare themselves for the eventuality of retirement. These actions include consulting a

financial planner, attending seminars, reading books and magazines, projecting retirement income needs, and using the assistance of a personal computer in the retirement planning process. According to Elder and Rudolph (1999), thinking about retirement and attending planning meetings are positively associated with retirement satisfaction. In addition, Mayer, Zick, and Marsden (2011) found that calculation of retirement needs is positively associated with increases in self-reported retirement savings.

TSE provides a meaningful way to better understand the linkages between behavioral processes and consumer actions, thereby providing justification of the use of psychosocial factors in consumer financial research. The following narrative provides a summary of self-esteem as conceptualized in TSE and a brief discussion of factors associated with pre-retirement planning behaviors.

Literature Review

Psychosocial Profile

According to Schmitt and Allik (2005), the Rosenberg self-esteem scale (Rosenberg, 1965) has been utilized to perhaps the greatest extent among social science research studies in the assessment of global self-esteem. Many reasons account for this including its simplicity, relatively few (i.e., 10) items, and its durability over nearly 50 years (Whiteside-Mansell & Corwyn, 2003). The Rosenberg self-esteem scale was originally developed for studies involving high school students (Rosenberg) in the mid-1960s, but its application has been successfully expanded for use with individuals of all ages (Whiteside-Mansell & Corwyn). Studies employing the Rosenberg self-esteem scale have entailed myriad research topics ranging from gender differences (Kling, Hyde, Showers, & Buswell, 1999) to age and birth cohort difference (Twenge & Campbell, 2001), as well as in-group bias (Crocker & Luhtanen, 1990) and have, as a by-

product, incorporated diverse sample sizes. Typically, the Rosenberg self-esteem scale measures the self-evaluation that an individual makes and customarily maintains and consequently reflects a degree of approval or disapproval toward oneself (Rosenberg).

The Pearlin mastery scale (Pearlin & Schooler, 1978) provides a measurement of self-concept, referencing "the extent to which one regards one's life-chances as being under one's own control in contrast to being fatalistically ruled" (p. 5). The Pearlin mastery scale has its origins in research surrounding individuals' ability to successfully cope with, and avoid being harmed by, life-strains (Pearlin & Schooler). According to Pearlin and Schooler, coping is defined as "any response to external life-strains that serves to prevent, avoid, or control emotional distress" (p. 3). Mastery is deemed to be one psychological resource, in addition to self-esteem and self-denigration, employed by individuals as part of their overall coping repertoire (Pearlin & Schooler). As such, applications of the mastery construct have generally revolved around studies on depression (Marshall & Lang, 1990), pain management (Kurtz, Kurtz, Given, & Given, 2008), family dynamics (Crosbie-Burnett, 1989), bereavement and geriatrics (Onrust, Cuijpers, Smit, & Bohlmeijer, 2007). The Pearlin mastery scale consists of seven items that are self-assessed.

The Rotter locus of control scale (Rotter, 1966) is a measure of the extent to which individuals see themselves in control of situations affecting their lives through self-determination and self-motivation as opposed to the extent that the environment controls their lives. Self-determination and self-motivation are deemed to be internally-driven characteristics, whereas environmental factors are considered to be externally-driven. Rotter is the originator of social learning theory (Rotter, 1954), which derives from a belief that individuals seek positive stimulation and reinforcement, while simultaneously striving to circumvent unpleasant

situations, as mechanisms to explain individual behaviors. Social Learning Theory (Rotter, 1954) contains four dimensions consisting of behavior potential, expectancy, reinforcement value, and the psychological situation. Each dimension contains both specific and generalized constructs; locus of control is a generalized expectancy of reinforcement construct measuring individual beliefs surrounding how they obtain reinforcement under various situations and in various environments. The original locus of control measurement scale consisted of 29 pairs of statements where respondents selected the statement that was closest to their beliefs. Applications of the Rotter locus of control scale have been equally diverse; however, there have been a few consumer finance behavior applications (Perry & Morris, 2005; Grable, Park, & Joo, 2009).

Attempts to integrate various measurements of self-esteem into a comprehensive psychosocial profile appear to be rather limited in the literature. Within the past decade, Winters, Myers, and Proud (2002) conducted a sequence of 10-year reviews of a number of rating scales, including self-esteem. Admittedly, the research conducted was specific to adolescent assessments and it therefore incorporated the Rosenberg self-esteem scale, the Piers-Harris children's self-concept scale, the Coopersmith self-esteem inventory, the Hare self-esteem scale, the self-perception profile for young adolescents, the self-perception profile for children, and the pictorial scale of perceived competence and acceptance for young children, each with proven construct validity and reliability specific to this area of research. Other research has utilized several self-esteem related scales (Dwyer, McCloud, & Hodson, 2011; Heatherton & Polivy, 1991); however, none appear to have integrated several measurement scales through factor analysis in an attempt to develop a comprehensive psychosocial profile. This study seeks to make a unique contribution to the literature on consumer finance by developing a comprehensive

psychosocial profile with potentially superior predictive ability for pre-retirement planning behaviors.

Factors Associated with Retirement Planning Behavior

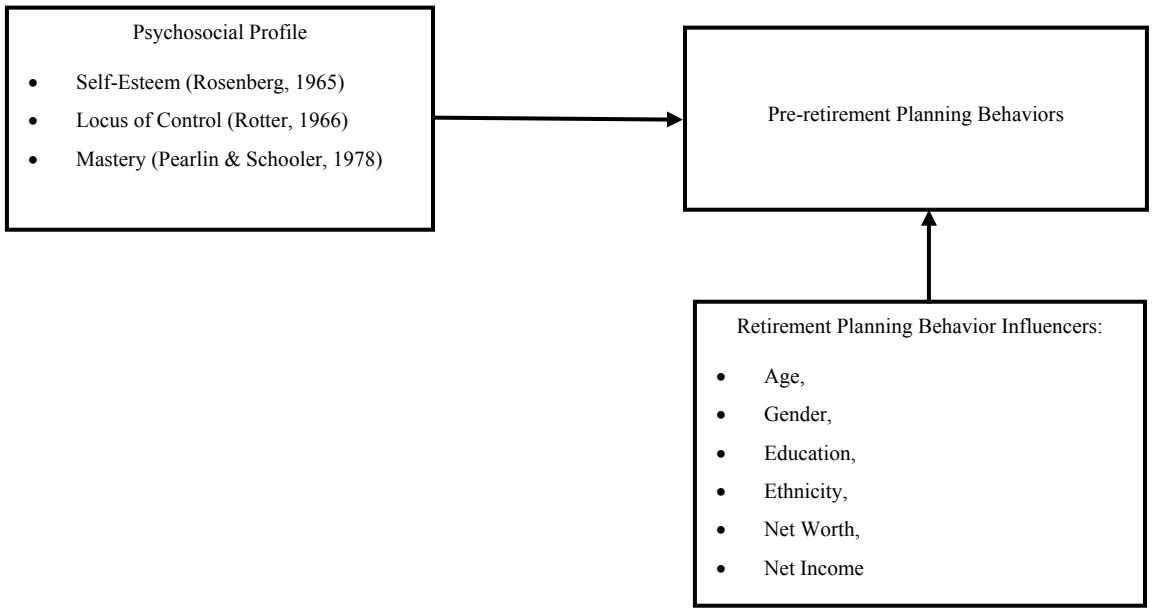
There are several known factors associated with retirement planning behavior, and financial behaviors in general, from prior literature. For instance, race and ethnicity often work to shift financial preferences (Yao, Gutter, & Hanna, 2005). Within a consumer behavior framework, Burlew, Banks, McAdoo, and Azibo, (1992) noted that race/ethnicity can represent cultural influences, as well as an information and resource barrier. Yao and her associates noted that Blacks, Hispanics, and Whites have different perceptions of what it means to be financially responsible. Differences in preferences and perceptions typically stem from cultural variations (Gutter & Fontes, 2006). It has been hypothesized in the literature that Hispanics and Blacks, compared to Whites, have a financial acculturation deficit resulting from a limited exposure to the credit, investment, and general financial markets. As a result of the observed financial acculturation deficit, Coleman (2003) reported that Whites have a tendency to exhibit greater financial risk tolerance, increased equity ownership, and more proactive financial planning behavior than other racial/ethnic groups. As such, in this study, it was hypothesized that Hispanics and Blacks would be less likely to engage in retirement planning behavior.

Additional factors known to be associated with retirement planning behavior include gender, age, marital status, net worth, and education. For some individuals, these personal characteristics generally represent impediments when contemplating and planning for retirement. For example, Joo and Pauwels (2002) noted that women face barriers to retirement. These obstacles stem from a combination of factors, such as gender role identification, that contribute to the accumulation of less financial knowledge over the lifespan by women versus men. Further,

Joo and Pauwels reported that younger individuals and individuals who attained higher levels of education were more likely to be confident about their retirement preparation. Mastin (1998) found an association between education and knowledge, noting that individuals with less education were less likely to be knowledgeable about retirement planning issues. Conversely, married individuals may have a greater incentive to be proactive in their retirement planning, inasmuch as planning for the preservation of capital and retirement income needs for two people can be more complex. Further, wealth, in addition to other factors (e.g., age and education), should be positively associated with retirement preparation (Li, Montalto, & Geistfeld, 1996).

As shown in Figure 4.1, it was hypothesized that a composite psychosocial profile consisting of the Rosenberg self-esteem scale (1965), Rotter locus of control scale (1966), and Pearlin mastery scale (Pearlin & Schooler, 1978), in combination with common retirement planning behavior influencers consisting of age, gender, education, ethnicity, net income, and net worth would be associated with pre-retirement planning behaviors.

Figure 4.1 Comprehensive Psychosocial Profile



Methods

Dataset and Respondents

Data for this study were obtained from the National Longitudinal Survey of Youth, 1979 cohort, consisting of young men and women (n = 12,686) who were born between January 1, 1957 and December 31, 1964 (between ages of 14 and 22 years of age). Individuals in this sample were interviewed annually from inception through 1994, and biennially thereafter. The initial survey sample consisted of three subsets representing: (a) a cross-section sample designed to represent noninstitutionalized, civilian population of youths living in the United States (n = 6,111); (b) a supplemental oversample of minority youths and economically disadvantaged non-minority youths residing in the United States (n = 5,295); and (c) a military sample of enlistees in the Army, Air Force, Navy or Marine Corps as of September 30, 1978 (n = 1,280).

Beginning in 1985, all but 201 randomly selected respondents in the military subsample were dropped from the survey, and the economically disadvantaged non-minority subsample was discontinued in its entirety in 1991, to reduce sampling costs. The first subset, the supplemental oversample of minority youths in the survey, and 201 randomly selected military participants remained at the time of this study (n = 9,964). During the latest survey, 7,654 individuals responded, representing a 77% retention rate. A correlation of all variables was conducted to assess for multicollinearity issues (see Appendix A, Table A-3). No issues were found.

Outcome Variable

Retirement Planning Behavior

Retirement planning behavior in the NLSY79 was assessed by asking respondents a series of questions related to their planning actions as of 2008. The following questions were asked: (a) Have you ever calculated how much retirement income you would need at retirement?,

(b) Have you consulted a financial planner about how to plan your finances after retirement?, (c) Have you read any books or magazines on retirement planning?, (d) Have you used a computer program to help you plan your retirement?, and (e) Have you ever attended any meetings on retirement or retirement planning? All items were coded dichotomously as 1 = yes or 0 = no. A summated variable was calculated based on responses with scores ranging from 0 to 5, with a mean and standard deviation of 1.01 and 1.38, respectively. Relying on research conducted by Rosenkoetter and Garris (2001), respondents were assigned to one of two groups consisting of: (a) individuals who have engaged in one or more retirement planning behaviors (1 = yes), and (b) individuals who have not engaged in any retirement planning behaviors (0 = no). Rosenkoetter and Garris, in their research study involving psychosocial adjustment among retirees, explored the number and effect of nine pre-retirement planning activities upon recent retirees.

Composite Psychosocial Profile

A composite psychosocial profile was developed using principal component analysis of the three distinct psychosocial scales contained within the NLSY79 dataset consisting of the Rosenberg (1965) self-esteem scale, the Rotter (1966) locus of control scale, and the Pearlin and Schooler (1978) mastery scale. The principal component analysis utilized a direct oblimin rotation inasmuch as A Theory of Self-Esteem (Cast & Burke, 2002) suggests that the resulting factors may be correlated. The retained factor score representing a composite psychosocial profile, consisting of 12 items (see Table 4.1 for factor loadings), was utilized in a logistic regression analysis as a predictor of pre-retirement planning behaviors. Cronbach's alpha for the extracted psychosocial profile factor was high (α =.73).

Table 4.1 Factor Loadings of Composite Psychosocial Profile

Variable	Factor Loading $\alpha = .73$ $M = .00$
I am no good at all (Rosenberg)	.72
I am inclined to feel like a failure (Rosenberg)	.71
I take a positive attitude toward myself and others (Rosenberg)	.71
I have a number of good qualities (Rosenberg)	.68
I am a person of worth (Rosenberg)	.68
I do things as well as others (Rosenberg)	.67
I do not have much to be proud of (Rosenberg)	.67
I feel useless at times (Rosenberg)	.67
I am satisfied with myself (Rosenberg)	.63
I wish I had more respect for myself (Rosenberg)	.62
Many times I feel I have little influence over things that happen to me/Impossible for me to believe that luck or chance plays an important role in my life (Rotter)	.63
In my case, getting what I want has little or nothing to do with luck/Many times we might just as well decide what to do by flipping a coin (Rotter)	.59
What happens to me is my own doing/Sometimes I feel that I don't have much control over the direction my life is taking (Rotter)	.55
I often feel helpless dealing with the problems of life (Pearlin)	.47
Little I can do to change important things in my life (Pearlin)	.46
I have little control over what happens to me (Pearlin)	.45
No way I can solve the problems I have (Pearlin)	.41
I sometimes feel I am being pushed around (Pearlin)	.41

Note: Two of the Pearlin Mastery items, and one of the Rotter items did not load onto either factor at the .40 level or above and were dropped from further analyses.

The Rosenberg self-esteem scale questions were most recently asked in 2006. The individual variables comprising the self-esteem scale consist of 10 statements measured on a 4 point Likert-type scale, ranging from strongly disagree (1) to strongly agree (4). Each statement listed below was self-assessed by the respondent.

1. On the whole I am satisfied with myself.;
2. At times I think that I am no good at all.;

3. I feel that I have a number of good qualities.;
4. I am able to do things as well as most other people.;
5. I feel I do not have much to be proud of.;
6. I certainly feel useless at times.;
7. I feel that I am a person of worth, at least the equal of others.;
8. I wish I could have more respect for myself.;
9. All in all, I am inclined to feel that I am a failure.; and
10. I take a positive attitude toward myself.

Statements 2, 5, 6, 8 and 9 were reverse coded with higher scores representing higher self-esteem.

The Rotter locus of control scale questions were asked in 1979 consisting of four pairs of statements. For each statement pair, respondents were asked to select the one statement that most closely reflected their opinion. In addition, respondents were asked to indicate whether the selected statement from each pair is much closer or slightly closer to their opinion. Each statement pair below was analyzed by the respondent and a selection made.

1. A. What happens to me is my own doing.; or
   B. Sometimes I feel that I don't have much control over the direction my life is taking.
2. A. When I make plans, I am almost certain that I can make them work.; or
   B. It is not always wise to plan too far ahead, because many things turn out to be a matter of good or bad fortune anyhow.
3. A. In my case, getting what I want has little or nothing to do with luck.; or
   B. Many times we might just as well decide what to do by flipping a coin.

4. A. Many times I feel that I have little influence over the things that happen to me.; or
   B. It is impossible for me to believe that chance or luck plays an important role in my life.

The first statement (statement A) in the first three pairs of statements represents an internal locus of control orientation, while the second statement in the fourth statement pair constitutes an internal locus of control orientation. The remaining statements in each pair of statements represent an external locus of control orientation. Internal locus of control orientation statements that were "much closer" to the respondents' opinion were coded 4, whereas those classified as "slightly closer" were coded 3. External control statements that were "much closer" to the respondents' opinion were coded 1, whereas those classified as "slightly closer" were coded 2. Scores for each respondent were summed with high scores representing an internal locus of control and low scores constituting an external locus of control.

The Pearlin mastery questions were most recently asked in 1992 consisting of seven statements. Statements were self-rated by respondents on a Likert-type scale ranging from strongly disagree (1) to strongly agree (4). The following statements were assessed by the survey respondents.

1. There is no way I can solve the problems I have.;
2. I sometimes feel I'm being pushed around.;
3. I have little control over what happens to me.;
4. I can do just about anything I really set my mind to.;
5. I often feel helpless in dealing with problems of life.;
6. What happens to me in the future mostly depends on me.; and
7. Little I can do to change important things in my life.

Statements 1, 2, 3, 5, and 7 were reverse coded with higher scores representing an individual's perception of greater mastery over their environment. As previously noted, the Pearlin mastery scale (Pearlin & Schooler, 1978) was originally designed as a means for assessing how well individuals cope with life events. Various research studies have explored the stability of this construct over time; however, a consensus has failed to emerge with concrete evidence of such stability (Finch, Shanahan, Mortimer, & Ryu, 1991; Jang, Haley, Small, & Mortimer, 2002; Brady, 2003). Finch et al. report that the Pearlin mastery scale is more stable during middle adolescent years, but it is not as stable in adults. However, Mortimer and Finch (1986) found a stability coefficient of .73 in adult males possessing a college degree, while Pearlin, Menaghan, Lieberman, and Mullan (1981) reported a stability coefficient of .44 over a four year study consisting of adults. Inasmuch as the data for this study are limited to the periodic administrations of the NLSY survey, the Pearlin mastery scale is being incorporated into the psychosocial profile utilizing the data collected from the questions posed to the survey sample in 1992.

Retirement Planning Behavior Influencers

Each of the control variables used in this study was assessed as of 2008. Age was measured in reported years. Gender was coded 1 = male and 0 = female. Race/ethnic background was grouped into three categories of Hispanic, Black, and non-Black/non-Hispanic within the original NLSY79 data. Hispanic and Black were coded as 0 in the multivariate analysis with non-Black/non-Hispanic being coded 1. Net worth, income, and education were measured continuously. Based upon this analysis, the following hypotheses were tested.

H_1: Respondents who possess a healthy composite psychosocial profile are more likely to engage in pre-retirement planning behaviors.

H_2: Older respondents are more likely to engage in pre-retirement planning behaviors.

H3: Men are likely to engage in pre-retirement planning behaviors.

H_4: Respondents with higher levels of education are more likely to engage in pre-retirement planning behaviors.

H_5: Non-Black, Non-Hispanic respondents are more likely to engage in more pre-retirement planning behaviors.

H_6: Respondents with higher net worth are more likely to engage in more pre-retirement planning behaviors.

H_7: Respondents with higher net income are more likely to engage in more retirement planning behaviors.

Data Analysis

The research hypotheses were tested using a logistic regression analysis with SPSS version 18.0. The dependent variable in this study, pre-retirement planning behaviors, consisted of five individual dichotomous questions, which are categorical in nature. A logistic regression analysis method is indicated in this study since the five statements are not linear. In order to determine the likelihood of respondents who will engage in one or more retirement planning behaviors, a logistic regression converts a categorical variable into log format, thereby transforming a non-linear variable into linear form in order to analyze associations, and the explained and unexplained variances between independent and dependent variables.

Results

Descriptive Statistics

Results from the statistical analysis (Table 4.2) show that the sample was represented by slightly more females than males; Non-Hispanic, Non Black individuals represented 52.72% of the sample. Approximately 52.52% of the sample engaged in no retirement planning behaviors, while the balance of 47.48% of respondents had engaged in one or more retirement planning behaviors. The mean age of the sample was 44.65 years, and the mean level of education attained was 13.39 years. The mean net worth and net income of the sample in 2008 were $272,928, and $74,722, respectively.

Table 4.2 Descriptive Statistics

N = 5,305

Variable	%	N	Mean	Range
No RP Behaviors	52.52%	2,786		
One or More RP Behaviors	47.48%	2,519		
Psychosocial Profile		5,305	38.71	12 - 48
Age		5,305	44.65	41 – 50
Female	52.05%	2,761		
Male	47.95%	2,544		
Years of Education		5,305	13.39	1 - 20
Non-Black, Non-Hispanic	52.72%	2,797		
Other	47.28%	2,508		
Net Worth (in $10,000ths)		5,305	$27.29	$-159.70 - $344.82
Net Income (in $10,000ths)		5,305	$7.47	$0 - $44.07

Logistic Regression Results

A logistic regression model was formulated to predict the probability that individuals would be likely to engage in one or more retirement planning behaviors (Table 4.3). The Log Likelihood Ratio (6432.80) was significant at the $p > .001$ level. The model accurately predicts respondents likely to engage in one or more pre-retirement planning behavior 56.29% of the time, and overall the model is accurate in its predictive capability 68.22% of the time.

Results from the model demonstrated that the composite psychosocial profile, attained level of education, age, net worth, and net income were significant predictors of respondents most likely to engage in one or more pre-retirement planning behaviors. Gender and ethnicity did not have a statistically significant bearing on the model. Respondents who have attained higher levels of education were 20% more likely to engage in one or more retirement planning behaviors. Individuals possessing a healthy psychosocial profile are 17% more likely to engage in one or more pre-retirement planning behaviors. Individuals who were older were 3% more likely to engage in one or more retirement planning behaviors.

Table 4.3 Logistic Regression – Engaging in Retirement Planning Behaviors

N = 5,305

Variable	Coefficient b	Odds Ratio
Intercept	-4.38***	
Healthy Psychosocial Profile	.16***	1.17
Age	.03*	1.03
Male	.01	1.01
Education Level	.18***	1.20
Non-Black, Non-Hispanic	-.00	1.00
Net Worth/10,000	.01***	1.00
Net Income/10,000	.06***	1.01

Discussion

This study was undertaken to explore the combination of three measures of psychosocial well-being into a composite psychosocial profile. A principal components analysis was utilized to establish a factor best representing a composite psychosocial profile consisting of Rosenberg's self-esteem scale (Rosenberg, 1965), Pearlin's mastery scale (Pearlin & Schooler, 1978), and Rotter's locus of control scale (Rotter, 1966).

The first hypothesis proposed that respondents who possess a healthy composite psychosocial profile would be associated with engaging in one or more pre-retirement planning behaviors. This hypothesis was supported. Respondents possessing healthier composite psychosocial profiles are 17% more likely to engage in one or more retirement planning behaviors (p <.001). This association is consistent with A Theory of Self Esteem (Cast & Burke, 2002), which provided that individuals who possess higher levels of self-esteem seek to produce

and reproduce behaviors that are likely to translate into future successful outcomes, thereby increasing self-esteem.

Hypothesis 2 stated that older respondents would be more likely to engage in retirement planning behaviors. This hypothesis was supported in that the results demonstrated that respondents who were older are 3% more likely ($p < .05$) to engage in one or more pre-retirement planning behaviors. Since this study entailed respondents who were between the ages of 41 and 49, it is plausible that those respondents who are at or near the upper age limit of this range are beginning to recognize that traditional retirement is little more than one decade away from the present (2006). Consequently the number of years remaining to tweak existing plans, adopt and fund new strategies, or adjust lifestyles may be catching the attention of older survey respondents.

Hypothesis 3 provided that men are more likely to engage in pre-retirement planning behaviors. This hypothesis was rejected as no statistically significant association was found between gender and pre-retirement planning behaviors. Although Lusardi (2006), and Joo and Pauwels (2002) found that women were more likely to be less adequately prepared for retirement than men due to gender role differences, this study did not find such an association as it pertained to pre-retirement planning behaviors.

The fourth hypothesis projected that respondents with higher levels of education are likely to engage in pre-retirement planning behaviors. This hypothesis was supported and is consistent with many prior studies involving attained levels of education and a variety of financial planning behaviors, including retirement planning (Lusardi & Mitchell, 2005; Mastin, 1998). Individuals who have pursued more education are more likely to understand the complexities associated with savings, investing, and risk, all of which play an important role in

retirement planning. Based on their awareness and understanding of these concepts, individuals are more likely to seek competent guidance in the design and implementation of strategies to accomplish their long-term financial goals.

Hypothesis 5 postulated that Non-Black, Non-Hispanic respondents are more likely to engage in more pre-retirement planning behaviors. This hypothesis was rejected as no statistically significant result was observed between ethnicity and pre-retirement planning behaviors. Yao, Gutter, and Hanna (2005) found that cultural differences may influence investment and financial behaviors of Blacks and Hispanics, thereby resulting in different approaches toward attaining financial objectives. Notwithstanding this prior research on the effects of culture, no observable differences were noted in this study as it pertained to pre-retirement planning behaviors.

The sixth and seventh hypotheses projected that individuals with higher net worth and higher net income, respectively, would be likely to engage in more pre-retirement planning behaviors. Both of these hypotheses were supported and were highly statistically significant ($p <$ .001). Individuals with higher net income were 1% more likely to engage in one or more pre-retirement planning behaviors. However, though statistically significant, there was no difference in the number of pre-retirement planning behaviors between respondents with higher or lower levels of net worth (O.R. = 1.00). These results may suggest that individuals who generate higher levels of income are more motivated to establish and protect a nest egg for future consumption. Further, individuals who earn higher levels of income may be in an enviable position of meeting their financial obligations with funds to spare, thereby giving them the incentive to investigate prudent ways of managing these excess funds.

Conclusion

The availability of research concerning psychosocial profiles and consumer finance applications has been limited (Demo, 1985). A composite psychosocial profile consisting of the Rosenberg self-esteem scale (Rosenberg, 1965), Rotter locus of control scale (Rotter, 1966), and Pearlin mastery scale (Pearlin & Schooler, 1978) was used in this study to determine the influence of psychosocial well-being on future behavior (i.e., pre-retirement planning behaviors). A logistical regression model was developed to test this hypothesis, finding that respondents possessing a higher composite psychosocial profile are 17% more likely to engage in one or more pre-retirement planning behaviors. Consistent with prior research, respondents with higher levels of attained education, older respondents, and respondents possessing higher net worth and net income were more likely to engage in one or more pre-retirement planning behaviors as well.

This study's main contribution to the literature is its conceptualization of a composite psychosocial profile consisting of three distinct self-report measures representing self-esteem, mastery, and locus of control, and the successful use and test of this composite profile in the field of consumer finance. Utilizing Cast and Burke's (2002) A Theory of Self Esteem as a theoretical framework, the composite psychosocial profile was hypothesized to function as a motivation for future behaviors consisting of pre-retirement planning behaviors.

As noted by Stryker (1980) and Cast and Burke (2002), the self consists of multiple identities, and individuals seek out positive verification of these identities as a means of producing relevant meanings that will translate into higher levels of self-esteem. The Rosenberg (1965) self-esteem scale is a measurement of an individual's self-evaluation, while the Rotter (1966) locus of control scale focuses upon an individual's perception of self-determination and self-motivation over life events. The Pearlin (Pearlin & Schooler, 1978) mastery scale represents a measurement of individuals' ability to cope with the ups and downs inevitable in life. A

composite psychosocial profile, therefore, should be more efficacious in capturing and aggregating respondents' multiple identities for application in social science research than associations derived from a single measurement of the self.

Understanding client psychosocial profiles can be beneficial to financial planners and financial therapists in formulating strategies to assist and guide clients toward ultimate attainment of their long-term financial goals. This study may possibly provide new or enhanced considerations for personal financial planning and financial therapy professionals as they build their repertoire of techniques for client use. For example, in the field of position recruitment and placement, candidates for open positions within a firm may be asked to complete one or more questionnaires in order to heighten the probability of an appropriate fit between prospective employee and prospective employer. Financial planners and therapists who wish to provide a holistic and value-added approach to their practices may find a benefit in employing a similar instrument that seeks to assess prospects' composite psychosocial profiles before they become clients, as this added knowledge may permit a more individually-tailored set of recommendations for achieving overall personal financial well-being.

Limitations associated with this study concern the time differences in which the various self-esteem measurement data was collected for the NLSY79 dataset. The Rosenberg self-esteem data (Rosenberg, 1965) was most recently collected in 2006, the Rotter locus of control data (Rotter, 1966) was collected in 1979, and the Pearlin mastery data (Pearlin & Schooler, 1978) was collected in 1992. While global self-esteem is generally regarded as a stable personality construct, there have been differences of opinion surrounding the degree of stability for each measure across the stages of life. In 1979, the inception of the NLSY79 study and sole collection date for the Rotter locus of control data, survey respondents were between the ages of 14 and 22

years. In 1992, the date of the Pearlin mastery data collection, the age range of the NLSY79 cohort was from 27 years of age to 35 years of age. In 2006, the most recent date of the Rosenberg self-esteem data collection, NLSY79 respondents were between the ages of 41 and 49. Thus, the survey respondents would be deemed to be between adolescence and mid-life.

In addition, results from this study are necessarily limited to the cohort that was analyzed at this particular point in their lifecycle. It is entirely possible that a different set of associations might be found or that no associations might be found had another cohort been analyzed at an earlier or later stage of life.

Since this study was constrained by the availability of data as collected, the absence of a more recent dataset on which to test hypotheses necessarily limits the applicability and generalization of results. Future studies may wish to measure self-esteem on a longitudinal basis from young adulthood to age of retirement in order to more precisely pinpoint associations of a composite psychosocial profile with pre-retirement planning behaviors.

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Chapter 5 - Conclusions

This dissertation, consisting of three essays, was designed to test the conceptualization of A Theory of Self-Esteem (Cast & Burke, 2002) and to expand the literature in a consumer finance context. Each paper approaches self-esteem from a different perspective in an attempt to provide practitioners, policy makers, and academicians with research that can advance the disciplines of personal financial planning and financial therapy, and ultimately benefit clients who seek the services of these professionals.

Essay One

In the first essay, self-esteem and its dimensions of worth and efficacy were examined as associations with prior financial behaviors. Utilizing Cast and Burke's (2002) A Theory of Self Esteem as the theoretical framework, this study explored the effect that information search behaviors and retirement planning actions have upon worth-based and efficacy-based self-esteem. As expected, information search behaviors were positively associated with higher levels of worth-based and efficacy-based self-esteem. Further, retirement planning actions were also found to be positively associated with higher levels of both self-esteem dimensions. These associations were expected, and the associations are most likely attributable to the belief that efficacy-based and worth-based self-esteem are most influenced by self-attributions, reflected appraisals and social comparisons (Cast & Burke).

The findings concerning changes in net worth and net income were unanticipated. Prior research literature has reported that single period measures of net worth and net income are associated with financial planning or retirement planning. Since net worth and net income alone represent snapshots at single points in time based on the data being collected, it was hypothesized that changes in these variables over broader time frames would provide a

longitudinal dimension to the analysis and more accurately constitute savings or dissavings. However, these associations were not observed in this study.

Ethnicity was found to be associated with worth-based self-esteem, but not with efficacy-based self-esteem in this study, or with the likelihood of engaging in more than one pre-retirement planning behaviors in essays two or three. A possible explanation for the association with worth-based self-esteem may be attributable to limitations associated with the reporting of ethnicity within the NLSY79 dataset. Specifically, ethnicity is coded as Non-Black, Non-Hispanic; Black; or Hispanic. The category of Non-Black, Non-Hispanic incorporates all ethnicities other than Black or Hispanic, which may result in some variances.

This essay contributes to the literature by demonstrating that information search behaviors and retirement planning actions play an integral role through their associations with self-esteem. Broadening opportunities for individuals to project retirement needs and to self-educate on retirement planning best practices can potentially result in more beneficial public policy programs.

Essay Two

The second paper explored the constructs of time preference, self-esteem and creditworthiness upon pre-retirement planning behaviors. Due to the limited research surrounding psychosocial effects in a consumer financial arena, this paper attempted to associate self-esteem with retirement planning preparation and simultaneously test the buffer element discussed in A Theory of Self Esteem (Cast & Burke, 2002).

This essay theorized that time preference, gender, marital status, ethnicity, net worth, net income, creditworthiness, attained levels of education and self-esteem are all associated with retirement planning activities. Net worth, net income, attained levels of education, and self-

esteem were all found to be significant in their association with retirement planning behaviors. Creditworthiness, time preference, gender, marital status, and ethnicity were rejected as being associated with pre-retirement planning behaviors and actions. These results were somewhat surprising regarding creditworthiness, time preference, gender, and marital status inasmuch as prior research literature has found associations between these variables and positive consumer finance applications. The absence of significance associated with the creditworthiness variable was rather unexpected, given its conceptualization as a proxy for prudent financial behaviors. Identity self-verification (Stryker, 1980) is one of the major tenets underlying A Theory of Self Esteem (Cast & Burke, 2002) and credit worthy practices were hypothesized to be one of the more common, routine activities enabling consumers to verify their financial identities. It is possible that prevailing economic events at the time data was employed in this study limited these associations.

The finding of no significance surrounding the inclusion of time preference in the model was also a surprise, since it was theorized that more patient individuals place a higher premium on the future, and would be more inclined to engage in behaviors that would be likely to secure a comfortable future, such as retirement planning behaviors. Responses to the NLSY79 survey question regarding time preference indicated that some respondents were highly impatient as evidenced by their rather extreme expectations of returns in exchange for the one year delay to receive the $1,000 prize amount. It is plausible that these respondents either may not have fully understood the question or were not as proficient in assessing mathematical returns.

Nonetheless, this second paper conclusively associated higher levels of self-esteem with pre-retirement planning activities, thereby contributing to the gap in the literature between self-esteem and consumer finance activities.

Essay Three

The third essay sought to leverage the results in Essay Two by conceptualizing a psychosocial profile consisting of three distinct measurements of self-esteem. The Rosenberg self-esteem scale (Rosenberg, 1965), the Rotter locus of control scale (Rotter, 1966), and the Pearlin mastery scale (Pearlin & Schooler, 1978) were analyzed and combined into a factor through the statistical principal components analysis method.

It was hypothesized that a composite psychosocial profile would be more efficacious in identifying respondents who would be more likely to engage in one or more pre-retirement planning behaviors. The findings in this essay supported this hypothesis, demonstrating that respondents who possess a stronger psychosocial profile would be likely to engage in one or more pre-retirement planning behaviors.

This was the first study to propose the use of a composite psychosocial profile in a consumer finance context, and the results make a significant contribution to the literature in this regard.

Summary

Integrating these three essays demonstrates associations of self-esteem in a consumer finance context. Essay One demonstrated that engaging in information search behaviors and retirement planning actions are associated with both efficacy-based and worth-based self-esteem. Since individuals are prone to repeat patterns and behaviors that have been previously successful (Cast & Burke, 2002), it is essential that individuals feel capable and worthy in personal financial planning endeavors. These associations serve to establish a foundation for future research on self-esteem in a consumer finance context. Essay Two was successful in demonstrating that an association exists between higher levels of self-esteem and the likelihood

that individuals would be more likely to engage in one or more pre-retirement planning actions. Essay Three proposed that a composite psychosocial profile would be more efficacious in determining the likelihood of engaging in one or more retirement planning behaviors. An association was found that individuals possessing a healthy psychosocial profile are likely to engage in one or more retirement planning behaviors.

Although not a principal focus of this dissertation research, attained education was found in all three essays to be significantly associated with the dimensions of self-esteem, and with respondents who engage in one or more retirement planning behaviors. This is not a new finding, but it does confirm and reaffirm prior research that has demonstrated the importance of education in personal financial planning.

These three studies represent the first attempts to apply Cast and Burke's (2002) A Theory of Self-Esteem to a consumer finance arena. Essay One demonstrated that self-esteem is associated with information search behaviors and retirement planning actions. Essay Two demonstrated that an association exists between self-esteem and pre-retirement planning behaviors. Essay Three demonstrated that a composite psychosocial profile is associated with the likelihood of individuals engaging in one or more pre-retirement planning behaviors. The associations from each study document the success of this endeavor, and, more importantly, heighten the significance and importance of self-esteem as a component of prudent personal financial behaviors. Financial therapists and financial planners of the future may discover that these studies may enable them to more accurately assess a client's psychosocial profile at the outset of a relationship. The ability to assess and understand a client's composite psychosocial profile may offer rich dividends to financial planners in targeting specific strategies that may

prove most beneficial in client financial goal attainment, including referrals of clients to financial therapists deemed to be most at risk of not engaging in any retirement planning behaviors.

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Appendix A - Correlation Matrices

Table A.1 Correlation Matrix – Chapter 2

	Education	Age	Info. Search Behaviors	Retirement Planning Actions	% Net Worth Change	% Net Income Change	Ethnicity	Gender	Worth Self-Esteem	Efficacy Self-Esteem
Education	1.00	-.01	.37**	.31**	-.01	-.05**	-.19**	-.05*	.24**	.30**
Age	-.01	1.00	.05**	.04**	-.01	.02	-.00	-.01	-.00	-.05**
Information Search Behavior	.37***	.05**	1.00	.59**	-.01	-.01	-.08**	-.03*	.19**	.20**
Retirement Planning Actions	.31**	.04**	.59**	1.00	-.01	-.01	-.11**	.04**	.16**	.18**
% Net Worth Change	-.01	-.01	-.01	-.01	1.00	-.00	.02	-.01	-.02	-.03*
% Net Income Change	-.05**	.02	-.01	-.01	-.00	1.00	.01	-.01	-.01	-.00
Ethnicity	-.19**	-.00	-.08**	-.11**	.02	.01	1.00	.00	-.03*	-.09**
Gender	-.05**	-.01	-.03*	.04**	-.01	-.01	.00	1.00	.03*	.04**
Worth Self-Esteem	.24**	-.00	.19**	.16**	-.02	-.01	-.03*	.03*	1.00	.46**
Efficacy Self-Esteem	.30**	-.05	.20**	.18**	-.03*	-.00	-.09**	.04**	.46**	1.00

* $p < .05$; ** $p < .01$; *** $p < .001$

Table A.2 Correlation Matrix – Chapter 3

	Self-Esteem	Time Preference	Age	Gender	Ethnicity	Marital Status	Credit-worthi-ness	Educa-tion	Net Worth	Net Income	Total Ret. Planning
Self-Esteem	1.00	.01	-.00	.02*	-.03*	.13**	.08**	.23**	.12**	.20**	.12**
Time Preference	.01	1.00	.03*	.03*	-.12**	.06**	.10**	.09**	.10**	.10**	.07**
Age	-.00	.03*	1.00	-.01	-.00	.02	.01	-.01	.06**	.03*	.02
Gender	.02*	.03*	-.01	1.00	.00	.03*	.04*	-.05**	.02	.06**	.01
Ethnicity	-.03*	-.12**	-.00	.00	1.00	-.25**	-.20**	-.19**	-.19**	-.23**	-.05**
Marital Status	.13**	.06**	.02	.03*	-.25**	1.00	.16**	.17**	.22**	.43**	.12**
Credit-worthiness	.08**	.10**	.01	.04*	-.20**	.16**	1.00	.09**	.19**	.18**	.08**
Education	.23**	.09**	-.01	-.05*	-.19**	.17**	.09**	1.00	.29**	.41**	.25**
Net Worth	.12**	.10**	.06**	.02	-.19**	.22**	.19**	.29**	1.00	.57**	.20**
Net Income	.198**	.10**	.03*	.06**	-.23**	.43**	.18**	.41**	.57**	1.00	.23**
Total Ret. Planning	.12**	.07**	.02	.01	-.05**	.12**	.08**	.25**	.20**	.23**	1.00

*$p < .05$; **$p < .01$

Table A.3 Correlation Matrix – Chapter 4

	Psychosocial Profile	Age	Gender	Ethnicity	Marital Status	Education	Net Worth	Net Income	≥ 1 Ret. Plan. Behavior
Psychosocial Profile	1.00	.01	.02	.02*	.09***	.20***	.12***	.14***	.15***
Age	.01	1.00	-.01	-.00	.02	-.01	.04***	.01	.03**
Gender	.02	-.01	1.00	.00	.01	-.06***	.02	.06***	-.02*
Ethnicity	.02*	-.00	.00	1.00	.24***	.18***	.21***	.23***	.11***
Marital Status	.09***	.02	.01	.24***	1.00	.15***	.25***	.38***	.17***
Education	.20***	-.01	-.06***	.18***	.15***	1.00	.30***	.43***	.33***
Net Worth	.12***	.04***	.02	.21***	.25***	.30***	1.00	.56***	.25***
Net Income	.14***	.01	.06***	.23***	.38***	.43***	.56***	1.00	.30***
≥ 1 Ret. Plan. Behavior	.15***	.03**	-.02*	.11***	.17***	.33***	.25***	.30***	1.00

*$p < .05$, **$p < .01$, ***$p < .001$

Appendix B - Codebooks

Appendix B.1 – Chapter 2 Codebook

Ethnicity

		Value	Count	Percent
Standard Attributes	Position	11		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Nominal		
	Role	Input		
Valid Values	1	Hispanic	2002	15.8%
	2	Black	3174	25.0%
	3	Non-Black, Non-Hispanic	7510	59.2%

Gender

		Value	Count	Percent
Standard Attributes	Position	12		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Nominal		
	Role	Input		
Valid Values	1	Male	6403	50.5%
	2	Female	6283	49.5%

Pearlin1

		Value	Count	Percent
Standard Attributes	Position	13		
	Label	No Way Solve Problems		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	8985		
	1	3701		
Labeled Values	2	Strongly Disagree	2666	21.0%
	3	Disagree	4466	35.2%
	4	Agree	1509	11.9%
		Strongly Agree	344	2.7%

Pearlin2

		Value	Count	Percent
Standard Attributes	Position	14		
	Label	Feel Pushed Around		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	8989		
	1	3697		
Labeled Values	2	Strongly Disagree	2034	16.0%
	3	Disagree	4451	35.1%
	4	Agree	2191	17.3%
		Strongly Agree	313	2.5%

Pearlin3

		Value	Count	Percent
Standard Attributes	Position	15		
	Label	Little Control over Things Happen to me		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	8975		
	1	3711		
Labeled Values	2	Strongly Disagree	2822	22.2%
	3	Disagree	5128	40.4%
	4	Agree	857	6.8%
		Strongly Agree	168	1.3%

Pearlin4

		Value	Count	Percent
Standard Attributes	Position	16		
	Label	Can Do Anything Mind set tb		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	8982		
	1	3704		
Labeled Values	2	Strongly Disagree	135	1.1%
	3	Disagree	359	2.8%
	4	Agree	5003	39.4%
		Strongly Agree	3485	27.5%

Pearlin5

		Value	Count	Percent
Standard Attributes	Position	17		
	Label	Often Feel Helpless Dealing Life Problems		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	8983		
	1	3703		
Labeled Values	2	Strongly Disagree	2465	19.4%
	3	Disagree	4961	39.1%
	4	Agree	1349	10.6%
		Strongly Agree	208	1.6%

Pearlin6

		Value	Count	Percent
Standard Attributes	Position	18		
	Label	What happens in future depends on me		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	8982		
	1	3704		
Labeled Values	2	Strongly Disagree	168	1.3%
	3	Disagree	414	3.3%
	4	Agree	4738	37.3%
		Strongly Agree	3662	28.9%

Pearlin7

		Value	Count	Percent
Standard Attributes	Position	19		
	Label	Little I can do to change important things in life		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	8972		
	1	3714		
Labeled Values	2	Strongly Disagree	2798	22.1%
	3	Disagree	5028	39.6%
	4	Agree	955	7.5%
		Strongly Agree	191	1.5%

SE1

		Value	Count	Percent
Standard Attributes	Position	20		
	Label	Person of worth		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7651		
	Missing	5035		
Labeled Values	1	Strongly Agree	4195	33.1%
	2	Agree	3226	25.4%
	3	Disagree	159	1.3%
	4	Strongly Disagree	31	.2%

SE2

		Value	Count	Percent
Standard Attributes	Position	21		
	Label	Good qualities		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7651		
	Missing	5035		
Labeled Values	1	Strongly Agree	4271	33.7%
	2	Agree	3286	25.9%
	3	Disagree	54	.4%
	4	Strongly Disagree	15	.1%

SE3

		Value	Count	Percent
Standard Attributes	Position	22		
	Label	Feel like a failure		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7651		
	Missing	5035		
Labeled Values	1	Strongly Agree	44	.3%
	2	Agree	241	1.9%
	3	Disagree	3539	27.9%
	4	Strongly Disagree	3747	29.5%

SE4

		Value	Count	Percent
Standard Attributes	Position	23		
	Label	Do things as well as others		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	3329	26.2%
	3	Agree	3866	30.5%
	4	Disagree	365	2.9%
		Strongly Disagree	56	.4%

SE5

		Value	Count	Percent
Standard Attributes	Position	24		
	Label	Don't have much to be proud of		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	119	.9%
	3	Agree	364	2.9%
	4	Disagree	3499	27.6%
		Strongly Disagree	3573	28.2%

SE6

		Value	Count	Percent
Standard Attributes	Position	25		
	Label	Positive attitude toward self & others		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	3256	25.7%
	3	Agree	4033	31.8%
	4	Disagree	291	2.3%
		Strongly Disagree	37	.3%

SE7

		Value	Count	Percent
Standard Attributes	Position	26		
	Label	Satisfied with myself		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	2483	19.6%
	3	Agree	4409	34.8%
	4	Disagree	649	5.1%
		Strongly Disagree	70	.6%

SE8

		Value	Count	Percent
Standard Attributes	Position	27		
	Label	Wish more self-respect		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	219	1.7%
	3	Agree	1295	10.2%
	4	Disagree	3629	28.6%
		Strongly Disagree	2386	18.8%

SE9

		Value	Count	Percent
Standard Attributes	Position	28		
	Label	Feel useless at times		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	110	.9%
	3	Agree	1261	9.9%
	4	Disagree	3686	29.1%
		Strongly Disagree	2494	19.7%

SE10

		Value	Count	Percent
Standard Attributes	Position	29		
	Label	Think no good at all		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
Labeled Values	1	5035		
	2	Strongly Agree	57	.4%
	3	Agree	485	3.8%
	4	Disagree	3637	28.7%
		Strongly Disagree	3357	26.5%

NW00_recompute

		Value
Standard Attributes	Position	81
	Label	NW00/10000
	Type	Numeric
	Format	F8.2
	Measurement	Scale
	Role	Input
N	Valid	7635
	Missing	5051

NW08_recompute

		Value
Standard Attributes	Position	82
	Label	NW08/10000
	Type	Numeric
	Format	F8.2
	Measurement	Scale
	Role	Input
N	Valid	7514
	Missing	5172

NI00_recompute

		Value
Standard Attributes	Position	84
	Label	NI00/10000
	Type	Numeric
	Format	F8.2
	Measurement	Scale
	Role	Input
N	Valid	6629
	Missing	6057

NI08_recompute

		Value
Standard Attributes	Position	85
	Label	NI08/10000
	Type	Numeric
	Format	F8.2
	Measurement	Scale
	Role	Input
N	Valid	6727
	Missing	5959

ED_06

		Value
Standard Attributes	Position	105
	Label	HighestEd_06
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7654
	Missing	5032

Age_06

		Value
Standard Attributes	Position	106
	Label	Age_06
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7654
	Missing	5032

RP_08_1

		Value	Count	Percent
Standard Attributes	Position	111		
	Label	Calc Inc_08		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7594		
	Missing	5092		
Labeled Values	0	No	5744	45.3%
	1	Yes	1850	14.6%

RP_08_2

		Value	Count	Percent
Standard Attributes	Position	112		
	Label	Cons FP_08		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7616		
	Missing	5070		
Labeled Values	0	No	6294	49.6%
	1	Yes	1322	10.4%

RP_08_3

		Value	Count	Percent
Standard Attributes	Position	113		
	Label	MagsBks_08		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7624		
	Missing	5062		
Labeled Values	0	No	5189	40.9%
	1	Yes	2435	19.2%

RP_08_4

		Value	Count	Percent
Standard Attributes	Position	114		
	Label	UsedPC_08		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7616		
	Missing	5070		
Labeled Values	0	No	6670	52.6%
	1	Yes	946	7.5%

RP_08_5

		Value	Count	Percent
Standard Attributes	Position	115		
	Label	Mtgs_08		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7611		
	Missing	5075		
Labeled Values	0	No	6437	50.7%
	1	Yes	1174	9.3%

RP_08_Sum

		Value
Standard Attributes	Position	116
	Label	RP_08_Sum
	Type	Numeric
	Format	F8.2
	Measurement	Scale
	Role	Input
N	Valid	7548
	Missing	5138

ISB_08

		Value
Standard Attributes	Position	117
	Label	InfoSrchBeh_08
	Type Format	Numeric
	Measurement	F8.2
	Role	Scale
N	Valid	Input
	Missing	7592
		5094

RPA_08

		Value
Standard Attributes	Position	118
	Label	RetPlnAct_08
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7578
	Missing	5108

Appendix B.2 – Chapter 3 Codebook

Ethnicity

		Value	Count	Percent
Standard Attributes	Position	2		
	Label	Ethnicity		
	Type	Numeric		
	Format	F11		
	Measurement	Nominal		
	Role	Input		
Valid Values	1	Hispanic	2002	15.8%
	2	Black	3174	25.0%
	3	Non Black; Non Hispanic	7510	59.2%

Gender

		Value	Count	Percent
Standard Attributes	Position	3		
	Label	Gender		
	Type	Numeric		
	Format	F11		
	Measurement	Nominal		
	Role	Input		
Valid Values	1	Male	6403	50.5%
	2	Female	6283	49.5%

SE1

		Value	Count	Percent
Standard Attributes	Position	4		
	Label	Person of worth		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	4195	33.1%
	3	Agree	3226	25.4%
	4	Disagree	159	1.3%
		Strongly Disagree	31	.2%

SE2

		Value	Count	Percent
Standard Attributes	Position	5		
	Label	Good qualities		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7651		
	Missing	5035		
Labeled Values	1	Strongly Agree	4271	33.7%
	2	Agree	3286	25.9%
	3	Disagree	54	.4%
	4	Strongly Disagree	15	.1%

SE3

		Value	Count	Percent
Standard Attributes	Position	6		
	Label	Feel like a failure		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	44	.3%
	3	Agree	241	1.9%
	4	Disagree	3539	27.9%
		Strongly Disagree	3747	29.5%

SE4

		Value	Count	Percent
Standard Attributes	Position	7		
	Label	Do things as well as others		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	3329	26.2%
	3	Agree	3866	30.5%
	4	Disagree	365	2.9%
		Strongly Disagree	56	.4%

SE5

		Value	Count	Percent
Standard Attributes	Position	8		
	Label	Don't have much to be proud of		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	119	.9%
	3	Agree	364	2.9%
	4	Disagree	3499	27.6%
		Strongly Disagree	3573	28.2%

SE6

		Value	Count	Percent
Standard Attributes	Position	9		
	Label	Positive attitude toward self & others		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	3256	25.7%
	3	Agree	4033	31.8%
	4	Disagree	291	2.3%
		Strongly Disagree	37	.3%

SE7

		Value	Count	Percent
Standard Attributes	Position	10		
	Label	Satisfied with myself		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	2483	19.6%
	3	Agree	4409	34.8%
	4	Disagree	649	5.1%
		Strongly Disagree	70	.6%

SE8

		Value	Count	Percent
Standard Attributes	Position	11		
	Label	Wish more self-respect		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	219	1.7%
	3	Agree	1295	10.2%
	4	Disagree	3629	28.6%
		Strongly Disagree	2386	18.8%

SE9

		Value	Count	Percent
Standard Attributes	Position	12		
	Label	Feel useless at times		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	110	.9%
	3	Agree	1261	9.9%
	4	Disagree	3686	29.1%
		Strongly Disagree	2494	19.7%

SE10

		Value	Count	Percent
Standard Attributes	Position	13		
	Label	Think no good at all		
	Type Format	Numeric		
	Measurement	F11		
	Role	Scale		
	Valid	Input		
N	Missing	7651		
	1	5035		
Labeled Values	2	Strongly Agree	57	.4%
	3	Agree	485	3.8%
	4	Disagree	3637	28.7%
		Strongly Disagree	3357	26.5%

Time1_Yr

		Value
Standard Attributes	Position	14
	Label	Addl Amt 1 yr
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7212
	Missing	5474

MarStat_06

		Value	Count	Percent
Standard Attributes	Position	63		
	Label	MaritalStat_06		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7653		
	Missing	5033		
Labeled Values	0	Never Married	1351	10.6%
	1	Married	4374	34.5%
	2	Separated	403	3.2%
	3	Divorced	1417	11.2%
	6	Widowed	108	.9%

ED_06

		Value
Standard Attributes	Position	64
	Label	HighestEd_06
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7654
	Missing	5032

Age_06

		Value
Standard Attributes	Position	65
	Label	Age_06
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7654
	Missing	5032

Credit_04

		Value	Count	Percent
Standard Attributes	Position	69		
	Label	Credit_04		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	3269		
	Missing	9417		
Labeled Values	0	No	2444	19.3%
	1	Yes	825	6.5%

RP_08_1

		Value
Standard Attributes	Position	90
	Label	Calc Inc_08
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7594
	Missing	5092

RP_08_2

		Value
Standard Attributes	Position	91
	Label	Cons FP_08
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7616
	Missing	5070

RP_08_3

		Value
Standard Attributes	Position	92
	Label	MagsBks_08
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7624
	Missing	5062

RP_08_4

		Value
Standard Attributes	Position	93
	Label	UsedPC_08
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7616
	Missing	5070

RP_08_5

		Value
Standard Attributes	Position	94
	Label	Mtgs_08
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7611
	Missing	5075

Appendix B.3 – Chapter 4 Codebook

Ethnicity

		Value	Count	Percent
Standard Attributes	Position	10		
	Label	Ethnicity		
	Type	Numeric		
	Format	F11		
	Measurement	Nominal		
	Role	Input		
Valid Values	1	Hispanic	2002	15.8%
	2	Black	3174	25.0%
	3	Non Black, Non Hispanic	7510	59.2%

Gender

		Value	Count	Percent
Standard Attributes	Position	11		
	Label	Gender		
	Type	Numeric		
	Format	F11		
	Measurement	Nominal		
	Role	Input		
Valid Values	1	Male	6403	50.5%
	2	Female	6283	49.5%

LOC1

		Value	Count	Percent
Standard Attributes	Position	2		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	12634		
	Missing	52		
Labeled Values	1	In Control	8691	68.5%
	2	No Control	3943	31.1%

LOC2

		Value	Count	Percent
Standard Attributes	Position	3		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	12630		
	Missing	56		
Labeled Values	1	Much Closer	6566	51.8%
	2	Slightly Closer	6064	47.8%

LOC3

		Value	Count	Percent
Standard Attributes	Position	4		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	12637		
	Missing	49		
Labeled Values	1	Plans Work	6080	47.9%
	2	Plans Matter of Luck	6557	51.7%

LOC4

		Value	Count	Percent
Standard Attributes	Position	5		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	12622		
	Missing	64		
Labeled Values	1	Much Closer	7258	57.2%
	2	Slightly Closer	5364	42.3%

LOC5

		Value	Count	Percent
Standard Attributes	Position	6		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	12630		
	Missing	56		
Labeled Values	1	Luck not a factor	10411	82.1%
	2	Flip a coin	2219	17.5%

LOC6

		Value	Count	Percent
Standard Attributes	Position	7		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	12610		
	Missing	76		
Labeled Values	1	Much Closer	6323	49.8%
	2	Slightly Closer	6287	49.6%

LOC7

		Value	Count	Percent
Standard Attributes	Position	8		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	12597		
	Missing	89		
Labeled Values	1	Luck Big Role	5702	44.9%
	2	Luck No Role	6895	54.4%

LOC8

		Value	Count	Percent
Standard Attributes	Position	9		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	12590		
	Missing	96		
Labeled Values	1	Much Closer	5052	39.8%
	2	Slightly Closer	7538	59.4%

Pearlin1

		Value	Count	Percent
Standard Attributes	Position	12		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	8985		
	Missing	3701		
Labeled Values	1	Strongly Disagree	2666	21.0%
	2	Disagree	4466	35.2%
	3	Agree	1509	11.9%
	4	Strongly Agree	344	2.7%

Pearlin2

		Value	Count	Percent
Standard Attributes	Position	13		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	8989		
	Missing	3697		
Labeled Values	1	Strongly Disagree	2034	16.0%
	2	Disagree	4451	35.1%
	3	Agree	2191	17.3%
	4	Strongly Agree	313	2.5%

Pearlin3

		Value	Count	Percent
Standard Attributes	Position	14		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	8975		
	Missing	3711		
Labeled Values	1	Strongly Disagree	2822	22.2%
	2	Disagree	5128	40.4%
	3	Agree	857	6.8%
	4	Strongly Agree	168	1.3%

Pearlin4

		Value	Count	Percent
Standard Attributes	Position	15		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	8982		
	Missing	3704		
Labeled Values	1	Strongly Disagree	135	1.1%
	2	Disagree	359	2.8%
	3	Agree	5003	39.4%
	4	Strongly Agree	3485	27.5%

Pearlin5

		Value	Count	Percent
Standard Attributes	Position	16		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	8983		
	Missing	3703		
Labeled Values	1	Strongly Disagree	2465	19.4%
	2	Disagree	4961	39.1%
	3	Agree	1349	10.6%
	4	Strongly Agree	208	1.6%

Pearlin6

		Value	Count	Percent
Standard Attributes	Position	17		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	8982		
	Missing	3704		
Labeled Values	1	Strongly Disagree	168	1.3%
	2	Disagree	414	3.3%
	3	Agree	4738	37.3%
	4	Strongly Agree	3662	28.9%

Pearlin7

		Value	Count	Percent
Standard Attributes	Position	18		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	8972		
	Missing	3714		
Labeled Values	1	Strongly Disagree	2798	22.1%
	2	Disagree	5028	39.6%
	3	Agree	955	7.5%
	4	Strongly Agree	191	1.5%

SE1

		Value	Count	Percent
Standard Attributes	Position	19		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7651		
	Missing	5035		
Labeled Values	1	Strongly agree	4195	33.1%
	2	agree	3226	25.4%
	3	disagree	159	1.3%
	4	Strongly disagree	31	.2%

SE2

		Value	Count	Percent
Standard Attributes	Position	20		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7651		
	Missing	5035		
Labeled Values	1	Strongly agree	4271	33.7%
	2	agree	3286	25.9%
	3	disagree	54	.4%
	4	Strongly disagree	15	.1%

SE3

		Value	Count	Percent
Standard Attributes	Position	21		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7651		
	Missing	5035		
Labeled Values	1	Strongly agree	44	.3%
	2	agree	241	1.9%
	3	disagree	3539	27.9%
	4	Strongly disagree	3747	29.5%

SE4

		Value	Count	Percent
Standard Attributes	Position	22		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7651		
	Missing	5035		
Labeled Values	1	Strongly agree	3329	26.2%
	2	agree	3866	30.5%
	3	disagree	365	2.9%
	4	Strongly disagree	56	.4%

SE5

		Value	Count	Percent
Standard Attributes	Position	23		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7651		
	Missing	5035		
Labeled Values	1	Strongly agree	119	.9%
	2	agree	364	2.9%
	3	disagree	3499	27.6%
	4	Strongly disagree	3573	28.2%

SE6

		Value	Count	Percent
Standard Attributes	Position	24		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7651		
	Missing	5035		
Labeled Values	1	Strongly agree	3256	25.7%
	2	agree	4033	31.8%
	3	disagree	291	2.3%
	4	Strongly disagree	37	.3%

SE7

		Value	Count	Percent
Standard Attributes	Position	25		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7651		
	Missing	5035		
Labeled Values	1	Strongly agree	2483	19.6%
	2	agree	4409	34.8%
	3	disagree	649	5.1%
	4	Strongly disagree	70	.6%

SE8

		Value	Count	Percent
Standard Attributes	Position	26		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7651		
	Missing	5035		
Labeled Values	1	Strongly agree	219	1.7%
	2	agree	1295	10.2%
	3	disagree	3629	28.6%
	4	Strongly disagree	2386	18.8%

SE9

		Value	Count	Percent
Standard Attributes	Position	27		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7651		
	Missing	5035		
Labeled Values	1	Strongly agree	110	.9%
	2	agree	1261	9.9%
	3	disagree	3686	29.1%
	4	Strongly disagree	2494	19.7%

SE10

		Value	Count	Percent
Standard Attributes	Position	28		
	Label	<none>		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7651		
	Missing	5035		
Labeled Values	1	Strongly agree	57	.4%
	2	agree	485	3.8%
	3	disagree	3637	28.7%
	4	Strongly disagree	3357	26.5%

NetWorth

		Value
Standard Attributes	Position	29
	Label	Family NW 2008
	Type Format	Numeric
	Measurement	F11
	Role	Ordinal
		Input

NetInc

		Value
Standard Attributes	Position	31
	Label	Family NInc 2008
	Type Format	Numeric
	Measurement	F11
	Role	Ordinal
		Input

MarStat_06

		Value	Count	Percent
Standard Attributes	Position	77		
	Label	MaritalStat_06		
	Type	Numeric		
	Format	F11		
	Measurement	Scale		
	Role	Input		
N	Valid	7653		
	Missing	5033		
Labeled Values	0	Never Married	1351	10.6%
	1	Married	4374	34.5%
	2	Separated	403	3.2%
	3	Divorced	1417	11.2%
	6	Widowed	108	.9%

ED_06

		Value
Standard Attributes	Position	78
	Label	HighestEd_06
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7654
	Missing	5032

Age_06

		Value
Standard Attributes	Position	79
	Label	Age_06
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7654
	Missing	5032

RP_08_1

		Value
Standard Attributes	Position	82
	Label	Calc Inc_08
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7594
	Missing	5092

RP_08_2

		Value
Standard Attributes	Position	83
	Label	Cons FP_08
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7616
	Missing	5070

RP_08_3

		Value
Standard Attributes	Position	84
	Label	MagsBks_08
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7624
	Missing	5062

RP_08_4

		Value
Standard Attributes	Position	85
	Label	UsedPC_08
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7616
	Missing	5070

RP_08_5

		Value
Standard Attributes	Position	86
	Label	Mtgs_08
	Type	Numeric
	Format	F11
	Measurement	Scale
	Role	Input
N	Valid	7611
	Missing	5075

Appendix C - Programming and Statistical Output

Appendix D - Curriculum Vitae

Ronald A. Sages, M.B.A., CFP®, CTFA

21 Roberta Lane
Greenwich, Connecticut 06830
(203) 255-9993 x201 (office)
(203) 913-0626 (cellular)
E-mail: rsages@chapinasset.com
Campus Email: rasages@ksu.edu

Education

2009 - present	Kansas State University ABD; Doctoral Candidate Personal Financial Planning Expected Completion Date: December, 2012 Research Interests: Behavioral Finance, Financial Numeracy/Literacy and Risk Management
1979	The University of Connecticut, Storrs, Connecticut MBA, Finance and Taxation
1973	The Ohio University, Athens, Ohio BGS, Liberal Arts

Honors and Awards

2012	Outstanding Ph.D. Student of the Year, Kansas State University, College of Human Ecology, Family Studies and Human Services, Personal Financial Planning Department
2011	Phi Kappa Phi Honor Society, Inducted at Kansas State Kappa Omicron Nu Honor Society, Inducted at Kansas State
2011	American Council on Consumer Interests, Recipient of Emerging Scholar Scholarship Award

Certifications

2010	Certified Financial Planner™

1993	Series 65, Registered Investment Advisor Law Examination
1992	Certified Trust & Financial Advisor Designation (CTFA), with distinction (Institute of Certified Bankers)
1985	Northwestern University/American Bankers Association, National Graduate Trust School. Thesis Title: "International Financial and Estate Planning Techniques," Accepted: August, 1985.

Employment

2011 – present	**Kansas State University**, Manhattan, Kansas Distance-based Instructor in Personal Financial Planning, Certificate Program, College of Human Ecology, Family Studies and Human Services
1993 - present	**Chapin Asset Management, Inc**., Greenwich, Connecticut & Hilton Head Island, South Carolina Co-founder, President & Chief Investment Officer of asset & wealth management and consulting firm catering to high net worth individuals and private fiduciaries; Registered Investment Advisor Representative
1985 - 1993	**Bankers Trust Company**, New York, New York (now Deutsche Bank) President, **BT Private Clients Group, Inc**. (wholly-owned subsidiary); Member, Board of Directors of BT PCG, Inc., New York, New York Vice President, Fiduciary Services Division Member of Personal Trust Investment Committee, Personal Trust Acceptance Committee, Discretionary Group, Special Assets Group and Fee Group.
1973 - 1985	**The Connecticut Bank and Trust Company**, Hartford, Connecticut (now Bank of America) Vice President & Regional Manager, Lower Fairfield County Private Banking Vice President, Trust Sales and Marketing

Vice President, Trust and Estate Administration

Trust Officer/Senior Trust Officer, Trust and Estate Administration

Administrator & Trainee, Fiduciary Administration and Portfolio Management and Investment Research

Publications – Peer Reviewed

Sages, R. A., & Grable, J. E. (under review). A test of the theory of self-esteem: A consumer behavior perspective.

Grable, J. E., Sages, R. A., Webb, F., Schindler, K., & Archuleta, K. L. (under review). Breaking the circle of problematic financial behavior: A test of self esteem theory.

Sages, R. A., Cumbie, J. A., & Britt, S. L. (forthcoming Fall, 2012, College Student Journal). The correlation between anxiety and money management.

Carr, N. A., Sages, R. A., Nabeshema, G., Fernatt, F., & Grable, J. E. (under review). Running towards financial health: Testing the relationships among exercise, diet, cognitive-directed health behavior, and financial preparedness.

Sages, R. A., & Grable, J. E. (2010). Financial numeracy, net worth, and financial management skills: Client characteristics that differ based on financial risk tolerance. *Journal of Financial Service Professionals, 64*(6), 57-63.

Publications – Non-Peer Reviewed

Sages, R. A., & Britt, S. L. (2012). Introducing clients to financial therapy. *Trusts and Estates, 151*(3), 31-35.

Sages, R. A. (1997). Industry professionals: Are you 2000 conversant? *Trusts & Estates, 136*(1), 46-48.

Sages, R. A. (1996). ¢ense and profitability. *Trusts & Estates, 135*(8), 27-29.

Sages, R. A. (1996). Getting better is the alpha, there can be no omega! *Trusts & Estates, 135*(1), 51-55.

Sages, R. A., & Keden, H. M. (1996). Supercharging popular wealth transfer planning vehicles. *Trusts & Estates, 135*(9), 45-61.

Sages, R. A. (1995). Avoiding the tarpits; Paleontological survival," *Trusts & Estates, 134*(1), 26.

Sages, R. A. (1994). Too busy to train, technically speaking?," *Directions Newsletter*, (The Center For Financial Services Research), 3 Reprinted (1994). *ABA Management Update*, 19.

Sages, R. A. (1994). The new prudent investor rule and the duty not to delegate. *Trust and Financial Advisor, 2*. 7-14. Reprinted (1995). *Trusts & Estates, 134*(5). 22-29. Reprinted (1995). *Trusts & Trustees and International Asset Management,1*(7), 20-27.

Sages, R. A., Keden, H. M., & Herritt, D. J. (1994). Watch out for taxes on IRAs!," *Private Asset Management, Institutional Investor*.

Sages, R. A., Keden, H. M., & Herritt, D. J. (1994). Considerations in choosing a common investment alternative. *Trusts & Estates, 133*(3), 45-52.

Sages, R. A., Keden, H. M., & Herritt, D. J. (1993). Business as anything but usual. *Trusts & Estates*, *132*(9), 8-14.

Textbooks

Grable, J. E., & Sages, R. A. (forthcoming 2013). Financial Planning Process. In Certified Financial Planning Board of Standards (Eds.), *The Financial Planning Competency Handbook*, Hoboken: Wiley.

Feldman, S., Groppelli, A. A., & Sages, R. A. (1986). Bank Trust Departments. In F. J. Fabozzi & F. G. Zarb (Eds.), *The Handbook of Financial Markets: Securities, Options, Futures* (pp. 534-548). Homewood, IL: Dow Jones-Irwin.

Reviewer

2012 Journal of Financial Therapy – review manuscripts for publication in the field of behavioral finance.

Academic Presentations

Breaking the Circle of Problematic Financial Behavior: A Test of Self-Esteem Theory (with F. Webb, J. Grable, K. Schindler, and K. Archuleta). American Council on Consumer Interests, 2010, Federal Reserve Bank of Atlanta.

A Test of A Theory of Self-Esteem: A Consumer Behavior Perspective (with John E. Grable, Ph.D.). American Council on Consumer Interests, 2011, Hyatt Regency, Washington, D.C.

The Correlation Between Anxiety and Money Management (with Julie A. Cumbie, and Sonya L. Britt, Ph.D.). Financial Therapy Association, 2011, University of Georgia, Athens, GA.

Mama's Boys and Nature's Girls: Explaining Differences in Risk Attitudes Between Women and Men (with Narita Anderson, Fred Fernatt, Robert Rodermund, and John E. Grable, Ph.D.). Academy of Financial Services, Harrah's, Las Vegas, NV.

Running towards financial health: Testing the relationships among exercise, diet, cognitive-directed health behavior, and financial preparedness (with Nicholas A. Carr, George

Nabeshema, Fred Fernatt, and John E. Grable, Ph.D.). American Council on Consumer Interests, 2012, Marriott Downtown, Memphis, TN.

Henegar, J., Sages, R.A., Schindler, K., Carr, N., Williams, S., Coffman, B., Cumbie, J., Cupples, W., Bell, M., Archuleta, K.L., & Grable, J. E. (May 2012). *Financial planning in the U.S.* Joo, S. (Moderator). Invited panel member at Korean Financial Planning, Seoul, South Korea.

Carr, N., Henegar, J, Sages, R. A., Williams, S., Coffman, B., Archuleta, K. L., Bell, M., Cumbie, J., Cupples, S., & Grable, J. E. (May 2012). *Financial planning in the U.S.* Joo, S. (Moderator). Invited panel member at Korean Financial Planning Standards Board and Korean Financial Planning Association Meeting, Seoul, South Korea.

Sages, R. A. (May 2012). *Self-Verification, Self-Esteem, and Retirement Planning Behaviors*. Invited presentation at the Samsung Life Insurance Retirement Center, Seoul, South Korea.

Teaching/Training/Speaking Experience

2012 (August) Financial Planning Day, Fort Riley, Manhattan, KS. Presentations on Estate Planning and one-on-one financial planning counselor, sponsored by the CFP® Board of Standards and Kansas State University

2011 – Present Instructor, Kansas State University Certificate Program in Personal Financial Planning

Subjects Taught:

Fundamentals of Personal Financial Planning
Insurance and Risk Management for Families
Investments for Families
Retirement Planning and Employee Benefits
Estate Planning for Families
Case Studies Capstone Course

2000 - Present Annual speaker at various programs sponsored by Stamford CFA Society, Estate Planning Councils, Prudential Insurance on personal financial planning and wealth management techniques

1993 - 2000 Speaker at multiple state-wide Bankers Association Trust & Investment Conferences (Michigan, Ohio, Pennsylvania, Texas)
Taught at various in-house Trust Division Banking Organizations

1987 - 1995 Instructor, National Graduate Trust School, National Trust School & Advanced Program for Trust Professionals sponsored by American Bankers Association/Northwestern University, Evanston, Illinois.

Subjects Taught:

Personal Trust Administration
Advanced Personal Trust Administration
Advanced Portfolio Management
Discretionary Exercises (Administration, Tax Elections & Investments)
Pecuniary & Fractional Shares in Estate & Trust Administration
Document Interpretation (Wills & Trust Agreements)
Distributions from Qualified Retirement Plans (Final Regulations)

Academic Committees

2011	Search Committee for two tenure-track positions in Personal Financial Planning, Family Studies & Human Services, College of Human Ecology, Kansas State University
2011 – Present	Curriculum Committee – Personal Financial Planning distance-based curriculum, Family Studies & Human Services, College of Human Ecology, Kansas State University
2011 – 2012	American Council on Consumer Interests (ACCI). Emerging Scholar Webinars.

Professional Activities

2011 – present	Member, CFP® Board Registered Programs Faculty Group
2011 – present	Member, Financial Therapy Association
2009 – present	Member, The American Council on Consumer Interests (ACCI)
2001 – present	Member CFA Institute & Stamford (CT) CFA Society
1992 – present	Certified Trust and Financial Advisor (CTFA)
1977 – present	Estate Planning Council of Lower Fairfield County (Past President 2004-05 & Current Member)
2006 – 2010	Former Treasurer, Board of Directors (Archons), The International Fraternity of Phi Gamma Delta
2002 – 2006	Former Chair & Member, Financial Advisory Board, Fraternity of Phi Gamma Delta
1999 – 2005	Past Founding Member, Editorial Advisory Board, Trusts & Investments Magazine (an American Bankers Association Publication)
1994 – 2004	Past Member, Editorial Advisory Board, Trusts & Estates Magazine (an Intertec/K-3 Publication)

1978 – 2006	The Connecticut Estate and Tax Planning Council, Inc. (Past Board Member & Past Member)
1994 – 2004	Estate Planning Council of New York City (Past Member)
	Non-Attorney Past Member, Probate Section, Westport Bar Association – Westport, Connecticut
1996 – 2002	Former Director, Phi Gamma Delta Educational Foundation, Inc.
1988 – 1995	Past Board Member, American Bankers Association National Trust/Graduate Trust School Program at Northwestern University

Expert Witness Testimony

1995 - 2000	Hired & testified as Expert Witness in 3 matters involving Prudent Man and Prudent Investor Rule Litigation (2 were Federal District Court for the Western District (Kansas); one Connecticut Superior Court – Fairfield County, CT)

Consulting

1997	Moore Special Forms (now Avery Dennison Corporation) Cleveland, Ohio on providing services to the personal trust/private banking profession
1994 - 1997	LaSalle Bank, Chicago, IL, Private Bank - technical training of line personnel, transfer tax law updates and planning techniques
1995 - 1996	Meridian Bank, Philadelphia, PA, Private Bank - technical training of line personnel on financial and wealth planning techniques
1993 - 1995	Bank of America, Los Angeles, CA. & San Francisco, CA. Personal Trust, Investment and Private Banking Groups, engaged to bring officers and staff into technical and procedural compliance with OCC-cited deficiencies
1994	Institute of Canadian Bankers, Montreal, Quebec Establishing Personal Trust and Private Bank Educational Training Sessions
1994	First of America, Lansing, MI, Private Bank - technical training of line personnel, transfer taxes and planning techniques