TESTING A MODEL OF FINANCIAL WELL-BEING

by

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Dissertation submitted to the Faculty of
the Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

Housing, Interior Design and Resource Management

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April, 1990

Blacksburg, Virginia

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(ABSTRACT)

This study was designed to empirically test a conceptual model and measurement of financial well-being as a function of (a) personal characteristics; (b) objective attributes, quantitative indicators of the financial domain and financial management behaviors of respondents; (c) perceived attributes, subjectively assessed life conditions and perceptions of financial situation; and (d) evaluations of financial situation using various reference points as standards of comparison. Two sub-problems were investigated in the study: (a) Which group of attributes, personal characteristics, objective attributes, perceived attributes, or evaluated attributes, significantly explains variance in perceived financial well-being?; and (b) Which individual attributes significantly explain variance in perceived financial well-being?

A mail survey was conducted from October of 1989 through January of 1990 with a randomly selected sample of Virginia citizens (N = 1,500). After an initial mailing and two follow-up mailings, 529 questionnaires were returned of the 1,450 that were received by respondents, providing a 36.5% total return rate (529/1,450). Twenty-

three questionnaires were blank or unusable, yielding a useable return rate of 34.9% (506/1,450). Demographic characteristics of the sample were similar to those of the population of Virginia citizens.

Financial well-being, as measured by an adaptation of Cantril's (1965) 11-point self-anchoring striving scale, was the dependent variable. All of the independent variables regressed on the dependent variable produced an R^2 of .71, which was statistically significant ($p < .01$). Removing each group of attributes individually from the regression equation resulted in a significant ($p < .01$) decrease in the resulting adjusted R^2s as computed by F ratios. All attribute groups were determined to be essential to the measurement of financial well-being.

Individual variables with a significant t ratio ($p < .05$) were the Perceived Attribute Index, Index of Well-Being, and full-time employment status. The results of the study supported the conceptual model. Results clearly verified the measurement of financial well-being as a function of personal characteristics, objective attributes, perceived attributes, and evaluated attributes.

Dedication

This is dedicated to my father whose quiet strength as he faced his death to cancer on March 3, 1990 provided me with the courage to achieve my goal in completing this dissertation.

ARTHUR L. MILLER

MARCH 27, 1917 - MARCH 3, 1990

"I loved you, Dad"

What can you say
about someone who was
always one of the
most essential parts of your world;
someone who took you by the hand
when you were little
and helped to show the way . . .

What do you say about someone
who stood by to help you grow,
providing love, strength and support
so you could become the person
you are today?

What can you say so others know
that he was the best there ever was,
and that you hope you've inherited
some of his wisdom and strength?

What words would you say
if you ever got the chance?

Maybe you'd just say
"I loved you, Dad . . ."

and hope he knew how much.

Adapted from
Andrew Tawney
(Schutz, 1983, p.7)

Acknowledgments

The author wishes to extend her sincere appreciation to the following people:

Dr. E. Thomas Garman, my major professor, for his guidance and assistance throughout my graduate program and for his ability to motivate, to keep me on schedule, and to edit my writing;

Dr. Ruth H. Lytton for her encouragement, teaching excellence, valuable research expertise, and for being a friend when I needed one the most;

Dr. Lee M. Wolfle for his patient guidance through multiple regression analysis and thought-provoking research questions;

Dr. Elaine D. Scott and Dr. James Littlefield for their encouragement and emotional support as well as assistance in enhancing the readability of this dissertation;

Ann Myers of the Virginia Department of Taxation for her assistance in obtaining the sample used in the study;

My mother and my family for their loving support during the last few difficult months; and

Very special thanks are extended to my husband, Tom, and sons, Michael and Robbie, without whom this dissertation would never have been completed. Their loving support, encouragement, and assistance during my entire graduate program are sincerely appreciated. Life during the last three years has been far from normal. Thank you for understanding.

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Chapter I

Introduction

The precarious economic environment of the 1980s resulted in serious financial difficulties for many individuals and families. The International Credit Association noted that 820,000 people were expected to file for bankruptcy in the United States in 1989 (Lee, 1989). At any point during this time, it was suspected that one sixth of all middle income families were experiencing difficulty in managing their finances and that ten percent of the time lost on the job was caused by financial problems (Brown, 1987). The readiness of the armed forces was thought to be compromised by persons distracted with financial difficulties who could not perform their tasks properly (N. Nolf, personal communication, 1988). In addition, disagreements over finances were consistently cited as the number one or two reason for divorce (Garman & Forgue, 1988).

The economic environment of the early 1990s may be slightly less precarious, but it is just as uncertain. Income inequality in the United States has hit record levels. Employment trends indicate that families will have to rely on having both parents in the work force to maintain family living standards. The American dream of owning a home is increasingly out of reach for families with children, but even more alarming is the rapid increase in the numbers of individuals and families who find themselves completely homeless (House of Representatives, 1989).

The Panel Study of Income Dynamics (PSID), a longitudinal study

conducted by the University of Michigan (Duncan, 1984), was designed to follow the economic status of 5,000 American families. The study, which began in 1968, has provided insights which contradict the previously held idea that American families can expect a continuous increase in prosperity throughout the family life cycle. Rather, the study suggests that most families can expect to experience periods of unemployment and hard times. A large and increasing proportion of Americans is suffering economic decline; few workers can expect continuous full-time employment and most workers have experienced large changes in earnings over the years (Lown, 1986).

The expectation of having more tomorrow than we have today, upward mobility, has been an economic aspiration for Americans for many years. However, Katherine Newman's research (1988) has documented a new socioeconomic phenomena she has termed "intragenerational downward mobility."

> It occurs when people who have attained a degree of occupational or financial success in their adult years see their achievements evaporate. They find themselves sliding down the socioeconomic ladder--they "fall from grace." In any year millions of families are sliding downward. And, perhaps most worrying, there is evidence to suggest that the situation has worsened in recent years (p. 20).

The downwardly mobile are people who have experienced various economic crises. Former middle-class managers and executives whose jobs

were casualties of corporate restructuring, displaced blue-collar workers from the deindustrialization in America, and divorced mothers who must accept a dramatic income reduction compose the majority of the downwardly mobile. Regardless of the reasons people are forced into economic hardship, the consequences are dire.

> Downwardly mobile refugees from the middle class do, for the most part, grope their way toward stability. For many, it is a stability devoid of promise, short on comfort, and surrounded by the uneasy feeling that there is little in life that one can rely on. They find ways to make ends meet, sometimes just barely. And lacking the benefits they had assumed to be their entitlement--health insurance, retirement pensions, houses appreciating in value--they confront the fact that the rest of their lives will be lived out in patterns more closely resembling the working poor than of the solid middle class. They survive, but their culture teaches that mere survival is not enough. Hence they feel perpetually unfulfilled, while their children scramble to reverse this heritage and worry that they too will find themselves dumped on society's junk heap (Newman, 1988, p. 238).

A majority of Americans may not experience the total financial devastation of the downwardly mobile, but the National Opinion Research Center's cumulative report for 1972-1986 reveals that 23% of the

respondents have reported that their financial situation has been getting worse (1986). The Changing Times ("The Key," 1989) Personal Prosperity Index measures the well-being of American households by combining average household spending with net worth. Since 1982, the Index has grown at an average annual rate of slightly less than one percent. The Index was up a scant two-tenths of a percent in 1988, the second year in a row of sluggish growth and the smallest rise since 1983.

Justification for the Study

Improving quality of life for individuals and families has long been a stated goal of research in the broad field of home economics. In the 1978 Home Economics Research Assessment, Planning Projections Report (HERAPP), Ritchey stated that research in home economics up to that time had added to the body of knowledge and had attendent implications for homes and families, but improvement was needed in productivity, generation of ideas, perseverance or follow through, problem identification, and research methodology. In providing this base line from which future research could be measured, the HERAPP Report claimed that priority should be given to research which would facilitate the improvement of the well-being of families.

The HERAPP Report gave the following definition of family economics:

> Family Economics is concerned with the determinants of the levels of living of families and individuals and with the possibilities for changing these levels to

> better meet personal and societal goals. It is based on principles and concepts of allocation related to the development, acquisition, maintenance, and conservation of scarce resources in productive activity and end uses by families and individuals as they interact with other social and economic systems to achieve their standards of living (Ritchey, 1978, p. 86).

Specifically, the research objective recommended in the HERAPP Report for family economics was "to analyze the components of economic well-being and evaluate their contribution to the family's overall well-being" (Ritchey, 1978, p. 85).

The full potential of this research objective has not been realized due to many factors. Family economic well-being is a multi-dimensional, complex construct. Many underlying key concepts have not been operationally defined and their relationships to the construct have not been empirically tested in a manner that has resulted in valid and reliable measures of family economic well-being.

An Overview of Measuring Overall Well-Being

The literature suggests that the foundation for measuring economic well-being has been laid in previously conducted quality of life research. This research study does not attempt to measure the broad concept of quality of life, but instead pursues an in-depth measurement of financial well-being as a subconcept of overall quality of life.

In 1973, Dalkey and Rourke defined quality of life as a person's sense of well-being, his satisfaction or dissatisfaction with life, or

his happiness or unhappiness. Following up on this definition, two national research studies were conducted in 1976 to measure well-being by determining what makes people happy or satisfied. Andrews and Withey investigated the levels of well-being perceived by American adults; Campbell, Converse, and Rodgers investigated Americans' sense of satisfaction with several critical domains of life.

Reported in Social Indicators of Well-Being (1976), Andrews and Withey's research objectives were aimed at identifying the "more significant general concerns of the American people" (p. 8), determining which of those concerns had the greatest effect on a general sense of well-being, establishing the relationships between the concerns, and evaluating the extent that Americans can identify and report their feelings about well-being. It was determined that there was tremendous variability in people's perceived quality of life and that patterns in feelings about well-being showed reasonably continuous variation throughout the population. Andrews and Withey suggested that the issue of how people come to feel as they do could be approached by individually examining the various concerns in life, such as their families, houses, neighborhood, local government, and standard of living.

Campbell, Converse, and Rodgers' (1976) research into perceived quality of life established that global reports of a sense of well-being can be meaningfully seen as a composite of feelings of satisfaction or dissatisfaction with twelve specific domains, or concern levels, of life. The following domains emerged as predictors of life satisfaction:

health, marriage, family life, national government, friendships, housing, job, community, religious faith, nonwork activities, financial situation, and organizations.

Campbell et al. presented a model (see Figure 1) to explain the interrelationships among the different domain satisfaction levels and their relationships to general life satisfaction and to behaviors. Within each domain the relationships among personal characteristics, objective attributes, perceived attributes, standards of comparison, and evaluated attributes were established.

The Conceptual Framework for Measuring Satisfaction in the Financial Domain

McCullers (1984) points out that home economics has been chastised for its dearth of theory, its overemphasis on practical and applied problems, and its lack of an emphasis on a theoretical basis for solving problems. An excellent case in point exists in the area of family financial problems. Lown and Cook (1987) agree that much research in family financial management has been atheoretical, but state that there are no generally accepted theories, models, or conceptual frameworks to guide research, education, or counseling.

In defense, Caplovitz (1983) states that research into real world problems is generally not based in theory because there are no theories of these problems to be tested. Researchers of real world problems are instead trying to explain as much as possible about the problem as it exists, how widespread it is, the kinds of people who are affected by it, and its apparent causes and consequences.

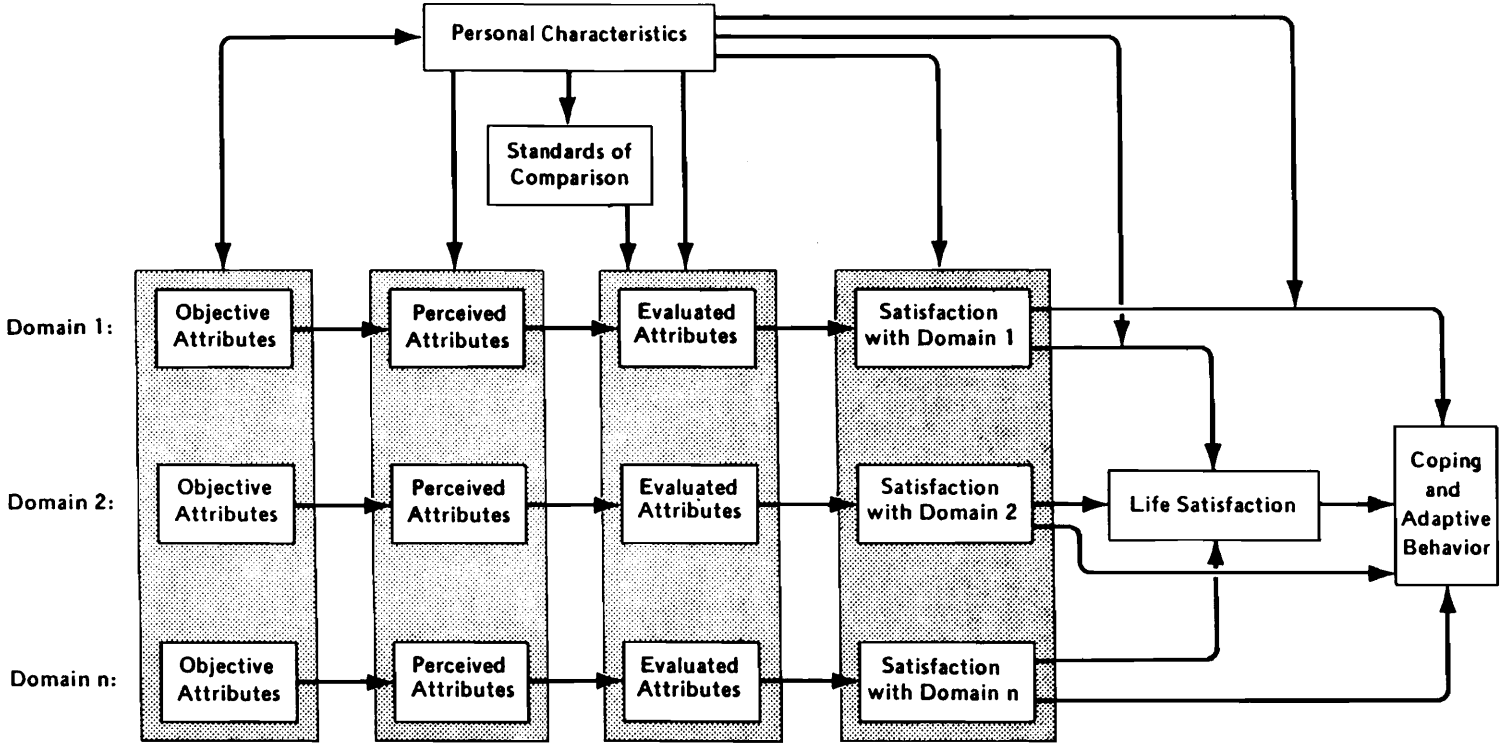

Figure 1. The Campbell, Converse, and Rodgers (1976) "Model of Life Satisfaction"

Financial well-being is a real world problem. Research should therefore focus on the measurement of financial well-being, the extent of the problem, the kinds of people who are affected by it, and its apparent causes and consequences. A conceptual framework that adequately guides the research is necessary.

Research in the area of financial well-being has historically been conducted piecemeal. Chronologically, objective measures of financial well-being, such as demographic characteristics, socioeconomic status, and financial management behaviors, were investigated first. Second, subjective measures were utilized to evaluate the role of individual perceptions of the financial situation on well-being. More recently, reference-point variables have been considered in research to determine additional variance in levels of financial well-being.

The literature suggests that relationships exist among these various components of financial well-being. However, testing a measurement of financial well-being as a function of these variables necessitates a conceptual model that incorporates all of the components into a single measure of financial well-being.

Campbell et al. (1976) created and tested a model which explained relationships among the various domains of life to provide a global measure of life satisfaction. Domains or "concern levels" were defined as the areas of experience which have significance for most people and which may be assumed to contribute in some degree to the general quality of life experience.

This model was originally based on the 1974 work of French,

Rodgers, and Cobb who asserted that people live in an objectively defined environment, but perceive a subjectively defined environment. Utilizing 12 domains, the model depicts the relationships among personal characteristics, objective attributes, perceived attributes, evaluated attributes, and standards of comparison in explaining variance in life satisfaction.

Even though little quantitative research was done specifically within the domain of personal finance in the Campbell et al. study, singling out the financial domain from the original model presents a useful conceptual framework for the measurement of financial well-being that includes the objective, subjective, and reference-point variables determined by researchers in the field to be components of financial well-being (see Figure 2).

Based on a review of the literature, it is logical to assert that a sense of financial well-being depends not only upon objective and subjective measures of the financial situation, but on how a person perceives objective attributes of the financial situation after comparing those attributes against certain standards of comparison. Standards of comparison include individual time horizons which correspond to the reference-point variables that have been utilized in previous financial well-being research.

Objective attributes are defined as quantitative indicators of the financial situation such as income and family size. Perceived attributes, such as satisfaction with standard of living or satisfaction with savings and investments, are value-related indicators of the

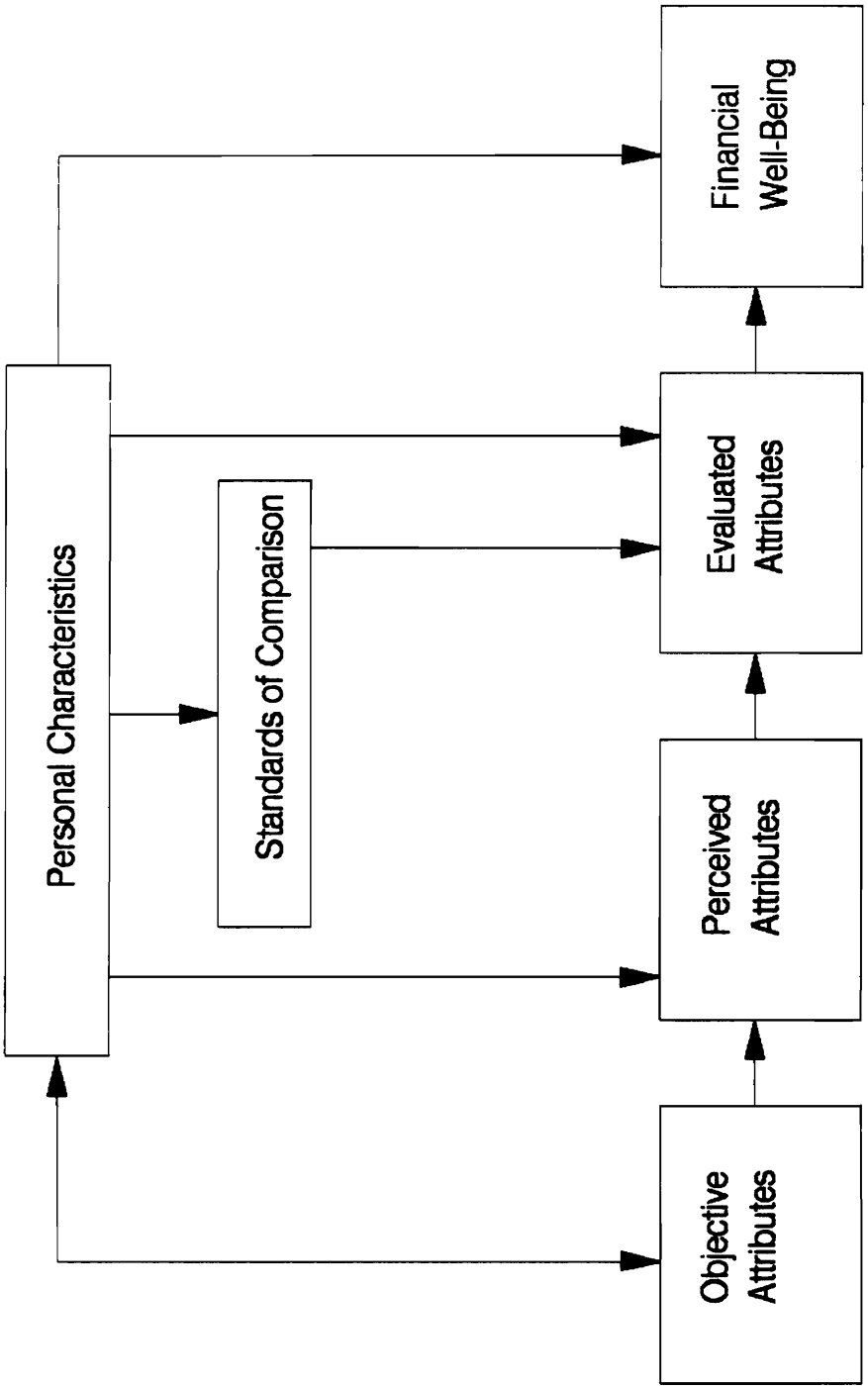

Figure 2. Porter's conceptual model of financial well-being.

objective attributes. Evaluated attributes are an individual's assessment of financial attributes when judged against standards of comparison such as aspirations, expectations, reference group levels, and past financial experiences. For example, an individual's assessment of the amount of money currently being saved and invested as compared to the amount saved and invested two years ago is an evaluated attribute. Utilizing this model, a sense of financial well-being is measured not only by the objective attribute, income, but by the perception of the adequacy of that income for achieving financial goals, such as saving for retirement. An individual's perception of income adequacy is based in part on the income and savings level experienced in the past and expected in the future.

Personal characteristics, the sum total of an individual's values, goals, and personal disposition, reflect a global sense of well-being. It is logical that this influences an individual's perception of well-being in any of the domains of life at any given point in time. Measuring this psychological outlook on life at the same time that a measurement of financial well-being is taken provides yet another possible factor for explaining a proportion of the variance in financial well-being.

Statement of the Problem

The problem of this study is to conceptualize and test a measurement of financial well-being as a function of personal characteristics, objective attributes, perceived attributes, and evaluated attributes of the financial domain.

Research Questions

There are two sub-problems of this study:

1) Which of the following groups of attributes significantly explain variance in perceived financial well-being: personal characteristics, objective attributes, perceived attributes, or evaluated attributes?

2) Which individual attributes significantly explain variance in perceived financial well-being?

Uses of the Study

A tested model of financial well-being for individuals and families will provide a base for future research and theory development. Measuring characteristics of financial well-being and determining systematic patterns will then allow these patterns to be formalized into theoretical statements (Reynolds, 1971). Since much research in family financial management has been atheoretical to date, this study will provide both a conceptual framework and model to guide future research, education, and counseling.

Campbell et al. (1976) created an "Index of Well-Being" in efforts to measure their dependent variable, overall sense of well-being with life. The index combined eight life descriptors on a seven-point semantic-differential scale along with a single item asking, "How satisfied are you with your life as a whole these days?" (p. 33) measured on a seven-point scale from completely satisfied to completely dissatisfied. Campbell et al. estimated that the reliability of this measure was .89 using Crombach's alpha and Heise and Bohrnstedt's omega

(p. 50). Indexing the individual items was determined to result in greater reliability than using the items individually. Including the use of the Campbell et al. "Index of Well-Being" as a measure of the independent variable "personal characteristics" will help to explain how satisfaction with life and general outlook on life influences reported financial well-being. This new approach will lend insight into the relationship between satisfaction with life in general and satisfaction in the financial domain.

Characterizing the sample according to financial life cycle stages will provide additional insight into the financial well-being of individuals as they progress along the continuous sequence of family-status stages with the financial tasks, problems, and challenges inherent in each. Three financial life cycle stages, formation, accumulation, and preservation/distribution, will be utilized in this study.

A sufficiently robust data base will provide valuable information about perceived financial well-being. Professionals who strive to help people improve their financial situation need to be cognizant of the pattern of relationships that exist among personal characteristics, objective, perceived, and evaluated attributes of financial well-being. Educational information that includes all the significant attributes should be provided by the Virginia Cooperative Extension Service, educators, financial service companies, and financial planners and counselors.

Also, research in the area of financial well-being can help

identify the most critical areas of financial management that concern individuals and families. Through research, better educational opportunities can be made available at the most appropriate periods of the family life cycle to minimize concerns and maximize well-being for individuals and families.

Delimitations of the Study

This study was delimited to the conceptualization of financial well-being as a function of personal characteristics, objective attributes, perceived attributes, and evaluated attributes of the financial domain. The study was based on an adaptation of the Campbell, Converse, and Rodgers' (1976) "Model of Life Satisfaction" which utilized only these attributes.

Concern levels in the financial domain were delimited to include five areas of personal finance which have significance for most people: cash management, credit management, risk management, capital accumulation, and retirement/estate planning, as well as a general financial management category. Tax management is also cited by experts as a level of concern in personal finance, but due to perceived and often expressed dissatisfactions with tax laws by the general public, it was thought that including perceived and evaluated attributes of tax management could bias the overall measure of financial well-being.

This study was delimited to a random sample (N = 1,500) of residents with income in the state of Virginia during the tax year 1988. Participants were age 17 or older and had an income of at least $5,000 if single or at least $8,000 if married. These delimitations were

specified by the nature of the population list used.

This study was delimited to the following personal characteristics: ethnicity, gender, educational attainment, and employment status. These characteristics were considered in addition to the Campbell et al. (1976) "Index of Well-Being." The inclusion of these variables provided an indication of the amount of variance in financial well-being explained by personal characteristics without complicating the analysis unnecessarily.

This study was delimited to the following objective attributes: income, stage of the financial life cycle, marital status, number of children, and certain financial management behaviors. An attempt to collect quantifiable objective attributes such as liquidity ratio, housing expenditure ratio, debt safety ratio, non-mortgage debt to income ratio, and savings ratio was made during the pilot test. However, it was determined that asking for this personal financial information substantially reduced the useable return rate.

The perceived and evaluated attributes were delimited to income adequacy, level of living, net worth, general financial management, cash management, credit management, risk management, capital accumulation, and retirement/estate planning. The perceived and evaluated attributes were developed to correspond to the objective attributes utilized in the study in order to consistently measure the effect of the matched sets of attributes on the dependent variable, financial well-being.

Campbell et al. (1976) suggest that the standard of comparison or frame of reference used to make judgements for evaluated attributes is

difficult to define and probably depends on multiple criteria considered simultaneously. For purposes of simplification, the evaluated attributes for this study were delimited to the respondent's perception of the current financial situation judged against the following standards of comparison: past financial experiences, peer financial reference groups, and future expectations of the financial situation.

Utilizing the financial life cycle with formation, accumulation, and preservation/distribution stages provides insight into the financial well-being of individuals as they progress along a continuous sequence of family-status stages with the financial tasks, problems, and challenges inherent in each. Delimiting the study to just these three stages (see the review of related literature for proposed stages) covers the range of possible stages without confusing the issue in the initial research attempt into the relationship between these stages and financial well-being.

This study was delimited to a mail study because the generation of a random sample from the population list of Virginia taxpayers by the Virginia Department of Taxation mandated certain research restrictions. The research team agreed (a) to only contact the taxpayers by mail and (b) to respect the confidentiality of the Department of Taxation and their mailing list. This prohibited the use of personal or telephone interviews for data collection.

Limitations of the Study

A weakness of this study was that it relied on a method of respondent self report for vital data. Since there was no check to

confirm the information, the possibility of error existed. However, the objective data necessary were not readily available for this population from any other source. The nature of the subjective data mandated its collection through self report.

A relatively low response rate was expected to be a limitation of this study. Survey instruments asking for similar types of sensitive data had produced response rates as low as 12%-22% (J. Marlowe, personal communication, August, 1989; S. Greninger, personal communication, August, 1989; Virginia Polytechnic Institute and State University Graduate School, personal communication, August, 1989). This limitation reduces the generalizability of the research results due to the fact that little is known about non-respondents who may differ significantly from the respondents.

The study was further limited because a follow-up with non-respondents was impractical. Budgetary constraints prohibited further attempts at contacting respondents. In addition, the only method of contacting respondents at the researchers disposal was through the mail. It was believed that those who had not complied with three separate mailed pleas for response would not respond to a fourth, no matter how short or different from the initial mailings. Moreover, because of the strong similarities between the sample and the population, a non-respondent follow-up study was not considered necessary.

In order to increase return rate, a modified Total Design Method (Dillman, 1978) was used to generate data via a mail survey. The procedure was closely followed to enhance the visual and emotional

appeal of the instrument and the organization of mailings. This study was limited by four digressions from Dillman's recommended procedure. First, the correspondence was addressed to "Virginia citizen" rather than to individually named respondents. Second, the length of the questionnaire exceeded the optimum length recommended by Dillman by 19 items in order to adequately measure the independent variables. Third, the full sized pages of the instrument were reduced so that two pages of questions fit side by side on 8 1/2 inch by 14 inch paper. The questionnaire was stapled twice in the center and folded in half to create a booklet which measured 7 inches by 8 1/2 inches to enhance readability. Last, budget constraints prohibited the use of a fourth mailing by certified mail.

Another limitation of the study was that the data were collected from residents with income in one state, Virginia. This restricts the generalizability of the findings to other populations. However, based on certain essential criteria validated by the 1980 Census, Virginia may be classified as a typical state. The urban population as a percent of total population (66%) ranked 29th of the 50 states plus the District of Columbia. The rural population as a percent of total population (34%) ranked 23rd. Virginia's population change between 1970 and 1980 (+14.9%) placed Virginia 24th. Virginia ranked 26th of the 50 states plus the District of Columbia with 11.8% of the population below the poverty level (Hornor, 1988). Average household size in Virginia, 2.77 persons (Hornor, 1988), is close to the national average of 2.66 persons (United States Bureau of the Census, 1987). Virginia's 1985 per capita

personal income was $14,542, only five percent above the national average of $13,867 for the same year (Center for Public Service, 1987). In demographic terms of urban-rural distribution, growth, poverty level, household size, and per capita income, Virginia ranks in the middle of the United States as a whole. Thus, the generalizability of the research results should hold for other state populations in this country.

The study is further limited because pairwise missing-value treatment, a common multiple regression statistical technique, was utilized in analyzing the data. A correlation coefficient between a pair of variables based on all cases with complete information for the two variables was calculated, regardless of whether the cases had missing data on any other variable. Thus, cases were only used in computations that involved variable pairs available in that case. A disadvantage with the pairwise treatment is that it may produce an inconsistent sample size. In addition inconsistent relationships between coefficients may exist because different cases are used to estimate different coefficients. However, this method maximizes the useable sample size and was determined to be the best solution to missing values based on a careful examination of the data (Norusis, 1988).

In addition to the limitations above, the possibility existed that the subjective data in this study was misrepresented by respondents. It is known that respondents, on the whole, generally report high levels of satisfaction in the financial domain (Hafstrom & Dunsing, 1973; Hira,

1986; Lawrence, Carter, & Verma, 1987; Winter & Morris, 1983). Therefore with this a priori knowledge, the researcher expected satisfaction levels to be inflated knowing that people do not like to appear dissatisfied and do not like to report dissatisfaction.

Definitions

The following operational definitions were used for the purposes of this study:

Accumulation Stage of the Financial Life Cycle- the financial status period that occurs after the major expenses of the household or family formation stage have been met and before the preservation/ distribution stage is entered upon retirement. In the accumulation stage, financial assets and net worth increase at a faster rate than inflation and are far greater in value than liabilities. Consumption expenditures typically decrease and a large proportion of income may be allocated to capital accumulation. A variety of financial assets are accumulated without incurring additional debt.

Attributes- distinctive features associated with one's financial situation.

Capital Accumulation- identifying, analyzing, and implementing practices which increase ownership of property and/or financial assets. Capital accumulation results in increased net worth.

Cash Management- identifying, analyzing, and implementing practices to allocate and distribute income to meet expenses and achieve financial goals. Optimum cash management maximizes the interest earned on the money left after meeting living and emergency expenses.

Credit Management- identifying, analyzing, and implementing credit use based on needs and wants so that a safe debt load is maintained.

Evaluated Attributes- an individual's assessment of financial attributes when judged against standards of comparison that are based on the following multiple criteria: past financial experiences, peer financial reference groups, and future expectations of the financial situation.

Expectations- a frame of reference based on a financial situation a person feels is likely to be attainable in the next five years.

General Financial Management- the financial decision making, goal setting, and task implementing completed to allocate and distribute income to meet living expenses as well as achieve financial goals.

Financial Life Cycle- a description of an individual's or family's progress along a continuum of financial status periods from the formation to preservation/distribution stage.

Financial Well-Being- a sense of one's financial situation that is based on objective attributes and perceived attributes that are judged against standards of comparison to form evaluated attributes of that financial situation. Originally, financial well-being was understated as simply happiness or general satisfaction with the financial situation. However, Strumpel (1976) asserted that financial well-being goes beyond transitory satisfactions to encompass individuals' satisfaction with income and savings, as well as perceptions of opportunities, ability to "make ends meet," sense of material security, and sense of fairness of the reward distribution system.

Formation Stage of Financial Life Cycle- the financial status period that occurs after a household is formed during which time few assets are built up. The major expenses of setting up the household, family growth, and educating children may result in a low or negative net worth because debt is often used for these costs. In addition, people typically use credit in this stage to acquire assets since the majority of income goes for living expenses and consumption. Assets that do accumulate are primarily held in personal property and the home.

Gross Income- the total income received by a household from all sources including wages, Social Security, pensions, interest, rent, support payments, trusts, etc.

Level of Living - the goods and services that can be purchased, such as housing, food, transportation, and recreation, that determine the reality experienced by an individual. Davis (1945) asserts that level of living is a complex balance of consumption, working conditions, possessions, freedoms, and atmosphere in light of needs and wants. Note that the term "standard of living," a more accepted term by the general population, was used on the survey instrument to facilitate understanding of this concept by respondents.

Net Worth- the total market value of goods and services owned (assets) minus the amount owed (liabilities).

Objective Attributes- the quantitative, observable indicators of the financial situation such as income, marital status, number of children, stage of the financial life cycle, home ownership, and the practice of certain financial management behaviors.

Past Financial Experiences- a frame of reference based on the financial situation a person has experienced in the past. This research limited past financial experiences to those that occurred during the past five years.

Peer Reference Group- a frame of reference based on what a person believes to be true of his/her financial peer group, i.e. the financial situation of others of his income, race, or similar occupation.

Perceived Attributes- the value-related qualitative indicators of income, level of living, net worth, general financial management, cash management, credit management, risk management, capital accumulation, and retirement/estate management. Perceived attributes are an individual's subjective evaluation of his/her own financial situation.

Personal Characteristics- the sum total of an individual's values, goals, and global sense of well-being. Proxy variables used to represent personal characteristics were the demographic attributes of sex, race, education, and employment status as well as personal disposition as measured by the Campbell et al. (1976) "Index of Well-Being."

Preservation/Distribution Stage of the Financial Life Cycle- the financial status period that occurs after retirement until death. Net worth peaks as liabilities approach zero. Accumulation of additional financial assets typically stops; assets generate income that is utilized for living expenses. Concern with estate planning and distributing assets to heirs increases in importance.

Retirement/Estate Planning- identifying, analyzing, and implementing capital accumulation and investment practices in order to meet the goal of financial freedom and security during the preservation/distribution stage of the financial life cycle.

Risk Management- identifying, analyzing, and implementing practices which minimize potential financial losses from death, illness, injury, loss of income, or loss of possessions from fire, theft, or other perils.

Standard of Living- the goods and services that can be purchased, such as housing, food, transportation, and recreation, that determine the reality experienced by an individual. This term, a more accepted term by the general population, was used on the survey instrument to facilitate understanding rather than using "level of living."

Organization of Remainder of Dissertation

This chapter provides an overview of the extent of the financial well-being problem. A conceptual framework for the measurement of financial well-being was presented. The justification and purposes for this research study, as well as the research questions to be answered, were outlined. The chapter concluded with the research study's delimitations, limitations, and operational definitions.

The remainder of the report is to be organized in the following manner: Chapter II, entitled "Review of Related Literature"; Chapter III, entitled "Methodology"; Chapter IV, entitled "Presentation of the Data"; Chapter V, entitled "Discussion of Results"; and Chapter VI, entitled "Summary, Conclusions, Recommendations, and Implications".

Chapter II

Review of Related Literature

A literature review of family financial management reveals varied attempts to measure financial well-being and provides guidelines for the proposed research. Variables that have been utilized in past research include the following: objective measures, subjective measures, and reference points. The discussion below examines each of these variables, the various combinations of the variables utilized in past research, and the relationships among them. A summary of the financial life cycles literature is presented, as well as a discussion of personal characteristics as specified for this study. Further, the general measurement of satisfaction will be addressed, with recommendations for interpreting results and reducing measurement error.

Objective Measures

Several objective measures have been used in efforts to empirically measure financial well-being. One approach has been to measure levels of well-being objectively utilizing quantifiable variables such as demographic characteristics, socioeconomic status, and consumption of durable goods (Beutler & Mason, 1987; Foster & Metzen, 1981; Godwin, 1989; Hafstrom, 1986; Hefferan, 1982; Hira, 1987; Williams, 1985). A second approach has investigated the relationships between financial well-being and other quantifiable variables such as financial management behaviors, level of savings, level of debt, and net worth (Godwin & Carroll, 1985; Hefferan, 1982; Hira, 1986; Lawrence, Carter, & Verma, 1987). Most recently, financial ratio analysis has

been cited in the literature as a possible objective determinant of financial well-being (Griffith, 1985; Mason & Griffith, 1988; Prather & Hanna, 1987).

However, using objective measures as the sole determinant of financial well-being is rare during the last twenty years. One example is Williams' (1985) research with the "Quality of Life as Affected by Area of Residence" (NC-128) data from three states. Williams examined the relationships among personal management procedures, resource satisfaction, sense of control over one's life, and quality of life. The unit of analysis was husband/wife households who had at least one child under age 19. Her objective measurement of resource satisfaction yielded a composite score of satisfaction based on income, education, occupation, community, number of children, housing, health, use of money, amount and quality of non-market work, and time available for desired activities. A seven-point response scale yielded a total score on a satisfaction index with a range of 1 to 70 points; it had a Crombach's alpha coefficient of reliability of .81. The results of the path analysis suggest that resource satisfaction had the strongest direct influence on satisfaction with quality of life; sense of control had the second most direct influence. As satisfaction with resources increased, individuals felt more in control over their life, and more satisfied with the quality of their life.

The lack of research which uses objective measures as the sole determinant of financial well-being clearly suggests that the measurement of financial well-being should include a combination of

objective and subjective variables. Utilizing both objective and subjective measures increases the amount of variance that can be explained in reported levels of financial well-being.

Objective-Subjective Measures

A second approach in the measurement of financial well-being has investigated the role of an individual's subjective evaluation of his/her financial situation. These value-related indicators of objective variables have provided useful insights into well-being (Campbell, Converse, & Rodgers, 1976). Perceived levels of selected variables, such as satisfaction with consumption, family financial management, and household situations, were investigated by Godwin and Carroll (1985), Hafstrom and Dunsing (1973), Hira (1986), Jeries and Allen (1986), and Wilhelm, Iams, and Ridley (1987).

In an early attempt to determine a subjective measure of a homemaker's satisfaction with her family's level of living, Hafstrom and Dunsing (1973) asked one question, "How satisfied are you with your present standard of living; that is, with the things you have and the way you are living now?" The response choices were very satisfied, somewhat satisfied, somewhat dissatisfied, and very dissatisfied. The researchers used the more commonly understood term "standard of living" instead of the term "level of living." The respondents, limited to households in Champaign-Urbana, Illinois which included a mother, or mother substitute under 65 years of age, and at least one child under 18 years of age, were contacted by personal interview during the 1970-71 "Survey of Life Styles of Families." The respondents were selected to

create two samples, "typical" and "disadvantaged" families. The "typical" families (N = 488) were stratified according to occupation of the household head and randomly selected from Polk's Champaign and Urbana City Directory. The "disadvantaged" families (N = 192) were randomly selected from areas in Champaign-Urbana designated as low-income housing. Only three respondents in the "typical" group indicated that they were very dissatisfied with their level of living; for purposes of analysis that response category was combined with the somewhat dissatisfied response group and simply called "dissatisfied." The resulting distribution for the "typical" group was 9% dissatisfied, 43% somewhat satisfied, and 48% very satisfied with their levels of living. A different distribution emerged for the "disadvantaged" group; 17% were dissatisfied, 49% were somewhat satisfied, and 34% were very satisfied with their levels of living.

In the Hafstrom and Dunsing study, multiple regression analysis was utilized with 129 independent variables. The independent variables were grouped into the following 10 categories: socioeconomic, near-environment related, wife's employment status, husband's job related, attitude scales concerning employment and education, marital satisfaction and child related attitudes, family-relative/community interaction, aspiration-communication and decisions, life cycle stage comparisons, and desire for children. When regressed on the dependent variable, homemaker's satisfaction with level of living, the independent variables explained 40% of the variance in satisfaction for the

"typical" families and 39% of the variance for the "disadvantaged" families. The homemaker's perception of the adequacy of family income was the most important variable in explaining the "typical" homemaker's satisfaction with level of living. The homemaker's satisfaction with housing was the most important variable for the "disadvantaged" sample in determining satisfaction with level of living. The results support the hypothesis that the homemaker's satisfaction with her level of living would be influenced by similar factors for both "typical" and "disadvantaged" families. It was recommended that further research was needed on the concept of satisfaction and its measurement.

Godwin and Carroll (1985) found that different levels of satisfaction with family financial management existed for husbands (N = 73) and wives (N = 73). A random selection of customers of a utility company in a southern state were invited to participate in a financial management workshop in April, 1982. Questionnaires completed by both the husband and wife of these self-selected volunteers provided the data for the study. Three scales were utilized: a family financial management attitude scale, a family financial management behavior scale, and a family financial management satisfaction scale for measuring spousal attitudes and behavior. A 10-item satisfaction scale having an alpha coefficient of .71 for reliability was used to measure subjective judgements regarding consumption of durable goods, non-durable goods and services, savings, and the process of management. Response choices ranged from very satisfied (coded five) to very dissatisfied (coded one). Path analysis revealed that wives' subjective "income adequacy

perception" was the only variable which influenced their satisfaction. The effect of attitudes on behavior and of behavior on satisfaction were both positive and significant for the husbands.

In a study of money management practices of two-earner households, Hira (1986) examined the relationship between those practices and the family's financial management satisfaction level. Personal interviews were conducted with the money manager (N = 201) of randomly selected households in Marshalltown, Iowa. Pearson correlation coefficients were computed to determine the relationships between financial management satisfaction and four independent variables: (a) demographic variables (occupation, education, age, years married, and family size); (b) economic variables (net income, total savings, percentage of income saved that year, total assets, and total monthly debt payments); (c) credit management practices (did the respondent owe money on credit cards, auto, home improvement, personal loans, and hospital bills; reasons for using credit cards; various purposes for which credit cards were used; whether finance charges were paid or not; amount that respondents felt comfortable owing on all credit cards at one time; and number of credit cards used); and (d) risk management practices (home owners insurance, auto insurance, basic and major medical insurance, disability income insurance, and life insurance for respondent, spouse, and children).

In the study, the respondent's satisfaction with money management practices, level of living, level of savings, ability to stay out of debt, ability to pay back money owed, level of assets, willingness to

discuss money matters, and ability to meet large emergency expenses were measured on a five-point Likert scale which ranged from extremely dissatisfied to extremely satisfied. A satisfaction index, the dependent variable, was developed as from these eight items which had a gamma reliability coefficient of 0.74. Household size was the only demographic variable significantly correlated to the dependent variable, satisfaction with financial management. As the size of the household increased, the satisfaction with financial practices decreased, a negative correlation.

Three economic variables were significantly correlated to level of satisfaction. As both the total amount of savings and the percentage of income saved increased, satisfaction increased. As total monthly debt payments increased, satisfaction decreased. Credit card and auto loan debt were the two credit management practice variables which were significant, but negatively related to satisfaction level. None of the five risk management variables were significantly related to respondent's level of satisfaction with financial management. Hira's results suggest that even though a majority of respondents report satisfaction with money management practices and level of living, they were not generally satisfied with specific aspects of their household's financial situation. Further research was recommended with a larger sample size in order to increase generalizability of research results.

In 1986, Jeries and Allen examined the relationships between satisfaction/dissatisfaction with financial management practices and the following money management practices: usefulness of budgeting,

financial preparedness for emergencies, record keeping, budgeting, debt-to-income ratio, and anticipated changes in future income. A random sample of 258 households was drawn from the 1,285 student families in the Iowa State University Married Students Housing Community. An interviewer delivered a questionnaire to the wife of each selected household (N = 184), explained the procedure, and picked up the questionnaire after three days. A follow-up telephone call was made to obtain missing information.

In this study, the dependent variable, satisfaction with financial management, was measured by the wives' response to a single question, "What is your overall satisfaction with your financial management techniques?" Response choices ranged from very dissatisfied (coded 1) to very satisfied (coded 7). Multiple regression analysis determined that perceived usefulness of budgeting, keeping track of cancelled checks, and financial preparedness for small emergencies were strongly related to satisfaction/dissatisfaction with financial management practices among married students.

In an effort to evaluate the adoption and use of selected financial management practices by Cooperative Extension program participants, Lawrence, Carter, and Verma (1987) randomly selected 400 participants from throughout Louisiana. In order to determine the relationships between the adoption of selected financial management practices and the level of satisfaction with financial management, the respondents (N = 203) were asked to express satisfaction with the practices that were adopted after participating in various extension programs. Measured on

a three-point Likert scale, a majority (50%) of the respondents were very satisfied, while only 8% were not satisfied with their financial management. This measure of satisfaction was not affected by wage earner status, area of residence, or membership in an Extension Homemaker Club when the data were analyzed with frequency distributions, chi square, and analysis of variance. The "age of respondent" variable was found to significantly affect financial satisfaction; financial satisfaction increased as "age of respondent" increased. It was also determined that as the number of people living in the household increased, the satisfaction with financial management decreased.

Wilhelm, Iams, and Ridley (1987) considered the impact of unemployment of the primary breadwinner on family economic well-being. Thirty-four breadwinners laid off from a copper mine in a small Arizona town participated along with their spouses in the two-phase research study. Participants remaining in town after the layoff were randomly selected from the telephone directory. Personal interviews were conducted and questionnaires were left for both spouses to complete independently and mail to the researchers. A letter was sent to all names in the telephone directory asking for husband/wife volunteers who (a) had moved during the three months after the layoff and (b) would complete questionnaires. A follow-up questionnaire was administered to both groups one year following the initial data collection.

An economic satisfaction measure, the dependent variable, consisted of a summed score of the participant's six responses concerning satisfaction with level of income, money available for family

necessities, ability to handle financial emergencies, amount of their debt, level of savings, and money available for future needs of the family. The measure was coded using a six-point Likert scale which ranged from extremely dissatisfied to extremely satisfied.

The same economic satisfaction measure was used during both phases of the study. Multivariate regression analysis determined a nonsignificant relationship of economic satisfaction at the onset of unemployment to economic satisfaction one year later, suggesting that being unemployed may impact the perception that an individual has concerning his family's economic well-being. Increased use of credit and income raising strategies emerged as the strongest predictors of economic satisfaction at the one year follow up.

Summary

Andrews and Withey (1976) hypothesized that subjective well-being should be measured at two different levels, the "global" and the "concern" levels. Well-being measured at the global level is aimed toward general satisfaction with life overall. The concern level refers to the specific domains of life, such as satisfaction with financial, marriage, or health domains.

However, Horley (1984) suggests that some people are unable to think in terms of life as a whole, thus well-being measures at these broad levels may produce meaningless information. He believes there is a finer, more "elemental" level of subjective assessment that focuses on day-to-day concerns. He states that there currently are few subjective well-being indicators focused at the elemental level, and that future

research should be aimed at this level as well as the concern and global levels.

In the domain of personal finance, subjective assessments should not only focus on satisfaction or dissatisfaction at the domain or concern level, but should also be measured at the elemental level. For example, measures of satisfaction should focus on one's assessment of daily financial management practices as well as the perception of total personal financial situation. Focusing on the here and now with day-to-day concerns or actions in the financial domain could expand the measurement of subjective well-being. "Assessment strategies and devices that tap global, domain, and elemental levels [will] allow a respondent to indicate the most personally salient level. In other words, multi-level flexibility is desirable in well-being measures" (Horley, 1984, p. 126).

Reference-Point Measures

A third approach in measuring financial well-being has incorporated the use of reference-point variables. Davis and Helmick (1985) developed a composite measure which utilized the objective measures of family income, net worth, number of earners in the household, debt-to-income ratio, and child-rearing commitments. The subjective measures used were satisfaction with wealth, consumption level, proportion of income saved, emergency reserves, and future financial security. Two "reference-point" variables, perceived change in financial condition over time and desire for financial improvement, were included in the full regression model and emerged as strong predictors

of financial satisfaction.

In this study, Davis and Helmick (1985) used data from three states in the "Quality of Life as Affected by Area of Residence" (NC-128) in evaluating the direct effects of selected inputs on a composite measure of financial satisfaction. Their measure utilized the objective measures of family income, net worth, number of earners in the household, debt-to-income ratio, and child-rearing commitments. In addition, respondents' satisfaction with wealth, consumption level, proportion of income saved, emergency reserves, and future financial security were subjectively measured on a seven-point scale ranging from extremely dissatisfied to extremely satisfied. Two "reference-point" variables, perceived change in financial condition over time and desire for financial improvement, were included in the full regression model and emerged as strong predictors of financial satisfaction.

Further research which would include reference-point variables was recommended in order to explore both the direct and indirect influence of past financial experience and aspirations on financial satisfaction. Additional research which would include reference-point variables is needed in order to explore both the direct and indirect influence of past financial experience and aspirations on financial well-being. These reference-point variables are sufficiently different from other subjective measures to warrant their inclusion in further research as a separate measure.

Objective-Subjective/Actual-Relative Measures

In a fourth approach to the study of financial well-being, Wilhelm, Iams, and Rudd (1987) divided objective and subjective measures into four categories for analysis. The objective measure was separated into objective-actual (a current measure of income, assets, and liabilities) and objective-relative (a comparison of objective-actual measures over a period of time). The subjective measure was divided into subjective-actual (perceptions of satisfaction with objective dimensions of economic well-being) and subjective-relative (positive or negative expectations of the future relative to either a reference group or to an individual's past economic status).

This study expanded upon the Williams, Iams, and Ridley (1987) research study in order to explore the extent of agreement between husbands and wives on different measures of economic well-being. The sample population from the original study became a rural/economic recession sample (from a small Southwestern town suffering economically from major layoffs from a copper mine) that was contrasted to a urban/economic growth sample (from a large, expanding metropolitan area experiencing economic growth). The economic satisfaction measure for the urban/economic growth sample included questions concerned with perception of income adequacy, satisfaction with level of living, and perception of present economic status. Few significant differences were found between spouses' responses, indicating that future research may safely utilize single respondents when assessing family economic well-being. Objective-actual measures of income obtained from one

spouse appeared to be less reliable than previously determined. However, it was concluded that subjective measures of economic well-being were similar for each spouse.

The objective-relative and subjective-relative measures mandate a longitudinal study. In a cross-sectional look at a population, these two variables could be measured by the reference-point variables of "a respondent's perceived change in financial condition over time" and "desire for improvement."

Financial Life Cycles

The biological life cycle describes the progress of human life along a continuous sequence of family-status periods and stages. Regardless of the pathways that people follow through the life cycle, "changes in the life cycle bring about numerous financial tasks, problems, and challenges . . ." (Garman & Forgue, 1988, p. 55). Therefore, it is logical that there is a financial life cycle that can describe an individual's or family's progress along a continuum of financial status periods and stages.

Kanaly (1986) visualizes five basic financial stages in everyone's economic life: formation, orientation, survival, accumulation, and preservation. The pace at which individuals move through this cycle is dependent upon his/her education, inheritance, talents, energy, background, and experience. "These factors affect our ability to cope with our economic existence and to alter the ultimate outcome of our personal financial evolvement" (p. 15).

Dwyer (1989) believes that "financial planning . . . is a lifelong

process" (p. 6). He identifies the following seven stages that individuals and families pass through during their lifetime: building the nest, birth of the family, growth of the family, the college years, the accumulation stage, the conservation stage, and retirement.

When advocating the development of generally accepted financial ratios, Mason and Griffith (1988) suggest that there are three financial life cycle stages for which different ratios should be created. "Consideration of the client's stage in the life cycle is essential in interpreting financial ratios" (p. 74). The financial life cycle stages they list as useful in financial planning are accumulation, preservation, and distribution.

Certain objective attributes of an individual's or family's financial well-being should only be compared to those of people in the same stage of the financial life cycle, who have similar economic constraints and freedoms. For example, comparing the net worth of a family in the formation stage of the financial life cycle to that of a couple in the accumulation stage is unreasonable and will reflect poorly on the family who has been using credit to establish their household.

Personal Characteristics

Satisfaction in the financial domain has been found to contribute significantly to satisfaction with one's overall life (Andrews & Withey, 1976; Campbell, Converse, & Rogers, 1976). However, one's satisfaction with life overall has not been used as a factor to help explain one's perceived financial well-being.

Satisfaction with financial management and satisfaction with

different aspects of financial situations have been the focus of numerous research studies. However, the perceived level of satisfaction does not necessarily tell researchers a great deal about the actual financial well-being of individuals. It is quite conceivable that an individual would report a high level of satisfaction, but be on the verge of a financial disaster. It is also probable that an individual might report a low level of satisfaction, but be in a favorable economic position.

Demographic variables such as sex, race, educational attainment, and employment status have been generally used as objective measures in explaining variance in financial well-being. However, a distinction can be clearly made between these variables and objective measures of the financial situation such as income, marital status, number of children, stage of the financial life cycle, and home ownership. The personal characteristics of sex, race, educational attainment, and employment status influence personal disposition and global sense of well-being. Combining these personal characteristics with the "Index of Well-Being" (Campbell et al., 1976) provides a measure of an individual's values, goals, personal disposition, and global sense of well-being.

Reported Satisfaction Levels

Winter and Morris (1983) report that in general people report high levels of satisfaction with just about all aspects of their lives. They conclude that satisfaction is not normally distributed, but skewed to the right which indicates greater satisfaction. This suggests that either people are attempting to decrease the gap between the situation

as it exists and their view of the situation, supporting Festinger's (1957) cognitive dissonance theory, or there is error in researchers' attempts to measure satisfaction.

In order to reduce measurement error, Winter and Morris present the following research suggestions: samples should be carefully selected and large enough that sampling error is small relative to the variance in the measured variables; instrument design needs to be improved and should include the use of multiple indicators for each variable to reduce random measurement error; and statistical regression techniques should be used to reduce systematic error. Research needs to be designed to determine whether people are truly satisfied, if the results are skewed according to cognitive dissonance theory, or if previous measurements of satisfaction are systematically flawed.

Summary of Literature Review

A review of the financial well-being literature suggests that objective, subjective, and reference-point measures have not been researched simultaneously. A majority of the previous research studies have utilized pre-collected data that were originally collected for other research objectives. A review of the literature has produced only a few survey instruments designed specifically to study financial management satisfaction and well-being (Godwin & Carroll, 1985; Hira, 1986; Jeries & Allen, 1986; Strumpel, 1976; Williams, 1985).

In addition, the validity and reliability of the measures used to date have not been adequately assessed. An attempt has been made by some researchers (Godwin & Carroll, 1985; Hira, 1986; Williams, 1985) to

determine the reliability of their individual measures, but repeated trials of one specific measure of satisfaction are not cited in the literature.

Populations studied have been restricted to small samples of unique groups. Further research should utilize a larger sampling size with more diverse populations in order to increase generalizability (Hira, 1986; Wilhelm, Iams, & Ridley, 1987; Winter & Morris, 1983). In addition to reducing sampling error and random measurement error, the correction for systematic error through the use of more appropriate statistical analyses, such as multiple regression, is recommended (Winter & Morris, 1983).

Chapter III

Methodology

This section presents the methodology and procedures that were employed in the study to conceptualize and test a measurement of financial well-being as a function of personal characteristics, objective attributes, perceived attributes, and evaluated attributes. A discussion of the population and sample, the instrument development, the data collection, the research models tested, and the data analysis utilized in this research study is provided.

Population and Sample

To accomplish this research, it was necessary to test the measurement of financial well-being with a sufficiently robust data base. A heterogenous population was desirable in order to increase the generalizability of the results to other populations. However, the availability of population lists that met these criteria was limited. The Virginia Department of Taxation data base was selected because it was the population list that was available to the research team that best met the criteria established.

There were 2.5 million residents in Virginia earning enough income to necessitate the filing of a state income tax return in 1988 (A. Myers, personal communication, 1989). After the annual filing of tax returns, the mailing list is updated by the Virginia Department of Taxation. This population list included individuals or married couples who filed a state income tax return in 1988. For inclusion, an

individual must have been at least 17 years of age with a minimum personal income of $5,000 or an income of $8,000 for a couple. A random sample (N = 1500) was drawn by computer by the Virginia Department of Taxation Information Systems employees from this list in September, 1989.

Development of the Instrument

The generation of the random sample from the population list of Virginia taxpayers by the Virginia Department of Taxation mandated certain research restrictions. The research team agreed (a) to only contact the taxpayers by mail and (b) to respect the confidentiality of the Department of Taxation and their mailing list. This prohibited the use of personal or telephone interviews for data collection. Thus, an instrument that could collect the data via a mailed survey was designed.

Questions were developed to test the measurement of financial well-being as a function of personal characteristics, objective attributes, perceived attributes, and evaluated attributes based on the conceptual framework and a review of related literature. The following areas provided the basis for questionnaire items: respondents' personal characteristics; objective attributes, perceived attributes, and evaluated attributes of the financial situation; individual preferences for family financial management education programming; willingness to discuss financial concerns; perceived competence of financial management advisors; perceptions of gender equity; and selected demographic characteristics of the respondents. Not all of the questions on the instrument pertained to this research project. The question areas

relevant to this study are discussed individually in the description of the final form of the data collection instrument.

Questionnaire items designed to measure the objective attributes of the financial domain included income, stage of the financial life cycle, marital status, payment or receipt of alimony or child support, number of children in the household, and number of others for whom the household was substantially responsible for financial support. In addition, forty-one items asked for dollar amounts of savings, investments, retirement accounts, and debt levels so that total net worth could be accurately calculated. This information also allowed the computation of selected financial ratios, such as a liquidity ratio, housing expenditure ratio, debt safety ratio, non-mortgage debt to income ratio, and savings ratio. These figures were to be entered into the regression equation as objective attributes of the financial situation.

Once the preliminary draft of the instrument had been developed, numerous reviews and revisions of the instrument were made. These included consultations with the dissertation advisory committee, preliminary tests with respondents of varying ages, and a pilot test. At each stage, the instrument was revised and refined in accordance with the findings of the reviews and testing.

The instrument was first reviewed by members of the advisory committee and selected graduate faculty in May, 1989. Each person reviewed the instrument and suggested needed revisions. The questionnaire was extensively revised and given to ten individuals of

varying ages. Feedback from these individuals was analyzed in the following areas: clarity of items and directions, motivation for participation, insight into additional parameters of items and item choices, ability of respondents to adequately complete the form, and lack of researcher bias. This analysis lead to significant changes in the instrument. The revised instrument was again reviewed by the dissertation advisory committee and approved for the pilot test (Appendix A).

As an incentive for completing the questionnaire, a "Personal Financial Report" was offered to pilot test respondents. This customized statement of the financial situation was to be generated by computer and would include the above financial ratios for each respondent as well as recommendations for improving the financial situation.

A pilot test was conducted in August, 1989 with a randomly selected convenience sample (N = 200) of individuals employed at Virginia Polytechnic Institute and State University. In order to match the final data collection procedure as closely as possible, the instrument was mailed to respondents using the United States Postal Service. A postage-paid envelope was provided for respondents' convenience. No follow-up mailings were conducted during the pilot test due to time and budget constraints.

Of the original 200 instruments mailed, 2 (1%) were returned by postal authorities as undeliverable. Thus, the initial sample size was reduced to 198. A total of 36 questionnaires were returned, an 18%

(36/198) total return rate. Of the returned questionnaires, 2 were completely blank and 18 lacked complete information. Fourteen respondents requested the "Personal Financial Report," which were created and mailed to respondents. Two other respondents included all of the requested information. The useable response rate was reduced to 8% (16/198).

As a result of the low response rate to the pilot test, the dissertation advisory committee recommended that the items asking for actual dollar amounts of savings, investments, retirement accounts, and debt levels be omitted from the instrument. This eliminated the possibility of calculating financial ratios as measures of objective attributes of the financial situation. Instead, 20 financial management behaviors were substituted as measures of objective attributes.

The pilot test data were coded for computerized statistical analysis. The Statistical Analysis System (SAS) was used to generate correlations for individual item analysis. Thirty-nine items were eliminated; some were not sufficiently dividing responses among the choices. Others appeared to be causing confusion for respondents. Eleven items were added to the instrument that more adequately met the research purposes of the studies involved. Further revisions were made in the wording of individual items for clarity based on the results of the pilot test.

The final form of the data collection instrument was entitled Financial Practices and Attitudes of Virginia Citizens (Appendix B). Nine sections of questions were included in the instrument to determine

respondents' (a) personal characteristics, (b) objective attributes, perceived attributes, and evaluated attributes of their financial situation, and (c) selected demographic characteristics.

The first section collected information about personal characteristics of the respondents using the Campbell et al. (1976) "Index of Well-Being." The index included eight life descriptors measured on a seven-point semantic-differential scale along with a single item asking, "How satisfied are you with your life as a whole these days?" (p. 33) measured on a seven-point scale from completely satisfied to completely dissatisfied.

A second section of the instrument included a list of 23 statements about financial management behaviors as a partial measure of the independent variables identified as objective attributes. Financial management behaviors were assessed in the following five subconcept areas of personal finance: cash management, credit management, risk management, capital accumulation, and retirement/estate planning. A sixth category evaluated more general financial management behaviors such as financial decision making and goal setting (Appendix C).

Of the 23 financial management behaviors, 3 were related to the area of tax management. However, perceived and evaluated attributes of tax management were not included due to perceived and often expressed dissatisfactions with tax laws by the general public. Elimination of the tax management concern level of personal finance was an attempt to reduce response bias to the other concern levels being analyzed.

A third section identified value-related attributes of the

financial domain, representing the independent variables in the perceived attribute group. Individual items in the perceived attribute category were written to correspond with the objective attribute measures in all six subconcept areas (Appendix C).

Evaluated attributes of the financial situation compared to various reference points were explored in a fourth section, measuring the independent variables in the evaluated attribute group. The reference points targeted were: (a) financial situations experienced in the past, at points five years and two years ago; (b) financial situations compared to peer financial reference groups; and (c) financial situations expected to exist five years in the future. Individual items in the evaluated attribute category were written to correspond with both the objective and perceived attribute measures in all six subconcept areas of personal finance (Appendix C).

A fifth section of the instrument used an adaptation of Cantril's self-anchoring striving scale (1965) to establish the respondents' satisfaction with their financial situation to create a measure of the dependent variable. This variation of Cantril's scale used an 11-step ladder on which a respondent was asked to imagine the "best possible financial situation" as forming the upper end and "the worst possible financial situation" as forming the lower end. After the ladder becomes self-anchored in this manner, the respondent was asked to locate an estimate of his/her current financial situation along the ladder between these two extremes. This measurement of the dependent variable provides an evaluation of the respondent's financial situation which is both

personal and situational.

Campbell et al. (1976) state that the Cantril ladder consistently measured satisfaction with life over time in several national samples which took place in 1959, 1964, 1971, 1972, and 1974. In addition, variations of Cantril's scale have successfully been used to measure relative assessments of various topics, such as "national life" and "government," as well as life satisfaction.

The sixth section was composed of questions to elicit selected demographic information to describe the sample and to ascertain additional objective attributes of the household. At the very end of the questionnaire respondents were given an opportunity to write additional comments and were thanked for their participation in the study.

Additional sections and question items were included on the instrument for use by two other researchers. Two other graduate students at Virginia Polytechnic Institute and State University collected data using the instrument designed for this study. Therefore, the instrument included an additional forty items to measure individual preferences for learning styles, preferences for financial management educational programming, willingness to discuss financial concerns, and perceptions of gender equity. These data were not analyzed in the present research study.

Data Collection

A blind process was developed for data collection due to the necessity of maintaining confidentiality of income tax mailing records.

Survey instruments were coded with a four digit identification number. For each mailing, envelopes were stuffed and labeled on the front center with the identification code that was on the instrument contained inside. Mailing labels with the corresponding identification number were attached to the envelopes by seven research technicians.

In order to increase return rate, a modified Total Design Method (Dillman, 1978) was followed to enhance the visual and emotional appeal of the instrument and the organization of mailings. The format of the instrument was based on Dillman's recommendations regarding the layout, type style, and cover design. The instrument was printed as a 12-page booklet using black ink on white paper. Questions were typed in lower case letters and answers were typed in all capital letters. Bold face type was used to accent directions and response categories. An identification number was placed on the lower right corner of the back cover of each questionnaire to facilitate monitoring the returns.

Four deviations from Dillman's recommendations existed in the instrument and procedure followed. First, all correspondence was addressed to "Virginia citizen" rather than to individually named respondents. Second, the length of the questionnaire exceeded the optimum length recommended by Dillman by 19 items. Third, the full-sized pages of the instrument were reduced so that two pages of questions fit side by side on 8 1/2 inch by 14 inch paper increasing white space and readability. The questionnaire was stapled twice in the center and folded in half to create a booklet which measured 7 inches by 8 1/2 inches. Last, budget constraints prohibited the use of a fourth

mailing by certified mail.

The data were collected from October, 1989 through January, 1990 with a mailed survey instrument. Each individual cover letter, introducing the research study and stressing confidentiality and the need for participation, was signed in blue ink by the Acting Director of the Virginia Cooperative Extension Service, Jim Johnson (Appendix D). The cover letter and instrument were folded in thirds and placed in a business letter envelope with a postage-paid return envelope (Appendix E). The business envelope was labeled and metered by Distribution Center technicians. The first mailing occurred early in the business week, Tuesday, October 10, 1989.

One week after the initial instrument mailing, on Tuesday, October 17, a thank-you/reminder postcard was mailed. It served as both a thank you for those who had already responded and as a friendly and courteous reminder for those who had not (Appendix F).

A receipt control plan was designed and followed to monitor return rate and to log in returned questionnaires by identification number. Questionnaires were logged in on a master list containing all of the identification codes. The date of return was labeled on the upper left corner of questionnaires as they were received. Two daily return rate graphs were prepared; one graph represented daily return rates and the second established a cumulative return rate (Table 1). Monitoring returns in this manner allowed the researcher to calculate return rates both as a percentage received each day and for total return.

Three weeks after the initial mailing, on Tuesday, October 31, a

Table 1

Daily and Cumulative Response Rate

Date Received	Number Received	Number Returned Blank	Number Unuseable	Daily[a] %	Cumulative[a] %
10/17/89	24	0	0	1.7	1.7
10/18/89	89	0	1	6.1	7.8
10/19/89	23	0	0	1.6	9.3
10/20/89	19	0	0	1.3	10.7
10/23/89	21	1	1	1.5	12.1
10/25/89	46	0	2	3.2	15.3
10/26/89	19	0	1	1.3	16.6
10/30/89	25	0	0	1.7	18.3
10/31/89	9	0	1	0.6	19.0
11/01/89	2	0	0	0.1	19.1
11/06/89	46	6	1	3.2	22.3
11/08/89	52	2	1	3.6	25.9
11/09/89	21	2	0	1.5	27.3
11/10/89	21	1	0	1.5	28.8
11/13/89	49	3	0	3.6	32.3
11/15/89	13	0	0	0.9	33.2
11/16/89	10	0	0	0.7	33.9
11/21/89	10	0	0	0.7	34.6
11/22/89	8	0	0	0.6	35.1
11/29/89	2	0	0	0.1	35.3
11/30/89	3	0	0	0.2	35.5
12/04/89	4	0	0	0.3	35.8
12/06/89	1	0	0	0.1	35.9
12/08/89	5	0	0	0.3	36.2
12/11/89	1	0	0	0.1	36.3
12/29/89	2	0	0	0.1	36.4
01/03/90	1	0	0	0.1	36.5
Totals	529	15	8	36.7[b]	36.5

[a]Percentages determined by dividing the number returned by the number delivered to potential respondents (1450).

[b]Does not equal cumulative return due to rounding.

second cover letter and replacement questionnaire were sent to non-respondents based on the identification numbers that had been received as of October 30, 1989. This follow-up very nearly resembled the original mailout but had a shorter cover letter that informed non-respondents that their questionnaire had not been received, and appealed for its return. Each of these cover letters were also signed in blue ink by Jim Johnson (Appendix G).

Of the original 1,500 names and addresses used for mailing, 50 (3%) questionnaires were returned by postal authorities as undeliverable. According to Babbie (1973) the accepted practice is to omit all those questionnaires that could not be delivered. Thus, the initial sample size was reduced to 1,450 (1,500-50) due to incorrect addresses, relocation, or death. A total of 529 questionnaires were returned, a 36.5% total return rate. This rate was calculated as the total number of questionnaires returned, 529, divided by 1,450. Babbie (1973) asserts that nondeliverable questionnaires represent a random sample of the initial sample and that calculating the return rate in this manner results in "a measure of the researcher's success in persuading sample members to participate, and he does not count against himself those whom he could not even contact" (Babbie, 1973, p. 165).

Of the returned instruments, 15 were returned blank by respondents unwilling or unable to complete the questionnaire. An instrument was determined unusable and omitted from the analysis if more than 75 percent of the data were missing. Eight instruments fell into this category and were labeled unusable, resulting in a useable return rate

of 34.9% (506/1,450). Twenty-one questionnaires were returned with the identification number removed. A new identification number, above the range of original numbers, was assigned to each of these cases.

Data Coding

A data coding and editing plan was developed and followed to insure correct coding and transferral of data into an electronic format for analysis. Variables were coded and the data were entered into a fixed column format in a WordPerfect 5.0 file on a personal computer. Three lines of 73 columns were used for each case. The first four columns of each line contained the identification number from the questionnaire. The seventy-third column was used for the line number, one, two, or three. Intermittent blank columns were designated to increase the accuracy of data entry. Because the eight semantic-differential items were represented by blank boxes on the instrument, the responses were coded so that the first box on the left was one and the last on the right was seven.

The WordPerfect file was converted to a DOS text file and uploaded to the University mainframe computer and analyzed using SPSS-X, an updated version of the Statistical Package for the Social Sciences (Norusis, 1988). The data were checked for out-of-range responses using both a hard copy of the data file and the descriptive statistics, which included frequency distributions, means, standard deviations, and ranges. Questionable data were compared to the original instruments and errors were corrected.

Dummy Variables

Categorical and nominally-scaled variables have to be recoded before they can be entered into a regression analysis. The simplest method is to generate a number of vectors such that, in any given vector, membership in a given group or category is assigned 1, while nonmenbership in the category is assigned 0 (Pedhazur,1982). Eleven variables in the data set had to be recoded into dummy variables by this method. Sex (S1) was coded "1" if the respondent was identified as male, and was coded "0" if the respondent was female. Race (R1) was coded "1" if the respondent was identified as white, and was coded "0" if the respondent was nonwhite.

Marital status was recoded to permit analysis of multiple statuses. Respondents were coded "1" if they reported themselves as having never been married (DUM1), "0" if otherwise. If they reported themselves as divorced and remarried (DUM2), they were coded "1" and "0" if otherwise. If they reported themselves as married (DUM3), they were coded "1" and "0" if otherwise. If they reported that they were separated (DUM4), they were coded "1" and "0" if otherwise. If the respondents reported that they were divorced and presently unmarried (DUM5), they were coded "1" and "0" if otherwise. The reference group was respondents who were currently widowed.

Similarly, the variable MB1 was created and coded "1" if the respondent indicated that his/her spouse had not been married before, "0" if he/she had. The variable PA1 was created and coded "1" if the respondent was not paying alimony or child support, "0" if they were

paying. The variable RA1 was created and coded "1" if the respondent was receiving alimony or child support, "0" if otherwise.

The respondent's employment status was also entered as a vector of dummy variables. Respondents who reported that they are employed full-time (EMP1) were coded "1" and "0" if otherwise. Respondents identified as employed part-time (EMP2), were assigned a "1" and "0" if otherwise. Respondents who reported that they were retired were coded "1" and "0" if otherwise. The reference group was respondents who identified themselves as either full-time homemakers, students, or currently unemployed.

Home ownership was a nominally scaled variable that was also coded as a dummy variable (H1). A "1" was entered if the respondent indicated that his/her home was owned, and "0" if otherwise.

Similarly, the variable FC1 was created as a dummy variable to allow analysis of the three life cycle stages. If a respondent classified himself/herself as being in the formation stage of the financial life cycle a "1" was entered, and "0" if otherwise. If a respondent selected the accumulation stage, a "1" was entered, and "0" if otherwise. Respondents who selected the preservation/distribution stage of the financial life cycle served as the reference group.

Responsibility for managing and handling financial management tasks was a categorical variable that was entered as a vector of dummy variables. Respondents who reported that they were responsible for these tasks (MH1) were coded "1" and "0" if otherwise. Respondents who reported that these tasks were done by their spouse or another (MH2)

were coded "1" and "0" if otherwise. Respondents who reported that these tasks were divided with their spouse or another (MH3) were coded "1" and "0" if otherwise. The reference group was respondents who reported that these tasks were shared with their spouse or another.

Responsibility for making major financial decisions was a categorical variable that was entered as a vector of dummy variables. Respondents who reported that they were responsible for these decisions (DEC1) were coded "1" and "0" if otherwise. Respondents who reported that these decisions were made by their spouse or another (DEC2) were coded "1" and "0" if otherwise. Respondents who reported that these decisions were divided with their spouse or another (DEC3) were coded "1" and "0" if otherwise. The reference group was respondents who reported that these decisions were shared with their spouse or another.

Reversal of Codes

In order to vary the responses and prevent a positive mind set by respondents, twenty items on the instrument were stated so that typical responses would fall at a different end of the scale than for the majority of items. The codes for these variables (numbers 2, 4, 5, 8, 21, 23, 25, 27, 30, 31, 32, 35, 40, 79, 86, 87, 89, 103, 105, and 109) were therefore reversed to represent continuous, positive responses.

Research Model

A review of the related research and the conceptual framework identified four groups of attributes, personal characteristics, objective, perceived, and evaluated, which may contribute to the explanation of the variance in perceived financial well-being. Methods

of analysis used to test this measurement of financial well-being included frequency analysis and multiple regression.

Missing Data

Cases with at least 75% of the data were determined to be useable. Even though many of the useable cases contained incomplete observations, there was no evidence that the missing-value pattern was not random. Pairwise missing-value treatment, a common statistical technique, was utilized in analyzing these data with SPSS-X. A correlation coefficient between a pair of variables based on all cases with complete information for the two variables was calculated, regardless of whether the cases had missing data on any other variable. Thus, cases were only used in computations that involved variable pairs available in that case.

A disadvantage with the pairwise treatment is that it may produce an inconsistent sample size. In addition inconsistent relationships between coefficients may exist because different cases are used to estimate different coefficients. However, this method maximizes the useable sample size and was determined to be the best solution to missing values based on a careful examination of the data (Norusis, 1988).

Personal Characteristics

The inclusion of a group of personal characteristics, as measured by the Campbell et al. (1976) "Index of Well-Being," was added to the research model to determine if an individual's perception of general well-being and life satisfaction explained additional variance in the dependent variable, financial well-being.

Combining the individual items of the "Index of Well-Being" was determined by Campbell et al. to result in greater reliability than using the items individually. The index for this study was created in the same manner used by Campbell et al. The eight semantic-differential items on the instrument, variables numbered 1 through 8, were combined with a single item asking, "How satisfied are you with your life as a whole these days?", variable number 9. The responses for variables 1 through 8 were summed and the sum was divided by 8 to create the variable SEMDIF. The response to variable 9 was multiplied by 1.1 (to parallel the weighting used by Campbell et al.) and added to the new variable SEMDIF to create a single variable, WELLINDX, for each respondent.

In addition to the WELLINDX, the following variables were entered into the regression equation as personal characteristics: the respondent's sex, race, educational attainment, and employment status.

Objective Attributes

The independent variables that were included as objective attributes were income, stage of the financial life cycle, marital status, home ownership, paying or receiving alimony or child support, number of children in the household, number of others for whom the household is substantially responsible for financial support, responsibility for managing and handling financial management tasks, and financial decision making. In addition, the 20 financial management behaviors (variables 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 30, 31, 32, 33, 34, 35, 36, 37, 39, and 40, Appendix C) were entered into the

regression equation as independent variables in the objective attribute group.

Perceived and Evaluated Attributes

The independent variables that were included in the regression equation as perceived attributes were variables 75 through 80, 83 through 89, 91, and 92 (Appendix C). The respondent's perception of his/her net worth and income adequacy were also included in this attribute group. Variables 95 through 123 (Appendix C) were entered into the regression singularly as independent variables of the evaluated attribute group.

Data Analysis

Multiple regression analysis, using SPSS-X, was used as the primary procedure for examination of the data. The relative importance of the personal characteristics, objective attributes, perceived attributes, and evaluated attributes, entered into the equation as blocks of independent variables, were empirically tested using a series of F ratios. First, all of the independent variables were regressed on the dependent variable, financial well-being. Second, each of the blocks of variables was removed individually from the equation and the regression was run again. This procedure was repeated for each group. An F ratio was applied to the change in the R^2s of the equations. A significant F ratio indicated that the group of variables removed from the equation provided unique information about the dependent variable that was not available from the other independent variables in the equation (Norusis, 1988).

In the regression analysis, the beta weight (standardized regression coefficient) was used to indicate relative importance of the individual variables, regardless of attribute group, in predicting the dependent variable. The beta weights were used because of the dissimilarity of measuring factors. The statistical test for the significance of individual coefficients was the t test. The alpha level (α) was set at .05 throughout the study.

Checks were made to insure that important assumptions underlying the multiple regression analysis were not violated. Multicollinearity, or high intercorrelation between one or more of the independent variables, can usually be detected by examining R^{-1} values. An inverse correlation (XTX) matrix was run using all of the variables. The diagonal values on the matrix were closely examined for the R^{-1} values that were greater than two. Then the zero-order correlations with those variables were examined. It was determined that there was high multicollinearity among the individual variables in the perceived and evaluated attribute groups.

In accordance with recommended statistical procedure, variables with high multicollinearity may be combined into a single useable measure. A factor analysis of the 15 subjective variables determined that twelve of the variables were measuring similar concepts. Three of the variables, numbers 84, 90, and 92, appeared significantly unrelated to the other 12. A single index (SUBJINDX) was created by combining the perceived net worth variable (73), and the income adequacy variable (74) with a number of other variables. These are identified in Appendix H as

75, 76, 77, 78, 79, 80, 83, 85, 86, 87, 88, and 89. An equally weighted index was created by summing the responses to all of these variables and dividing by 14.

The financial reference-point variables were combined into the following three indexes: past financial experiences, at five years and two years in the past (PASTINDX); peer financial reference groups (PEERINDX); and the expectation of the financial situation five years in the future (IN5INDX). The responses for variables 95 through 109 were summed and then the sum was divided by 15 to create a single variable PASTINDX (Appendix I) for each respondent. The responses for variables 110 through 115 were summed and the sum was divided by 6 to create a single variable PEERINDX (Appendix J) for each respondent. The responses for variables 116 through 123 were summed and the sum was divided by 8 to create a single variable IN5INDX (Appendix K) for each respondent. A second inverse correlation matrix verified that creating the four indexes reduced multicollinearity.

Summary of Research Methodology

This study was designed to provide an empirical test of a measure of financial well-being. Independent variables were entered into a multiple regression analysis as blocks of variables in each of the following areas: personal characteristics; objective attributes, quantitative indicators of the financial domain and financial management behaviors of respondents; perceived attributes, subjectively assessed life conditions and perceptions of financial situation; and evaluations of financial situation using various reference points as standards of

comparison.

This chapter has provided a discussion of the population and sample, the instrument development, the data collection, and the research models tested in this research study. A detailed description of the data coding and editing plan was presented. Finally, the data analysis was considered. The dummy coding that was utilized with nominal and categorical variables was described as well as the indexes that were created.

Chapter IV

Presentation of the Data

This study was designed to conceptualize and test a measurement of financial well-being. The measurement, which includes selected personal characteristics, as well as objective attributes, perceived attributes, and evaluated attributes of the financial domain, was empirically tested with a randomly selected sample of Virginia citizens (N = 1,450) using a mail survey conducted from October of 1989 through January of 1990. The purpose of this chapter is to present the data from this research project. The discussion begins with the return rates, selected characteristics of the sample, and comments regarding the representativeness of the sample to the population of Virginia citizens. The descriptive statistics of the individual attributes of financial well-being as measured by the instrument are presented as well as the indexes utilized in the measurement. The chapter concludes with the results of the statistical methods used to analyze the model.

Return Rate Results

A total of 529 questionnaires were returned of the 1,450 that were received by Virginia citizens, representing a 36.5% total return rate (529/1,450). Of those returned, 15 were returned blank by respondents unwilling or unable to participate and 8 questionnaires were unusable due to incomplete answers, yielding a useable return rate of 34.9%

(506/1,450). Although 506 usable questionnaires were returned, the total number of responses for most of the questionnaire items did not equal 506 due to the facts that certain items were occasionally omitted by some respondents and some items were not applicable to all respondents.

Demographic and Household Characteristics of the Sample

This section presents and discusses the findings related to the characteristics of the respondents. These findings include data concerning demographic characteristics of the respondents (Tables 2 and 3), a comparison between the respondents and the population of Virginia citizens (Table 4), personal characteristics related to financial management (Table 5), and a description of the household financial situation (Table 6).

Both the cover letter and instrument asked that the questionnaire be completed by the person in the household "who is primarily responsible for financial decision making." Everyone, regardless of family or financial situation, was encouraged to participate.

As shown in Table 2, respondents were divided equally between the sexes. Two hundred fifty-one males (49.7%) responded to the survey compared to two hundred fifty-four females (50.3%). The greater majority of respondents (85.1%) were self-identified as white (Caucasian); the next largest group (11.7%) were self-identified as black (African-American). Other population groups represented were Hispanic (1.2%), Native American (0.2%), and Oriental (1.8%).

By combining groups in Table 2, it can be seen that 64.3% of the

Table 2

Demographic Characteristics of Respondents (N = 506) and Their Spouses

Demographic Characteristics	n	%[a]
Gender	(N^b = 505)	
Male	251	49.7
Female	254	50.3
Ethnicity	(N^b = 505)	
White (Caucasian)	430	85.1
Black (African-American)	59	11.7
Hispanic (Spanish-American)	6	1.2
Native American (American Indian)	1	0.2
Oriental	9	1.8
Other	0	0.0
Marital Status	(N^b = 503)	
Married	284	56.5
Divorced and Remarried	39	7.8
Divorced and Presently Unmarried	40	8.0
Never Married	99	19.7
Separated	12	2.4
Widowed	29	5.8
Respondents' Age (in Years)	(N^b = 504)	
Less Than 19	6	1.2
20 to 29	101	20.0
30 to 39	139	27.6
40 to 49	114	22.6
50 to 59	78	15.5
60 to 69	49	9.7
70 to 79	17	3.4
Spouses' Age (in Years)	(N^b= 342)	
Less than 19	0	0.0
20 to 29	48	14.0
30 to 39	96	28.1
40 to 49	94	27.5
50 to 59	58	17.0
60 to 69	38	11.1
70 to 79	8	2.3

[a] Percentages may not add to 100 due to rounding.
[b] Number of respondents may not add to 506 due to non-response or non-applicability of the question.

Table 2. (continued)

Demographic Characteristics	n	%[a]
Number of Children Living in Household	(N[b] = 493)	
0	259	52.5
1	112	22.7
2	86	17.4
3	28	5.7
4	6	1.2
5	1	0.2
6	1	0.2
Number of Other Adults or Children Responsible for Financially	(N = 506)	
0	446	88.1
1	50	9.9
2	9	1.8
3	1	0.2
Spouse Married Before	(N[b] = 427)	
No	336	78.7
Yes	91	21.3
Pay Alimony or Child Support	(N[b] = 465)	
No	440	94.6
Yes	25	5.4
Receive Alimony or Child Support	(N[b] = 467)	
No	444	95.1
Yes	23	4.9
Total Annual Gross Income	(N[b] = 497)	
Less than $10,000	26	5.2
$10,000 to $19,999	80	16.1
$20,000 to $29,999	92	18.5
$30,000 to $39,999	78	15.6
$40,000 to $49,999	69	13.8
$50,000 to $59,999	50	10.0
$60,000 to $69,999	32	6.4
$70.000 to $79,999	28	5.6
$80,000 and Above	42	8.5

[a] Percentages may not add to 100 due to rounding.
[b] Number of respondents may not add to 506 due to non-response or non-applicability of the question.

respondents were currently married. This included both first time marriages and couples that had divorced and remarried. The second largest group of respondents (19.7%) reported that they had never been married. Combining categories reveals that 10.4% were currently separated or divorced and presently unmarried.

The largest group of both respondents (27.6%) and spouses (28.1%) were in the age range 30 to 39 years. By combining categories, it can be seen that most respondents and their spouses were between the ages of 20 and 59, 85.7% and 86.6% respectively. Using raw data, the mean age of the respondents was determined to be 41.9 years, with an age range of 17 to 78, while their spouses were slightly older with a mean age of 43.3 and a range of 21 to 78.

As shown in Table 2, over half of the respondents (52.5%) indicated that no children were currently residing in the household. Using raw data of the households with children, the mean number was determined to be 1.7, with a range of one to six children. Ninety percent of the respondents were not responsible for the financial support of other adults or children. One-tenth (11.9%) of the respondents reported that they were substantially responsible for the financial support of other adults or children who did not reside in the same household. Using raw data, the mean number of other people supported financially was 1.2, with a range of one to three.

As also shown in Table 2, 21.3% of the spouses of the respondents had been previously married. Note further that 7.8% of the respondents

themselves were divorced and remarried. Yet few households were paying (5.4%) or receiving (4.9%) alimony or child support.

Respondents were asked to indicate the range of incomes which contained the total annual gross income for their household, considering all sources of income from all contributing adults, such as wages, salaries, tips, Social Security, pensions, interest, dividends, trusts, child support, alimony, welfare, etc. The incomes ranged from less than $10,000 to $80,000 and above. By combining categories, it can be seen that approximately one third of the households (34.6%) represented in this study reported a total annual gross income for the household between $10,000 and $29,999 in 1988. A slightly smaller proportion (29.4%) indicated a total income of $30,000 to $49,999. The third largest income group (16.4%) was $50,000 to $69,999. A small proportion reported household earnings less than $10,000 (5.2%) or more than $80,000 (8.5%).

Education of the respondents and their spouses ranged from less than high school to graduate and professional degrees; respondents were typically better educated than their spouses. It can be seen in Table 3 that a high school degree was reported by almost one-fourth of the respondents (23.4%) and one-third of their spouses (31.4%). Combining categories results in 29.2% of the respondents and 27.2% of their spouses having had trade/vocational training or some college. Another one-fourth of the respondents (23%) and 15.8% of their spouses had a bachelors degree. A graduate or professional degree had been earned by 16.1% of the respondents and 10.0% of their spouses. Less than a high

Table 3

Profile of Educational Attainment and Occupational Status of Respondents (N = 506) and Their Spouses

Demographic Characteristics	Respondent		Spouse	
	n	%[a]	n	%[a]
Educational Attainment	(N[b] = 496)		(N[b] = 360)	
Less Than High School	41	8.3	56	15.6
High School Degree	116	23.4	113	31.4
Trade/Vocational Training	21	4.2	23	6.4
Some College (No Degree)	124	25.0	75	20.8
Bachelors Degree	114	23.0	57	15.8
Graduate or Professional Degree	80	16.1	36	10.0
Employment Status	(N[b] = 493)		(N[b] = 341)	
Full-Time Employment	364	73.8	224	65.7
Part-Time Employment	44	8.9	34	10.0
Unemployed	9	1.8	10	2.9
Full-Time Homemaker	20	4.1	45	13.2
Student	9	1.8	4	1.2
Retired	47	9.5	24	7.0
Occupation	(N[b] = 488)		(N[b] = 256)	
Not Employed for Money Income	79	16.2	--	---[c]
Executive, Large Business Owner, Major Prof.	18	3.7	10	3.9
Manager, Medium Business Owner, Prof.	135	27.7	50	19.5
Adm. Personnel, Small Business Owner	74	15.2	55	21.5
Clerical, Sales, Technicians	73	15.0	51	19.9
Skilled Manual Employees	64	13.1	54	21.1
Machine Operators, Semi-Skilled	26	5.3	30	11.7
Unskilled Employees	19	3.9	6	2.3

[a] Percentages may not add to 100 due to rounding.
[b] Number of respondents may not add to 506 due to non-response or non-applicability of the question.
[c] 109 respondents noted that the question regarding spouse's employment was not applicable or their spouse was not currently employed. Data is presented for the other 341 spouses.

school degree was reported by 8.3% of the respondents and 15.6% of their spouses.

At the time of the survey, three-fourths (73.8%) of the respondents and two-thirds (65.7%) of their spouses were employed full-time. Part-time employment was reported by 8.9% of the respondents and 10.0% of their spouses. Students composed 1.8% of the respondent group and 1.2% of their spouses. Retirement was reported by 9.5% of the respondents and 7.0% of their spouses. Only 1.8% of the respondents and 2.9% of their spouses were unemployed.

A variation of the Hollingshead's socio-economic scale was used to provide descriptions of various occupations on the questionnaire where respondents could self-report their status by choosing from among seven occupational categories. Only 3.7% of the respondents classified their occupation as high executives, owners of large businesses, or major professionals. As illustrated in Table 3, the largest group of respondents (27.7%) reported that they would classify their occupation as business managers, owners of medium-sized businesses, or professionals. Other respondents listed occupations as either administrative personnel, small business owners, or semi-professionals (15.2%) or that of clerical and sales workers, technicians, or owners of very small businesses (15.0%). An additional 13.1% of the respondents reported that they were skilled manual employees.

Only 3.9% of the respondents classified the status of their spouse as high executives, owners of large businesses, or major professionals. Approximately one-fifth of the spouses were classified as business

managers, owners of medium-sized businesses, or professionals (19.5%); as administrative personnel, small business owners, and semi-professionals (21.5%); as clerical and sales workers, technicians, or owners of very small businesses (19.9%); and as skilled manual employees (21.1%). Fewer spouses were classified as machine operators or semi-skilled employees (11.7%) and unskilled employees (2.3%).

Representativeness of the Sample

In an effort to ascertain the representativeness of the sample to the population of Virginia citizens, a comparison was made of selected demographic variables. Results, shown in Table 4, suggest that the findings from this survey can be generalized to citizens of the Commonwealth of Virginia with relative accuracy. The gender, ethnicity, housing tenure, educational attainment, age, and income of the sample were very similar to that of Virginia citizens. As might be expected with any mail survey, respondents were more highly educated and typically reported a higher household income. Moreover, because of the strong similarities between the sample and the population, a non-respondent follow-up study was not considered necessary (Lytton & Garman, 1990).

Description of the Findings

The four major aspects of the financial domain described for the respondents in this section are as follows: (a) financial situation and strategies, (b) objective attributes represented by financial management behaviors, (c) perceived attributes of the financial situation, and (d) evaluated attributes of the financial situation.

Table 4

Demographic Characteristics of Respondents (N = 506) Compared to the Population of Virginia Citizens

Demographic Characteristics	Respondents %[a]	Virginia Citizens %[a]
Gender		
Male	49.7	49.0[b]
Female	50.3	51.0
Ethnicity		
White (Caucasian)	85.1	79.1[b]
Black (African-American)	11.7	18.9
Hispanic (Spanish-American)	1.2	1.5
Native American (American Indian)	0.2	0.8
Oriental	1.8	1.2
Other	0.0	----[c]
Housing Tenure		
Own	72.6	65.6[d]
Rent	22.0	34.3
Other	5.4	----[c]
Educational Attainment		
Less Than High School	8.3	37.5[e]
High School Graduate	23.4	28.4
Some College or Vocational Training	29.2	14.9
Four Years of College or More	39.1	19.1
Age (in Years)		
20 to 29	20.0	24.0[f]
30 to 39	27.6	24.8
40 to 49	22.6	19.8
50 to 59	15.5	12.8
60 to 69	9.7	11.4
70 to 79	3.4	7.1
1988 Annual Household Income		
Less than $10,000	5.2[g]	26.8[h]
$10,000 to $14,999	8.5	12.6
$15,000 to $19,999	7.6	10.5
$20,000 to $24,999	10.9	8.6
$25,000 to $29,999	7.6	7.2
$30,000 to $39,999	15.6	11.3
$40,000 to $49,999	13.8	7.7
$50,000 to $74,999	20.4	9.5
$75,000 and Above	10.1	5.5

[a]Percentages may not add to 100 due to rounding.
[b]Center for Public Service, 1989
[c]Data not available
[d]Sheatsley, 1984
[e]American Demographics Magazine Editors, 1984. 1980 data for persons 25 and older.
[f]Center for Public Service, 1987
Based on projected 1990 population of 4,438,040 (ages 20-79)
[g]Total annual gross household income.
[h]Department of Taxation, percentage of total 1988 personal income tax returns filed based on adjusted gross income (AGI). In general, AGI should be about the same as total gross annual household income for people in the first four income categories, but somewhat lower (perhaps $1,000 to $3,000) for higher income categories.

Financial Situation and Strategies

Six questions were posed to the people in the sample regarding their financial situation and strategies for family financial management. Two of the questions asked about financial responsibility, two questions asked about housing tenure and perceived net worth, and one question asked about adequacy of family income. An additional question determined stage of the financial life cycle.

Table 5 shows responses from the respondents to the survey item "who is responsible for managing and handling financial management tasks?" A majority (62.2%) of the respondents reported that they themselves were responsible while 3.9% noted that their "spouse (or another)" was responsible. Over one fourth of the respondents (27.5%) "shared" the financial responsibilities with their spouse and a few (6.4) "divided" these responsibilities with their spouse.

Realizing that respondents answer questions differently depending upon how each is phrased, it appears from Table 2 that of the 506 respondents 284 were currently married and 12 were separated for a total of 296 respondents who were legally married. As shown in Table 5, 165 (31 + 134) of the 296 married and/or married and separated respondents divided or shared responsibilities for financial management tasks with a spouse or other person. This is 55.7% of the respondents who were legally married.

In terms of decision making, 46.0% of respondents "shared" the responsibility for "making major financial decisions" with their spouse. A similar number (45.2%) of the respondents reportedly are solely

Table 5

Responsibility for Household Financial Tasks of Respondents (N = 506)

Question	n	%[a]
Who is responsible for managing and handling financial management tasks?		
	(N[b] = 487)	
I am responsible	303	62.2
Done by my spouse (or another)	19	3.9
Divided with spouse (or another)	31	6.4
Shared with spouse (or another)	134	27.5
Who is responsible for making major financial decisions?		
	(N[b] = 487)	
I am responsible	224	45.2
Done by my spouse	8	1.6
Divided with spouse (or another)	36	7.3
Shared with spouse (or another)	228	46.0

[a] Percentages may not add to 100 due to rounding.
[b] Number of respondents may not add to 506 due to non-response.

responsible for making major financial decisions while few responded that financial decision making was divided with their spouse (7.3%) or done by the spouse alone (1.6%). Again, considering the total of 296 (284 + 12) married and/or married and separated respondents (see Table 2), 264 (36 + 228) reportedly divide or share major financial decisions with a spouse or other person. This represents 89.2% of the respondents who were legally married.

As shown in Table 6, the great majority (72.6%) of the respondents reported that they owned their homes while 22% rent. Other living arrangements, such as living with parents or living in homes owned by parents but not paying rent, were reported by 5.4% of the sample. One respondent indicated that her current living situation was a rescue shelter.

When asked "if you sold all of your major possessions (including your home), turned all of your investments and other assets into cash, and paid all of your debts," most respondents (84.8%) reported that they would "have something left over," indicating a positive net worth. Only 8.8% of the respondents indicated that they would just break even; fewer reported that they would "be in debt" (6.4%), suggesting a negative net worth, i.e. a situation of insolvency.

The respondents were also asked to consider the perceived adequacy of their family income. The response scale shown in Table 6 represents a range of inadequacy to surplus. The majority of the respondents (52.8%) reported that they could "afford some of the things I want." In addition, 18.7% of the respondents reported that they "can afford

Table 6

Description of Household Financial Situation of Respondents (N = 506)

Financial Characteristics	n	%[a]
Housing Tenure	(N[b] = 500)	
Own	363	72.6
Rent	110	22.0
Other	27	5.4
Perceived Net Worth	(N[b] = 499)	
Have something left over	423	84.8
Break even	44	8.8
Be in debt	32	6.4
Perceived Adequacy Of Family Income	(N[b] = 498)	
Not at all adequate	32	6.4
Can meet necessities only	63	12.7
Can afford some of the things I want	263	52.8
Can afford about everything I want	93	18.7
Can afford everything I want and still save	47	9.4
Financial Life Cycle Stages	(N[b] =477)	
Formation Stage	280	58.7
Accumulation Stage	140	29.4
Preservation/Distribution Stage	57	11.9

[a] Percentages may not add to 100 due to rounding.
[b] Number of respondents may not add to 506 due to non-response.

about everything I want" and another 9.4% reported that they "can afford everything and still save money." At the lower end of the income adequacy scale, 12.7% indicated that they "can afford necessities only" while another 6.4% believe their income is "not at all adequate."

Three life cycle stages were explained on the questionnaire and the respondents were asked to choose the stage that best described their situation. As shown in Table 6, over half of the respondents (58.7%) agreed that their stage in life was similar to the "formation stage." The "formation stage" was described as:

> Household is being established . . . children, if any, are financially dependent on the family . . . basic needs of food, clothing shelter, etc. are being met . . . possessions are being accumulated, but are often purchased with credit so that what you owe is greater than what you own . . . most valuable thing owned is often the home . . . little retirement or estate planning is done except for contributions that are made by employer or those required by the government.

The second largest group of respondents (29.4%) identified themselves in the "accumulation stage" which was defined as:

> Lifestyle is set . . . major financial costs of life are behind you, such as educating children, purchasing a home, etc . . . what you own is now more than what you owe . . . for the first time there seems to be extra income available for saving and investing . . . planning and preparing for retirement becomes very important.

Only 11.9% of the respondents reportedly are in the "preservation/distribution" category:

> Retirement of at least one individual within household means that income, savings, and investments need to be managed carefully so that they will last a lifetime . . . what you own has reached a lifetime peak . . . investments may be producing income to live on . . . debts have been reduced . . . planning for the distribution of your assets to other people has become very important.

Objective Attributes Represented by Financial Management Behaviors

The following objective attributes entered into the multiple regression analysis were discussed in the demographic characteristics of the sample: income, stage of the financial life cycle, marital status, home ownership, paying or receiving alimony or child support, number of children in the household, number of others for whom the household is substantially responsible for financial support, responsibility for managing and handling financial management tasks, and financial decision making. The respondents' financial management behaviors were included with the above to complete the objective attribute group of the model.

The respondents were asked to rank 23 behaviors on a five-point scale ranging from not typical of yourself to very typical of yourself. Results are shown in Table 7. For discussion purposes the behavior statements are grouped according to six

Table 7

Percentage Responses of Financial Behaviors

#[a]	Behaviors	Not Typical 1 %	2 %	3 %	4 %	Very Typical 5 %	n[b]	M	SD
Cash Management									
18.	I have a weekly or monthly budget that I follow.	21.4	15.2	23.8	20.0	19.6	505	3.0	1.4
20.	My checking account pays me interest.	50.6	4.2	3.6	8.2	33.3	498	2.7	1.8
22.	I never write bad checks or ones with insufficient funds.	22.5	4.8	2.8	7.2	62.6	497	3.8	1.7
23.	In the recent past, I have received overdue notices because of late or missed payments.	65.0	8.5	8.3	8.9	9.1	503	1.9	1.4
Credit Management									
21.	I usually do not pay the total balance due on my credit card, but instead just make a partial payment.	44.6	7.1	10.6	11.9	25.8	480	2.7	1.7
25.	I often spend more money than I have.	57.0	14.1	14.3	6.4	8.2	502	1.9	1.3
27.	Overall, I am more in debt than this time last year.	50.1	12.9	12.9	6.2	17.9	503	2.3	1.6
31.	In the recent past, I have obtained cash advances to pay money toward other credit balances.	81.5	6.0	3.8	2.8	6.0	503	1.5	1.1
40.	Compared to a year ago, my use of credit cards has increased.	52.7	13.4	14.8	8.4	10.7	486	2.1	1.4
Capital Accumulation									
24.	I regularly set money aside for savings.	18.6	8.0	17.6	11.6	44.3	501	3.6	1.6
34.	This year, I invested some money in stocks, bonds, or mutual funds.	58.8	3.8	3.0	8.6	25.9	502	2.4	1.8

[a]Variable number
[b]Number of responses may not add to 506 due to non-response.

Table 7. (continued)

		Not Typical 1	2	3	4	Very Typical 5			
#[a]	Behaviors	%	%	%	%	%	n[b]	M	SD
Risk Management									
30.	I have trouble meeting monthly health care expenses, including premiums for health insurance.	76.4	6.2	5.4	4.4	7.6	499	1.6	1.2
37.	My auto is adequately insured.	2.8	0.4	1.4	6.4	88.9	497	4.8	0.7
39.	I have a homeowner's or renter's insurance policy.	18.3	1.0	1.0	2.6	77.1	497	4.2	1.6
Retirement/Estate Planning									
28.	In the past year I made a financial contribution to a private retirement program, such as an IRA or 401-k.	55.9	2.8	4.4	4.2	32.7	501	2.6	1.8
36.	I have a legal, written will.	58.3	4.4	3.8	1.2	32.4	503	2.5	1.8
General Management									
19.	I have an overall plan that will enable me to reach my financial goals.	17.4	18.2	25.1	22.0	17.4	501	3.0	1.3
32.	I often make financial decisions without much analysis.	45.5	16.5	20.3	7.8	9.9	503	2.2	1.4
33.	I have some specific financial goals for the future (for example, to buy a new car in two years).	18.9	8.2	17.5	20.3	35.2	503	3.4	1.5
35.	I rarely discuss my personal financial matters with family or friends.	23.1	10.7	23.1	16.1	27.0	503	3.1	1.5

[a]Variable number
[b]Number of responses may not add to 506 due to non-response.

major conceptual areas representing personal finance although the statements were not grouped in that manner on the questionnaire. Three tax management behaviors that were not analyzed for this study have been deleted. Each area will be discussed individually.

Cash management. As shown in Table 7, the respondents were almost equally divided among the five response choices on following a "weekly or monthly budget." When the two response categories on either end of the scale are combined the results confirm that individuals who likely did not budget, 36.6%, is only slightly less than those who did, 39.6%.

The majority of the respondents (50.6%) reportedly did not take advantage of interest-bearing checking accounts. Only 33.3% of the consumers said that a checking account that paid them interest was "very typical." The standard deviation was determined to be 1.8, indicating a wide variation of the responses from the mean of 3.0.

Over half (62.6%) of the respondents indicated that it was "very typical" of them to "never write bad checks or ones with insufficient funds." Yet a combined total of 27.3% of the respondents indicated some history of writing checks with insufficient funds. The respondents were widely dispersed among the response categories as indicated by the standard deviation of 1.7. The mean of the responses was determined to be 3.8.

Only 9.1% of the respondents report that it was "very typical" to have recently "received overdue notices because of late or missed payments." Combining the categories suggests that only 18.0% were likely to be receiving overdue notices because of late or missed payments. In contrast, 73.5% of the respondents reported that it was generally not typical for them to receive such notices. The mean of 1.9 is indicative that this behavior is generally not typical. These responses are located on the numerically lower end of the scale.

Credit management. Almost one-half of the respondents (44.6%) decisively reported that they "pay the total balance due" on their credit cards each month instead of just making a partial payment. In contrast one-fourth (25.8%) of the respondents find it "very typical" to "just make a partial payment" each month. Combining the two categories on that end of the scale indicates that 37.7% responded that they tend to "just make a partial payment" each month. The standard deviation was determined to be 1.7, indicating a wide variation among the responses about the mean of 2.7.

As shown in Table 7, 57.0% of the participants reported that it was "not typical" of them to "often spend more money that I have." Combining the two categories on that end of the scale suggests that 71.2% of the respondents live within their means and do not typically "spend more money" than they have. Combining responses on the other end of the scale indicates that 14.6% of

the respondents likely "spend more money" than they have.

The majority of the respondents (50.1%) indicated that it was "not typical" for them to be "more in debt than this time last year." Only 17.9% agreed that incurring an increased level of debt this year was "very typical" of them. Combining responses on that end of the scale reveals that 24.1% of the respondents had incurred additional debt compared to last year.

For the overwhelming majority (81.5%), it was "not typical" in the recent past to have "obtained cash advances to pay money toward other credit balances." Only 6.0% of the respondents reported this as "very typical," while combining categories on this end of the scale indicates that just 8.8% of the respondents use cash advances to pay credit balances. As indicated in Table 7, the mean for this item (1.5) confirms that the majority of the responses were located at the "not typical" end of the scale. Moreover, all of the means in the credit management conceptual area appear low, but are only indicative of the location of the "not typical" responses on the lower end of the scale.

Only 10.7% of the respondents reported that it was "very typical" for their use of credit cards to have increased as compared to a year ago. In contrast, 52.7% said that this was "not typical" of them.

Capital accumulation. As shown in Table 7, 44.3% of the respondents noted that it was "very typical" for them to "regularly set money aside for savings." Almost one-fifth (18.6%)

noted that such savings was "not typical." Combining the two categories on either end of the scale revealed that over half of the respondents (55.9%) tended to be regular savers compared to about one-fourth (26.6%) for whom this was less typical.

Only 25.9% of the survey participants report it was "very typical" to invest "some money in stocks, bonds, or mutual funds." In contrast, 58.8% reported that investing in these instruments was "not typical" of themselves. The standard deviation was determined to be 1.8, indicating a wide variation of responses about the mean of 2.4.

Risk management. The great majority of the respondents (76.4%) decisively report not having "trouble meeting monthly health care expenses including premiums for health insurance." Combining the two categories on the other end of the scale indicates that 12.0% of the respondents are likely to have difficulty meeting health care expenses. The mean for this item was determined to be 1.6. This indicates that the responses of "not typical" were located at the numerically lower end of the scale.

As also shown in Table 7, only 18.3% of the respondents did not typically have "a homeowner's or renter's insurance policy" compared to 77.1% for whom ownership was "very typical." Further, almost nine out of ten participants (88.9%) reported that it was "very typical" for their auto to be adequately insured while only 2.8% reported this "not typical" of themselves. The mean of this

item (4.8) and standard deviation (0.7) indicate that the responses were heavy distributed on the "very typical" end of the scale.

Retirement/estate management. As shown in Table 7, almost a third of the respondents (32.7%) reported that it was "very typical" of them during the past year to have "made a financial contribution to a private retirement program, such as an IRA or 401-k," while 55.9% said this was "not typical." Combining the response categories on the ends of the scale revealed that more of the respondents (58.7%) were likely not investing in a private retirement program than those who were (36.9%).

Over half of the respondents (58.3%) reported that it was "not typical" of them to "have a legal, written will" while for 32.4% this was "very typical." Based on the combined categories those for whom a will was generally not typical exceeds those for whom it generally was (62.7% and 33.6%, respectively).

The mean for making financial contributions to a private retirement program was 2.6. The mean for having a legal, written will was 2.5. The standard deviations for both of the retirement/estate planning behaviors were determined to be 1.8. This confirms that the responses were unequally distributed between the extreme ends of the response scale with few located in the middle categories.

General management. As shown in Table 7, almost one-fifth (17.4%) of the respondents placed themselves at opposite ends of

the scale for the behavior of having "an overall plan that will enable me to reach my financial goals." Combining groups at both ends also indicates that substantial portions of respondents found this behavior generally "not typical" (35.6%) or "very typical" (39.4%) of them to have such an overall plan.

Only 9.9% of the respondents stated that it was "very typical" for them to make "financial decisions without much analysis." Almost half (45.5%) of the respondents reported that making decisions without analysis was "not typical." When responses were combined, the results indicated that 17.7% of the respondents reportedly made financial decisions without much analysis while 62.0% responded that this was "not typical" of themselves. The mean for this behavior was determined to be 2.2, confirming that the average of the responses fell more toward the "not typical" end of the scale.

Over one-third (35.2%) of the respondents noted that futuristic goal setting was "very typical" of them while 18.9% of the respondents reported that it was "not typical." Combining categories revealed that 55.5% of the respondents reported that it was typical of them to have "some specific financial goals for the future (for example, to buy a new car in two years)."

Over one-fourth (27.0%) of the respondents noted that it was "very typical" for them not to "discuss [their] personal financial matters with family or friends" while for 23.1% this was "not typical." Combining the two response categories on either end of

the scale suggests that slightly more of the respondents typically discussed their finances with others as compared to those for whom this was generally "not typical" (43.1% and 33.8%, respectively). The mean for this item was computed to be 3.1. This average of the responses indicated that discussing "personal financial matters with family or friends" was not a typical behavior for most respondents.

Perceived Attributes of the Financial Domain

The following results report the respondents perceptions of specific aspects of their financial situation. The respondents were asked to respond to 15 subjective, value-related items. The four-point scale utilized was coded disagree (1), tend to disagree (2), tend to agree (3), and agree (4). A fifth category, not applicable, was provided, but was not coded to enter into the analysis. Results are shown in Table 8. For discussion purposes the perceived attributes are grouped according to six major conceptual areas representing personal finance although the statements were not grouped in that manner on the questionnaire. Each area will be discussed individually.

Cash management. As shown in Table 8, the respondents were fairly equally divided between agreeing (32.8%) and disagreeing (38.4%) with the statement "I have enough savings and reserve funds to maintain my present lifestyle if I lost my income for a period of 3 to 6 months." Combining the disagree and tend to disagree categories resulted in 51.9% of the respondents at that

Table 8

Percentage Responses of Perceived Attributes

#[b]	Attribute	D %	TD %	TA %	A %	NA[a] %	n[c]	M	SD
Cash Management									
78.	I have enough savings and reserve funds to maintain my present lifestyle if I lost my income for a period of 3 to 6 months.	38.4	13.5	12.5	32.8	2.8	503	2.4	1.3
80.	I would be able to handle a financial emergency that would cost $500 to $1000.	18.6	5.9	13.9	60.6	1.0	505	3.2	1.2
88.	I don't worry about being able to meet my normal monthly living expenses.	19.7	17.3	23.5	39.2	0.4	503	2.8	1.2
Credit Management									
79.	I am concerned about the total amount I have to repay on my debts each month, such as on credit cards, car payments, and other loans.	29.8	13.7	23.0	26.2	7.3	504	2.5	1.2
89.	I would have trouble borrowing $2,000 cash if I needed it.	66.7	14.7	5.4	11.1	2.2	504	1.6	1.0
Capital Accumulation									
83.	I am satisfied with the amount of money that I am able to save and invest each year.	35.0	25.3	18.8	18.8	2.0	505	2.2	1.1
86.	I can't save as much as I would like to save.	7.6	7.8	27.8	55.5	1.4	503	3.3	0.9

[a]D (Disagree) = 1, TD (Tend to Disagree) = 2, TA (Tend to Disagree) = 3, A (Agree) = 4, NA (Not Applicable)
[b]Variable number
[c]Number of responses may not add to 506 due to non-response.

Table 8. (continued)

#[b]	Attribute	D %	TD %	TA %	A %	NA[a] %	n[c]	M	SD
Risk Management									
84.	My home, car, and other personal property is adequately insured.	2.4	4.6	14.5	77.6	1.0	505	3.7	0.7
92.	I have a sufficient amount of life insurance on myself.	13.5	7.5	18.7	56.0	4.4	504	3.2	1.1
Retirement/Estate Planning									
85.	I probably will have a financially secure retirement.	10.9	14.3	36.0	35.2	3.6	503	3.0	1.0
90.	I have a legal will that is current and up to date.	55.8	5.0	5.6	28.2	5.6	504	2.1	1.4
General Management									
75.	I am satisfied with my present standard of living, that is, the goods and services that I can purchase like my housing, food, transportation, and recreation.	12.1	12.5	31.0	43.3	1.2	504	3.1	1.0
76.	My total income is enough for me to meet my monthly living expenses.	9.5	10.9	19.1	59.6	0.8	503	3.3	1.0
77.	I have developed a sound plan that should enable me to achieve my financial goals.	18.7	20.1	30.6	26.2	4.4	503	2.7	1.1
87.	No matter how fast my income goes up, I never seem to get ahead.	20.8	23.8	21.8	30.8	2.8	500	2.6	1.1

[a]D (Disagree) = 1, TD (Tend to Disagree) = 2, TA (Tend to Disagree) = 3, A (Agree) = 4, NA (Not Applicable)
[b]Variable number
[c]Number of responses may not add to 506 due to non-response.

end of the scale. Combining the agree and tend to agree categories totaled 45.3% of the respondents, confirming that the respondents were fairly equally divided between the two extremes.

The majority of the respondents (60.6%) reportedly perceive that they would "be able to handle a financial emergency that would cost $500 to $1000." Only 18.6% disagreed with that statement.

Almost four out of every ten respondents (39.2%) agreed that they did not worry about meeting normal monthly living expenses. Two out of ten respondents (19.7%) disagreed, indicating that they did worry. Combining categories resulted in almost two-thirds (62.7%) of the respondents likely to agree that they did not worry and over one-third (37.0%) who were likely to worry about meeting normal monthly living expenses.

Credit management. As shown in Table 8, the respondents were fairly evenly distributed among the response choices on being concerned with the total amount of debt repayment each month; 29.8% disagreed and 26.2% agreed with the statement. Combining categories on either end of the scale confirmed the even distribution; 49.2% were likely to agree that they were concerned and 43.5% were not likely to be concerned. Thirty-seven respondents (7.3%) reported that this statement was not applicable to them, indicating that they did not have monthly debt repayments.

The majority of respondents (66.7%) disagreed with the perception that they would have trouble borrowing $2,000 cash if needed. Only 11.1% agreed that they would have trouble. The mean for this perceptual item was computed to be 1.6. This confirmed a distribution that was heavy on the tend to disagree and disagree end of the scale. Note that both perceived attribute items in the credit management area were phrased to match the phrasing of items in the credit management conceptual area of the objective attribute group.

Capital accumulation. The largest group of respondents (35.0%) reported that they were dissatisfied with the amount of money they were able to save and invest each year. Only 18.8% agreed that they were satisfied with their saving and investing. Combining categories resulted in 60.3% of the respondents likely to be dissatisfied and only 37.6 likely to be satisfied.

A majority of respondents (55.5%) indicated that they agreed with the statement, "I can't save as much as I would like to save." Only 7.6% of the respondents indicated that they were able to save as much as they would like. Combining categories resulted in a greater contrast, with 83.8% likely to agree that they were unable to save as much as they would like and only 15.4% likely to disagree with that perception. The standard deviation for this item was determined to be 0.9 which indicated little dispersion of responses about the mean of 3.3.

Risk management. A large majority of respondents (77.6%) agreed that their personal property was adequately insured. Only 2.4% disagreed with that perception. The standard deviation was computed to be 0.7 which indicated little variance of responses about the mean of 3.7.

Over half of the respondents (56.0%) agreed that they had a sufficient amount of life insurance. Fewer (13.5%) disagreed with that perception. Combining categories resulted in 74.7% likely to agree with the perception and only 21.0% likely to disagree.

Retirement/estate planning. Over one-third (35.2%) of the respondents agreed with the perception that they would probably have a financially secure retirement. Only one in ten respondents (10.9%) disagreed with the statement. Combining categories confirmed the perception that a majority of respondents (71.2%) perceived that they were likely to be financially secure during retirement; only one-fourth (25.2%) were likely to disagree.

The majority of respondents (55.8%) disagreed with the statement, "I have a legal will that is current and up to date." Only 28.2% of the respondents agreed with the statement.

General management. The largest group of respondents (43.3%) agreed that they were satisfied with their present standard of living; only 12.1% disagreed with that perception. Combining the agree and tend to agree categories resulted in almost three-quarters (74.3%) of the respondents satisfied with their standard of living.

The majority of respondents (59.6%) agreed that their income was enough to meet monthly living expenses. Almost one-tenth (9.5%) disagreed with that subjective evaluation. Combining the two categories at each end of the scale resulted in 78.7% likely to agree and only 20.4% likely to disagree with the statement.

The responses for the statement, "I have developed a sound plan that should enable me to achieve my financial goals" were distributed with 26.2% agree, 30.6% tend to agree, 20.1% tend to disagree, and 18.7% disagree. The respondents likely to agree with that statement was 56.8% compared to 38.8% who were likely to disagree.

The largest group of respondents (30.8%) agreed that they never seem to get ahead no matter how fast income increases. Two out of ten respondents (20.8%) disagreed with that perception. Combining categories resulted in half (52.6%) of the respondents likely to perceive a lack of advancement toward financial goals and 44.6% likely to disagree.

SUBJINDX. The single index (SUBJINDX) was created to combine the perceived attributes into a single variable to reduce multicollinearity (see Chapter III). A factor analysis of the 15 subjective variables determined that twelve of the variables were measuring similar concepts. Three of the variables, numbers 84, 90, and 92, appeared significantly unrelated to the other 12. The index (SUBJINDX) was created by combining the perceived net worth variable (73), and the income adequacy variable (74) with a number

of other variables. These are identified in Appendix H as 75, 76, 77, 78, 79, 80, 83, 85, 86, 87, 88, and 89. An equally weighted index was created for each member of the sample with complete responses (N = 403) to those items and then dividing the sum by 14. The index ranged from a low score of 1.0 to a high of 4.0. Using raw data, the mean was determined to be 2.7; the standard deviation was 0.7.

Evaluated Attributes of the Financial Domain

The following results report the respondent's evaluated attributes of specific aspects of their financial situation. A three-point scale was utilized for each of the evaluated attribute items; results are shown in Tables 9, 10, and 11. The evaluated attributes were grouped on the questionnaire according to the following three major standards of comparison utilized in the study: past financial experiences, peer financial reference groups, and financial expectations five years in the future. Each reference area will be discussed individually.

Past financial experiences. Financial experiences "compared to five years ago" were evaluated with the following three-point scale: decreased = 1, remained the same = 2, and increased = 3. As shown in Table 9, a majority of respondents (80.6%) reported that their total income had increased compared to five years ago. Slightly more than one-tenth (11.7%) believed that total income had decreased and fewer (7.7%) reported it had remained the same.

Table 9

Percentage Responses of Evaluated Attribute Items in Past Financial Experience Index (PASTINDX)

		1	2	3[a]			
#[b]	Attribute	%	%	%	n[c]	M	SD
Compared to five years ago.....							
95.	my total income has	11.7	7.7	80.6	504	2.7	0.7
96.	my financial assets have	8.1	20.6	71.3	505	2.6	0.6
97.	my total financial situation has	12.6	23.5	63.8	506	2.5	0.7
98.	my retirement "nest egg" has	14.9	33.5	51.6	498	2.4	0.7
99.	my standard of living, the things that I purchase, such as housing, food, transportation, and recreation has	8.9	37.8	53.3	505	2.4	0.7

[a]1 = Decreased, 2 = Remained the Same, 3 = Increased
[b]Variable number
[c]Number of responses may not add to 506 due to non-response.

Table 9 . (continued)

#[b]	Attribute	1 %	2 %	3[a] %	n[c]	M	SD
Compared to <u>two</u> years ago.....							
100.	my ability to meet my usual monthly living expenses has	11.7	42.5	45.8	506	2.3	0.7
101.	the amount that I am able to save and invest has	24.5	41.1	34.4	506	2.1	0.8
102.	my ability to meet unexpected expenses has	16.2	46.5	37.2	505	2.2	0.7
103.	the total consumer debt that I owe has ...	29.9	33.7	36.5	502	2.1	0.8
104.	the total amount of income I have has	11.0	15.4	73.7	501	2.6	0.7
105.	how often I worry about the amount of money I am required to pay on my monthly debts has	22.7	46.6	30.7	502	2.1	0.7
106.	the property insurance coverage I have has	4.2	46.0	49.8	498	2.5	0.6
107.	my standard of living, the things that I purchase, such as housing, food, transportation, and recreation has	7.5	44.9	47.6	506	2.4	0.6
108.	my total financial situation has	11.5	34.3	54.3	505	2.4	0.7
109.	my use of credit cards has	19.2	43.8	37.0	489	2.2	0.7

[a]1 = Decreased, 2 = Remained the Same, 3 = Increased
[b]Variable number
[c]Number of responses may not add to 506 due to non-response.

The majority of respondents (71.3%) reported that their financial assets had increased compared to five years ago. One-fifth (20.6%) reported assets had remained the same and fewer (8.1%) indicated assets had decreased.

The majority of respondents (63.8%) reported that their total financial situation had increased compared to five years ago. Almost one-fourth (23.5%) reported the financial situation had remained the same and fewer (12.6%) indicated the financial situation had decreased.

Over one-half (51.6%) of the respondents reported that their retirement "nest egg" had increased compared to five years ago. One-third (33.5%) reported their "nest egg" had remained the same and fewer (14.9%) indicated the "nest egg" had decreased.

Over one-half (53.3%) of the respondents reported that their standard of living had increased compared to five years ago. Almost four out of ten respondents (37.8%) reported their standard of living had remained the same and less than one-tenth (8.9%) indicated their standard of living had decreased.

Financial experiences "compared to <u>two</u> years ago" were evaluated with the same three-point scale utilized above. As shown in Table 9, the largest group of respondents (45.8%) reported that their ability to meet usual monthly living expenses had increased. A similar number (42.5%) reported that this ability had remained the same, while fewer (11.7%) reported a decreased ability to meet normal expenses.

The largest group of respondents (41.1%) reported that the amount they were able to save and invest had remained the same compared to two years ago. More than one-third (34.4%) reported that this amount had increased. Almost one-fourth (24.5%) reported a decreased amount available for saving and investing.

Almost one-half (46.5%) of the respondents reported that their ability to meet unexpected expenses had remained the same compared to two years ago. Almost four out of ten respondents (37.2%) reported their ability in this area of financial management had increased and fewer (16.2%) indicated this ability had decreased.

Respondents were fairly equally distributed among the response categories for the item "Compared to two years ago the total consumer debt that I owe has . . . ." Slightly more than one-third (36.5%) indicated that consumer debt had increased. One-third (33.7%) reported that total consumer debt had remained the same. Only 29.9% of the respondents reported that their debt had decreased.

As shown in Table 9, the majority of respondents (73.7%) reported that their total amount of income had increased in the past two years. Fewer (15.4%) reported that their income had remained the same and 11.0% reported decreased income.

Almost one-half (46.6%) of the respondents reported that how often they worried about monthly debt repayment had remained the same compared to two years ago. Almost one-third of the

respondents (30.7%) reported that the amount of worry had increased and only 22.7% indicated the amount of worry had decreased.

As shown in Table 9, one-half (49.8%) of the respondents reported that their amount of property insurance coverage had increased compared to two years ago. A similar number of respondents (46.0%) indicated that their property insurance coverage had remained the same compared to two years ago. Only 4.2% of the respondents reported that their amount of property insurance coverage had decreased.

Almost one-half (47.6%) of the respondents reported that their standard of living had increased compared to two years ago. A similar number of respondents (44.9%) indicated that their standard of living had remained the same. Only 7.5% of the respondents reported that their standard of living had decreased.

The majority of respondents (54.3%) reported that their total financial situation had increased compared to two years ago. Almost one-third (34.3%) reported the financial situation had remained the same and fewer (11.5%) indicated the financial situation had decreased.

The largest group of respondents (43.8%) reported that their use of credit cards had remained the same compared to two years ago. More than one-third (37.0%) reported that this use had increased. Almost one-fifth (19.2%) reported a decreased use of credit cards compared to two years ago.

PASTINDX. The responses for variables 95 through 109 were summed and then the sum was divided by 15 to create a single variable PASTINDX (Appendix I) for each respondent with complete data (N = 466). The index ranged from a low score of 1.1 to a high score of 3.0. Using raw data, the mean was determined to be 2.4 with a standard deviation of 0.4.

Peer financial reference groups. Evaluated attributes of the financial situation compared to certain peer groups were evaluated with the following three-point scale: less desirable = 1, about the same = 2, and more desirable = 3. As reported in Table 10, one-half (51.9%) of the respondents reported that their ability to meet a financial emergency of $500 to $1000 compared to the people they work with was about the same. Over one-fourth (26.1%) indicated their ability was more desirable than others at work. Only 22.0% indicated that their ability was less desirable than others.

Over one-half (56.0%) of the respondents reported that compared to their friends, the likelihood that they would have a financially secure retirement was about the same. One-fourth (25.1%) indicated the likelihood they would have a secure retirement was more desirable than their friends. Only 18.9% indicated that the likelihood was less desirable than their friends.

The majority of respondents (58.4%) reported that their financial situation was more desirable than that of their parents

Table 10

Percentage Responses of Evaluated Attribute Items of Peer Reference Group Index (PEERINDX)

		1	2	3[a]			
#[b]	Attribute	%	%	%	n[c]	M	SD
Compared to.....							
110.	people I work with, my ability to meet a financial emergency of $500 to $1000 is	22.0	51.9	26.1	491	2.0	0.7
111.	my friends, the likelihood that I will be able to have a financially secure retirement is	18.9	56.0	25.1	491	2.0	0.7
112.	my parents' financial situation when they were my age, my financial situation is	23.2	18.4	58.4	495	2.4	0.8
113.	other people I know with similar incomes, the amount of debt that I owe is	18.9	45.7	35.4	492	2.2	0.7
114.	other people my age, my life, health, disability insurance coverage is	14.6	59.9	25.5	494	2.1	0.6
115.	most of my friends, my standard of living, the things I purchase such as housing, food, transportation, and recreation is	15.9	60.5	23.6	496	2.1	0.6

[a]1 = Less Desirable, 2 = About the Same, 3 = More Desirable
[b]Variable number
[c]Number of responses may not add to 506 due to non-response.

at the same age. Almost one-fourth (23.2%) reported that their financial situation was less desirable than that of their parents at the same age. Fewer (18.4%) indicated that their financial situation was about the same as their parents at the same age.

The largest group of respondents (45.7%) reported that their amount of debt compared to other people they knew was about the same. More than one-third (35.4%) reported that their amount of debt was more desirable. Almost one-fifth (18.9%) reported a debt level that was less desirable than others they knew.

The majority of respondents (59.9%) reported that compared to other people their age, their life, health, and disability insurance coverage was about the same. One-fourth (25.5%) reported that their insurance coverage was more desirable than others. Fewer (14.6%) indicated that their coverage was less desirable.

The majority of respondents (60.5%) reported that their standard of living was about the same as that of most of their friends. Almost one-fourth (23.6%) reported that their standard of living was more desirable than most of their friends. Fewer (15.9%) indicated that their standard of living was less desirable.

PEERINDX. The responses for variables 110 through 115 were summed and the sum was divided by 6 to create a single variable PEERINDX (Appendix J) for each respondent with complete data (N = 475). The index ranged from a low score of 1.0 to a high score of

3.0. Using raw data, the mean was determined to be 2.1 with a standard deviation of 0.5.

Financial expectations. Evaluated attributes of the financial situation expected to exist five years in the future were determined with the following three-point scale: probably be worse = 1, be the same = 2, and probably be better = 3. As shown in Table 11, a majority of respondents (77.2%) reported that their total amount of income will probably be better five years in the future. Fewer respondents (14.0%) expected that their total income would probably be the same. Less than one in ten respondents (8.8%) reported it would probably be worse.

The largest group of respondents (62.2%) reported that their ability to save and invest would probably be better five years in the future. One-fourth (25.6%) expected that their ability to save and invest would be the same in five years. Fewer (12.2%) predicted that their ability in this area would probably be worse.

The majority of respondents (57.9%) reported that their ability to meet large emergency expenses would probably be better in five years. Over one-fourth (28.3%) expected that their ability to meet emergency expenses would be the same in five years. Fewer (13.8%) predicted that their ability to meet emergency expenses would probably be worse five years in the future.

Similarly, the majority of respondents (66.1%) expected that their retirement "nest egg" would probably be better five years in

Table 11

Percentage Responses of Evaluated Attribute Items of Financial Expectation Five Years In the Future (IN5INDX)

		1	2	3[a]			
#[b]	Attribute	%	%	%	n[c]	M	SD
In five years I expect.....							
116.	my total amount of income will	8.8	14.0	77.2	501	2.7	0.6
117.	my ability to save and invest will	12.2	25.6	62.2	500	2.5	0.7
118.	my ability to meet large emergency expenses will	13.8	28.3	57.9	501	2.4	0.7
119.	my retirement "nest egg" will	11.0	23.0	66.1	501	2.6	0.7
120.	the amount of debt I have will	10.2	36.1	53.7	499	2.4	0.7
121.	my total financial situation will	8.8	20.6	70.7	501	2.6	0.6
122.	my insurance coverage will	5.2	61.4	33.4	500	2.3	0.6
123.	my standard of living, the things I purchase, such as housihng, food, transportation, and recreation will	10.2	40.3	49.5	501	2.4	0.7

[a]1 = Probably be Worse, 2 = Be the Same, 3 = Probably be Better
[b]Variable number
[c]Number of responses may not add to 506 due to non-response.

the future. Almost one-fourth (23.0%) predicted that their "nest egg" would be the same in five years and fewer (11.0%) expected that their "nest egg" would probably be worse in five years.

The largest group of respondents (53.7%) indicated that the amount of debt they would have in five years would probably be better. Over one-third (36.1%) expected that the amount of debt they would have in five years would be the same. Fewer (10.2%) predicted that their amount of debt would probably be worse in five years.

The majority of respondents (70.7%) expected that their total financial situation would probably be better in five years. Two out of ten respondents (20.6%) predicted that their financial situation would be the same in five years and fewer (8.8%) expected a financial situation in five years that would probably be worse.

The majority of respondents (61.4%) expected that their insurance coverage would be the same in five years. One-third (33.4%) predicted that their insurance coverage would probably be better five years in the future. Only 5.2% of the respondents expected that their insurance coverage would probably be worse five years in the future.

The largest group of respondents (49.5%) indicated that their standard of living in five years would probably be better than their current standard of living. Four out of ten

respondents (40.3%) expected that their standard of living in five years would be the same. Fewer (10.2%) predicted that their standard of living would probably be worse in five years.

IN5INDX. The responses for variables 116 through 123 were summed and the sum was divided by 8 to create a single variable IN5INDX (Appendix K) for each respondent with complete data (N = 491). The index ranged from a low score of 1.0 to a high score of 3.0. Using raw data, the mean was determined to be 2.5 with a standard deviation of 0.5.

Personal Characteristics

The following personal characteristics entered into the multiple regression analysis were discussed in the demographic description of the sample: the respondent's sex, race, educational attainment, and employment status. In addition to those personal characteristics, the people were asked to respond to eight semantic-differential items in order to evaluate the respondents' perceptions of specific aspects of their personal life situation. A seven-point scale was utilized to code the blank boxes of the instrument. The following results are presented in Table 12.

In the first semantic differential item, the largest group of respondents (33.1%) described their life as interesting. Only 3.4% indicated that their life was boring. Combining the three categories on each end of the scale resulted in the majority

Table 12

Percentage Responses of Individual Items Combined Into WELLINDX

		1	2	3	4	5	6	7			
#[a]	Item	%	%	%	%	%	%	%	n	M	SD
	I think my life is ...										
1.	Boring/Interesting	3.4	1.0	3.6	11.8	21.6	25.5	33.1	499	5.6	1.5
2.	Enjoyable/Miserable	39.0	26.2	15.8	11.6	3.6	1.8	2.0	500	2.3	1.4
3.	Useless/Worthwhile	2.0	0.2	0.8	8.1	16.4	23.8	48.7	495	6.0	1.3
4.	Friendly/Lonely	45.4	21.4	13.4	10.8	4.0	2.0	3.0	500	2.2	1.5
5.	Full/Empty	42.5	22.0	15.6	13.0	3.8	1.0	2.0	499	2.2	1.4
6.	Discouraging/Hopeful	2.4	1.4	1.8	9.9	13.5	24.3	46.7	497	5.9	1.4
7.	Disappointing/Rewarding	2.8	1.8	2.8	10.4	18.3	24.9	39.0	498	5.7	1.5
8.	Brings out the best in me/Doesn't give me much chance	30.7	29.5	16.8	14.5	4.0	2.6	1.8	495	2.5	1.4
	How satisfied are you about your life as a whole these days?										
9.	Completely dissatisfied/ Completely satisfied	1.8	2.2	3.2	11.9	31.3	35.7	13.9	496	5.3	1.2

[a]Variable number

(80.2%) describing their life as tending to be interesting. Fewer (8.0%) reported their life as tending to be boring.

In the second semantic differential item, the largest group of respondents (39.0%) described their life as enjoyable. Only 2.0% indicated that their life was miserable. Combining the three categories on each end of the scale resulted in the majority (81.0%) describing their life as tending to be enjoyable. Fewer (7.4%) reported their life as tending to be miserable.

In the third semantic differential item, the largest group of respondents (48.7%) described their life as worthwhile. Only 2.0% indicated that their life was useless. Combining the three categories on each end of the scale resulted in the majority (88.9%) describing their life as tending to be worthwhile. Fewer (3.0%) reported their life as tending to be useless.

The fourth semantic differential item resulted in the largest group of respondents (45.4%) describing their life as friendly. Only 3.0% indicated that their life was lonely. Combining the three categories on each end of the scale resulted in the majority (80.2%) describing their life as tending to be friendly. Fewer (9.0%) reported their life as tending to be lonely.

In the fifth semantic differential item, the largest group of respondents (42.5%) described their life as full. Only 2.0% indicated that their life was empty. Combining the three

categories on each end of the scale resulted in the majority (80.1%) describing their life as tending to be full, while only 6.8% reported their life as tending to be empty.

The sixth semantic differential item resulted in the largest group of respondents (46.7%) describing their life as hopeful. Only 2.4% indicated that their life was discouraging. Combining the three categories on each end of the scale resulted in the majority (84.5%) describing their life as tending to be hopeful. Fewer (5.6%) reported their life as tending to be discouraging.

In the seventh semantic differential item, the largest group of respondents (39.0%) described their life as rewarding. Only 2.8% indicated that their life was disappointing. Combining the three categories on each end of the scale resulted in the majority (82.2%) describing their life as tending to be rewarding, while only 7.4% reported their life as tending to be disappointing.

The eighth semantic differential item resulted in the largest group of respondents (30.7%) describing their life as bringing out the best in them. Only 1.8% indicated that their life doesn't give them much chance. Combining the three categories on each end of the scale resulted in the majority (77.0%) describing their life as tending to bring out the best in them. Fewer (8.4%) reported their life as tending to not give them much chance.

The general life satisfaction question provided a seven-point response scale ranging from <u>completely dissatisfied</u> (coded

1) to completely satisfied (coded 7). The largest group of respondents (35.7%) evaluated their life as 6. Only 1.8% reported life satisfaction as 1. Combining the three categories on each end of the scale resulted in the majority of respondents (80.9%) evaluating their life satisfaction as 5 or greater. Fewer (7.2%) reported a life satisfaction rating of 3 or less.

WELLINDX. Combining the above items following the format presented by Campbell et al. (1976) provides an "Index of Well-Being," a measure of a respondent's perception of general well-being and life satisfaction. The responses for the eight semantic-differential items on the instrument were summed and the sum divided by 8. The response to the single item asking, "How satisfied are you with your life as a whole these days?" was multiplied by 1.1 (to parallel the weighting used by Campbell et al.) and added to the average of the semantic differential items to create a single variable, WELLINDX, for each respondent with complete data (N = 483). The index ranged from a low score of 2.1 to a high of 14.7. Using raw data, the mean was determined to be 11.6 with a standard deviation of 2.3.

Empirical Test of Porter's Conceptual Model of Financial Well-Being

Multiple regression analysis, using SPSS-X, was used as the primary procedure for testing the conceptual model. Financial well-being, as measured by an adaptation of Cantril's (1965) 11-point self-anchoring striving scale, was the dependent variable.

This variation of Cantril's scale used an 11-step ladder on which a respondent was asked to imagine the "best possible financial situation" as forming the upper end (11) and "the worst possible financial situation" as forming the lower end (1). After the ladder becomes self-anchored in this manner, the respondent was asked to locate an estimate of his/her current financial situation along the ladder between these two extremes. This measurement of the dependent variable provided an evaluation of the respondent's financial situation which is both personal and situational.

As shown in Table 13 the respondents' perceptions of their financial well-being is varied, but slightly biased to indicate more positive levels of satisfaction were reported. The mean of the responses (N = 498) for the dependent variable was determined to be 6.5 with a standard deviation of 2.2, indicating a wide variation of responses about the mean.

The relative importance of personal characteristics, objective attributes, perceived attributes, and evaluated attributes, in explaining variance in the dependent variable was determined by using an F statistic. These variables, entered as blocks of independent variables, were regressed on the dependent variable and the difference between the resulting R^2s computed using an F ratio (Pedhazur, 1982).

The procedure for determining the significance of the independent variables was accomplished in three steps. First, all of the independent variables, including personal characteristics,

Table 13

Perceived Financial Well-Being of the Respondents (N = 498[a]) as Measured by a Variation of Cantril's (1965) Self-Anchoring Striving Scale

Level of Perceived Financial Well-Being	n	%[b]
1	14	2.8
2	13	2.6
3	26	5.2
4	47	9.4
5	54	10.8
6	72	14.5
7	79	15.9
8	97	19.5
9	67	13.5
10	22	4.4
11	7	1.4

[a] Number of respondents may not add to 506 due to non-response.
[b] Percentages may not add to 100 due to rounding.
[c] M = 6.5; SD = 2.2; Range = 1 - 11.

objective, perceived, and evaluated attributes, were regressed on the dependent variable, financial well-being. Second, each of the blocks of variables was removed individually from the equation leaving the other groups intact, and the regression was run again. This procedure was repeated to remove each group individually. Third, an F ratio was applied to the change in the R^2s of the equations. A significant F ratio indicated that the group of variables removed from the equation provided unique information about the dependent variable that was not available from the other independent variables in the equation (Norusis, 1988).

Full Regression Equation

Entering all of the variables into the regression model produced an R^2 of .71015, meaning that 71% of the variance in financial well-being could be explained by the linear combination of all of the predictor variables (see Table 14). With an F ratio of 15.76, this R^2 was considered statistically significant at the .01 level (df 51,454). This empirical test explained a greater proportion of the variance in financial well-being than any of the research studies cited in previous literature.

Personal Characteristics

The relative importance of the personal characteristics group which included the following variables: gender, ethnicity, educational attainment, employment status, and the "Index of Well-Being" (WELLINDX), was determined by removing all of these variables from the regression equation leaving all other variables

Table 14

Regression of All Individual Variables on Financial Well-Being

Variable	b	B	t	Sig t
SUBJINDX	1.8596	.5933	8.000	.0000
WELLINDX	.1024	.1066	2.777	.0058
EMP1 (employed full-time)	-.6123	-.1226	-2.275	.0235
PEERINDX	.3831	.0781	1.899	.0584
MB1 (spouse not married before)	-.3287	-.0692	-1.851	.0651
V24 (set money aside for savings)	.1006	.0696	1.801	.0727
V34 (invested in stocks, bonds)	-.0754	-.0596	-1.618	.1065
MH2 (financial management done by spouse or another)	-.6365	-.0539	-1.602	.1102
V39 (have homeowner's insurance)	.0965	.0671	1.555	.1209
V21 (do not pay total balance due on credit card)	-.0685	-.0520	-1.465	.1438
DEC3 (financial decisions divided with spouse or another)	-.4704	-.0539	-1.425	.1550
R1 (Caucasian)	.3068	.0489	1.400	.1625
V32 (make decisions without analysis)	.0688	.0414	1.212	.2263
FC1 (formation stage of cycle)	-.2851	-.0632	-1.080	.2808
DUM2 (divorced and remarried)	-.4660	-.0554	-1.075	.2833
V136 (income)	.0265	.0523	1.071	.2850
V36 (have legal, written will)	.0487	.0399	1.063	.2886
V138 (number of children in household)	.0839	.0815	1.030	.3039
IN5INDX	.1610	.1683	0.957	.3393
RA1 (not receiving alimony or child support)	.2309	.0337	0.912	.3627
DUM3 (married)	-.3112	-.0688	-0.906	.3654
DEC2 (financial decisions done by spouse or another)	.5136	.0286	0.880	.3798
DUM5 (divorced and presently unmarried)	-.3422	-.0412	-0.872	.3838
V30 (have trouble meeting health care expenses)	.0522	.0287	0.812	.4173
V23 (have received overdue notices)	.0489	.0300	0.798	.4256
V31 (obtained cash advances to pay toward other credit balances)	-.0583	-.0285	-0.780	.4360
MH3 (financial managment divided with spouse or another)	.2768	.0296	0.773	.4402
PASTINDX	.2100	.0373	0.760	.4479
FC2 (accumulation stage of cycle)	-.1845	-.0368	-0.724	.4697
S1 (male)	.1011	.0225	0.646	.5184
EMP3 (retired)	-.2243	-.0290	-0.609	.5430
V40 (use of credit cards compared to one year ago has increased)	-.0305	-.0191	-0.563	.5739

Table 14. (continued)

Variable		b	B	t	Sig t
H1	(own home)	.1113	.0223	0.518	.6048
V19	(have overall financial plan)	.0334	.0199	0.473	.6364
EMP2	(employed part-time)	-.1461	-.0183	-0.442	.6585
V37	(auto is adequately insured)	.0438	.0146	0.435	.6635
V22	(never write bad checks)	.0193	.0145	0.423	.6722
DUM1	(never married)	-.1563	-.0276	0.403	.6870
V28	(contributed to private retirement in past year)	.0174	.0143	0.387	.6988
V35	(rarely discuss personal financial matters with others)	.0156	.0105	0.327	.7438
PA1	(paying alimony or child support)	.1075	.0104	0.302	.7626
V130	(educational attainment)	.0148	.0106	0.276	.7824
MH1	(I am responsible for financial management)	-.0423	-.0092	-0.210	.8334
V140	(financially responsible for other adults or children)	.0328	.0060	0.177	.8593
V20	(have interest-bearing checking)	-.0071	-.0058	-0.172	.8637
V33	(have specific financial goals)	.0082	.0055	0.163	.8709
DEC1	(I am responsible for making financial decisions)	.0282	.0062	0.122	.9034
DUM4	(separated from spouse)	.0466	.0032	0.083	.9335
V27	(more in debt than last year)	-.0033	-.0023	-0.058	.9538
V25	(often spend more than I have)	.0037	.0021	0.057	.9548
V18	(have weekly or monthly budget)	-.0022	-.0014	-0.040	.9680
(constant)		-2.4739		-2.811	.0052

R^2 = .71015

F = 15.76 (51,454) $p < .01$

intact. The resulting R^2 was .67382. An F ratio was computed according to the following formula:

$$F = \frac{(R^2_{y.all} - R^2_{y.all-PC}/(k_1 - k_2)}{(1 - R^2_{y.all})/(N - k_1 - 1)}$$

where

$R^2_{y.all}$ = Proportion of variance in financial well-being explained with all of the variables in the equation

$R^2_{y.all-PC}$ = Proportion of variance in financial well-being explained with all of the variables in the equation except the personal characteristics group

k_1 = Degrees of freedom in equation with all variables

k_2 = Degrees of freedom in equation without personal characteristics group

N = Sample size

therefore

$$F = \frac{(.71015 - .67382)/(51 - 44)}{(1 - .71015)/(506 - 51 - 1)} = 8.13$$

This ratio was significant at the .01 level (df 7,454). It was determined that the personal characteristic group contributed significantly to the explanation of the variance in the dependent variable, financial well-being.

Objective Attribute Group

The objective attribute group included the following variables: income, stage of the financial life cycle, marital

status, home ownership, paying or receiving alimony or child support, number of children in the household, number of others for whom the household is substantially responsible for financial support, responsibility for managing and handling financial management tasks, financial decision making, and 20 financial management behaviors (variables 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 30, 31, 32, 33, 34, 35, 36, 37, 39, and 40, Appendix C). The relative importance of this attribute group was determined by removing all of these variables from the regression equation leaving all other variables intact. The resulting R^2 was .64126. An F ratio was computed according to the following formula:

$$F = \frac{(R^2_{y.all} - R^2_{y.all-OA})/(k_1 - k_2)}{(1 - R^2_{y.all})/(N - k_1 - 1)}$$

where

$R^2_{y.all}$ = Proportion of variance in financial well-being explained with all of the variables in the equation

$R^2_{y.all-OA}$ = Proportion of variance in financial well-being explained with all of the variables in the equation except the objective attribute group

k_1 = Degrees of freedom in equation with all variables

k_2 = Degrees of freedom in equation without objective attribute group

N = Sample size

therefore

$$F = \frac{(.71015 - .64126)/(51 - 11)}{(1 - .71015)/(506 - 51 - 1)} = 2.69$$

This ratio was significant at the .01 level (df 40,454). It was determined that the objective attribute group contributed significantly to the explanation of the variance in the dependent variable, financial well-being.

Perceived Attribute Group

The relative importance of the perceived attribute group was determined by removing the perceived attribute index, SUBJINDX, from the regression equation leaving all other variables intact. The index was created by summing the responses to the perceived net worth variable (73), the income adequacy variable (74), and variables 75, 76, 77, 78, 79, 80, 83, 85, 86, 87, 88, and 89, and dividing by 14 (Appendix H). Removing the SUBJINDX from the equation resulted in an R^2 of .61874. An F ratio was computed according to the following formula:

$$F = \frac{(R^2_{y.all} - R^2_{y.all-PA}/(k_1 - k_2)}{(1 - R^2_{y.all})/(N - k_1 - 1)}$$

where

$R^2_{y.all}$ = Proportion of variance in financial well-being explained with all of the variables in the equation

$R^2_{y.all-PA}$ = Proportion of variance in financial well-being explained with all of the variables in the equation except the perceived attribute group

k_1 = Degrees of freedom in equation with all variables

k_2 = Degrees of freedom in equation without perceived attribute group

N = Sample size

therefore

$$F = \frac{(.71015 - .61874)/(51 - 50)}{(1 - .71015)/(506 - 51 - 1)} = 143.19$$

This ratio was significant at the .01 level (df 1,454). It was determined that the perceived attribute group contributed significantly to the explanation of the variance in the dependent variable, financial well-being.

Evaluated Attribute Group

The evaluated attribute group included the PASTINDX, PEERINDX, and IN5INDX indexes. The responses for variables 95 through 109 were summed and then the sum was divided by 15 to create a single variable PASTINDX (Appendix I) for each respondent. The responses for variables 110 through 115 were summed and the sum was divided by 6 to create a single variable PEERINDX (Appendix J) for each respondent. The responses for variables 116 through 123 were summed and the sum was divided by 8 to create a single variable IN5INDX (Appendix K) for each respondent. The relative importance of this group of evaluated attributes was determined by removing these three variables from the regression equation leaving all other variables intact. The resulting R^2 was .67970. An F ratio was computed

according to the following formula:

$$F = \frac{(R^2_{y.all} - R^2_{y.all-EA}/(k_1 - k_2)}{(1 - R^2_{y.all})/(N - k_1 - 1)}$$

where

$R^2_{y.all}$ = Proportion of variance in financial well-being explained with all of the variables in the equation

$R^2_{y.all-EA}$ = Proportion of variance in financial well-being explained with all of the variables in the equation except the evaluated attribute group

k_1 = Degrees of freedom in equation with all variables

k_2 = Degrees of freedom in equation without evaluated attribute group

N = Sample size

therefore

$$F = \frac{(.71015 - .67970)/(51 - 48)}{(1 - .71015)/(506 - 51 - 1)} = 15.90$$

This ratio was significant at the .01 level (df 3,454). It was determined that the evaluated attribute group contributed significantly to the explanation of the variance in the dependent variable, financial well-being.

Significant Individual Attributes

The relative importance of the individual variables, regardless of attribute group, in predicting the dependent

variable was the second sub-problem of this study. The regression analysis calculated by SPSS-X provided a significant t value for each of the individual variables utilized in the model.

With the alpha level ($\propto$) set at .05, three individual variables were significant in explaining variance in the dependent variable, financial well-being. As shown in Table 14, the SUBJINDX (perceived attribute index) variable produced a significant t of .0000. (Note that pairwise missing-values treatment produced an inconsistent sample size for the SUBJINDX [N = 403] and the full regression equation [N = 454]. Thus the t^2 of 64.0 for the SUBJINDX does not equal the F of 143.19.) The WELLINDX ("Index of Well-Being") variable produced a significant t of .0058. EMP1, a dummy-coded categorical variable representing respondents who reported a full-time employment status, produced a significant t of .0235.

Summary

This chapter presented the data collected to empirically test a measurement of financial well-being. Return rates and household characteristics of the random sample of Virginia citizens (N = 506) responding to the mail survey were discussed. Selected demographic characteristics of the sample were analyzed and compared to the population of Virginia citizens. Strong similarities were noted; the generalizability of results to the population was established.

Selected personal characteristics, objective attributes, perceived attributes, and evaluated attributes of the financial domain were presented both individually and as combined into five indexes. The chapter included the results of the multiple regression analysis of the measurement of financial well-being as a function of personal characteristics, objective, perceived, and evaluated attribute groups. A discussion of the relative importance of the individual variables, regardless of attribute group, in predicting the dependent variable concludes the chapter.

Chapter V

Discussion of Results

This chapter discusses the results of the study to conceptualize and test a measurement of financial well-being as a function of personal characteristics, objective attributes, perceived attributes, and evaluated attributes of the financial domain. The measurement was empirically tested with a randomly selected sample of Virginia citizens (N = 1,450) using a mail survey conducted from October of 1989 through January of 1990.

The discussion of the research results begins with the dependent variable, financial well-being, as measured by the instrument. A summary is presented of the objective, perceived, and evaluated attributes of the financial domain as well as selected personal characteristics of the respondents. The chapter concludes with a discussion of the empirical test of Porter's Model of Financial Well-Being.

Perceived Financial Well-Being

The dependent variable, financial well-being, was measured using an adaptation of Cantril's self-anchoring striving scale (1965) to establish the respondents' perception of their financial situation. As shown in Figure 3 the frequency distribution of the respondents' sense of financial well-being is varied, but slightly skewed to the right indicating more positive levels of satisfaction were reported. This distribution correlates highly with earlier satisfaction research results (Festinger, 1957; Winter & Morris, 1983) reported in the review

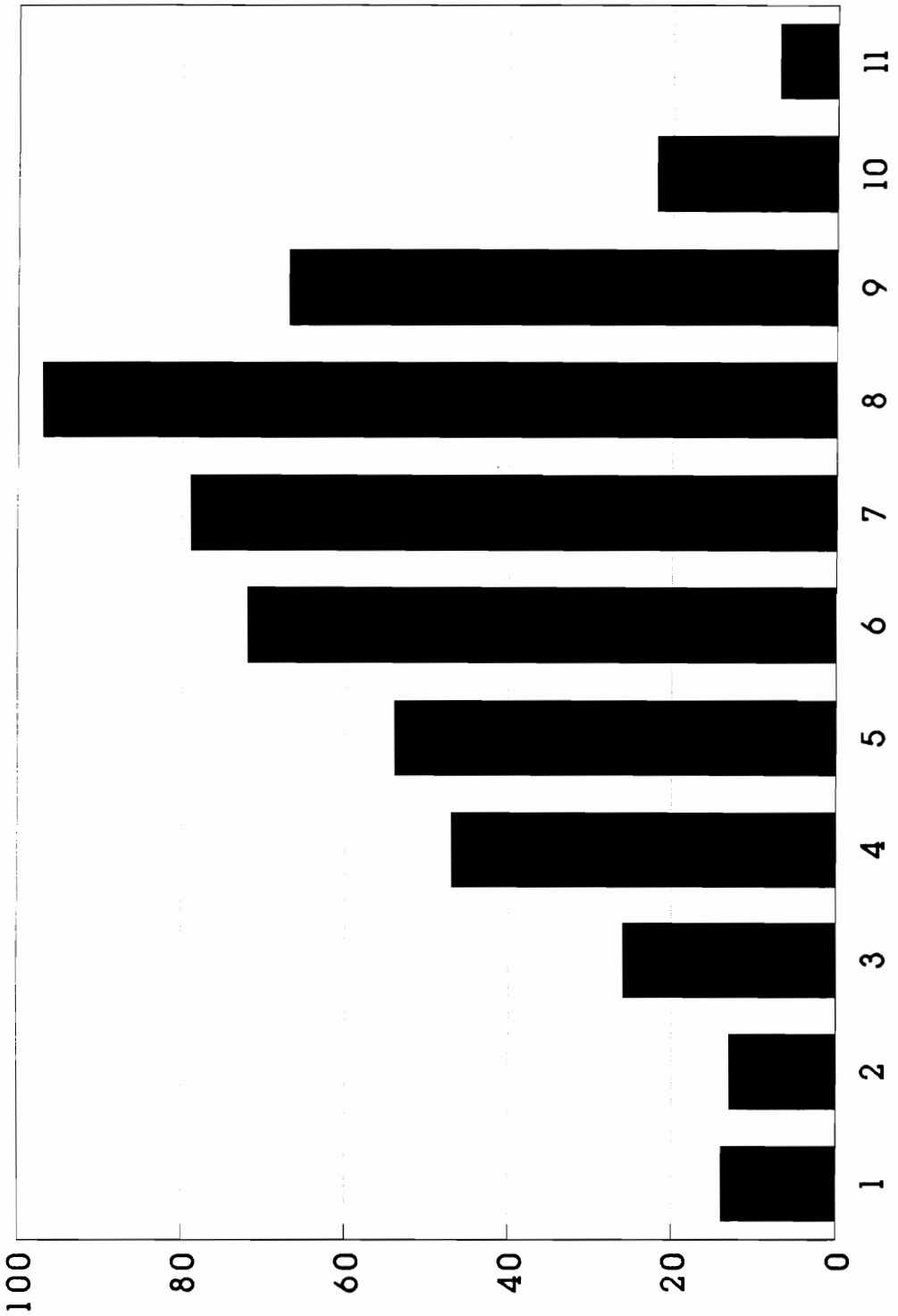

Figure 3. Frequency distribution of respondents' perceived levels of financial well-being.

of related literature.

Objective Attributes of the Financial Domain

The majority of the respondents were married (64.3%) without children living in the household (52.5%) and without being substantially responsible for the financial support of any other adults or children (88.1%). Only 7.8% of the respondents and 21.3% of their spouses had been previously married. Few households were paying (5.4%) or receiving (4.9%) alimony or child support.

Total gross annual income reported for the households represented in the sample ranged from less than $10,000 to $80,000 and above. Combining categories revealed that one-third (34.6%) indicated a total income of $10,000 to $29,999; slightly fewer (29.4%) reported an income of $30,000 to $49,999.

Almost half (45.7%) of the married respondents (N = 296) reported sharing the managing and handling of financial tasks with their spouse or another person. Over three-fourths of those married (77.0%) reported sharing the major financial decision making with a spouse or another.

The majority of respondents (58.7%) indicated that they would place themselves in the formation stage of the financial life cycle. Most of the respondents owned their homes (72.6%), while few reported that they 22% rented.

Financial Management Behaviors

Six conceptual areas of personal finance were investigated as additional objective attributes of the financial domain. The behaviors reported by respondents in the areas of cash management, credit

management, capital accumulation, risk management, retirement/estate planning, and general financial management were sufficiently varied to provide insight into the impact of certain management strategies on perceived financial well-being.

Decreased financial well-being may result from the limited use of certain financial management behaviors that are believed by experts (Garman & Forgue, 1988) to increase financial success. Respondents who typically did not budget (21.4%) outnumbered those who did (19.6%). The majority of respondents (50.6%) reportedly do not take advantage of interest-bearing checking accounts. Combining categories revealed that 27.3% of the respondents indicated some history of writing checks with insufficient funds. Another 18.0% reported that they were likely to have received overdue notices because of late or missed payments. Consistent with this pattern, combining responses indicated that 8.2% likely "spend more money" than they have, 19.1% have increased their use of credit cards compared to a year ago, 24.1% have incurred more debt than this time last year, and 37.7% are increasing debt levels by not typically paying the total balance due on their credit cards. However, few respondents (6.0%) appear to be using cash advances to pay other credit obligations.

Combining responses revealed that 26.6% of the respondents do not have a regular savings plan. Fully 58.8% of the respondents reported that it was "not typical" of themselves to have invested in stocks, bonds, or mutual funds during the past year.

Another 18.3% do not typically have a "homeowner's or renter's

insurance policy" and 7.6% are likely to have difficulty meeting health care expenses. However, the majority of respondents (88.9%) reported that their automobile is fully insured.

More people are likely not investing in a private retirement program than those who are (58.7% and 36.9%, respectively). Over half (58.3%) reported that it is "not typical" of them to "have a legal, written will."

Few respondents (17.4%) reported that it was "very typical" of them to have an overall plan for reaching financial goals, while 18.9% noted that "specific financial goals for the future" were "not typical." Combining categories produced 17.7% of the respondents who reported that it was fairly typical for them to make financial decisions without much analysis and over one-fourth (27.%)
reported that they rarely discussed personal financial matters with family or friends.

Perceived Attributes of the Financial Domain

Perceived net worth and perception of income adequacy were investigated as perceived attributes of the financial domain. The majority of the respondents in the sample (84.8%) perceived themselves as having a positive net worth, while 8.8% believed they would just break even if all of their possessions were sold and debts repaid. A full 6.4% of the respondents perceived that they had a negative net worth.

Few respondents (6.4%) perceived their family income as "not at all adequate" while another 9.4% reported that they could "afford

everything I want and still save money;" these responses represented the range of extremes of financial surplus and inadequacy evident in the scale. The majority of the respondents (52.8%) reportedly "can afford some of the things I want."

In addition to the above, fifteen value-related indicators of the financial domain were investigated to correspond with the objective attributes in the areas of cash management, credit management, capital accumulation, risk management, retirement/estate planning, and general management. However, a factor analysis of these variables determined that only 12 of the variables were measuring similar concepts. Three variables, two in the risk management conceptual area and one in the retirement/estate planning conceptual area, appeared significantly unrelated to the other 12 and were eliminated from the analysis.

Negative perceptions of individual aspects of the financial situation provide insight into the variability of perceptions of financial well-being. Almost four out of ten respondents (38.4%) did not believe they had enough savings and reserve funds to maintain present lifestyles if income was lost for a period of three to six months. Almost two out of ten (18.6%) did not perceive they had the ability to handle a financial emergency that would cost $500 to $1,000. A similar number (19.7%) admitted that they worry about being able to meet normal monthly living expenses.

One-fourth of the respondents (26.2%) agreed that they were concerned about the total amount that had to be repaid on debts each

month. One in ten respondents (11.1%) reported that they would have trouble borrowing $2,000 if needed.

A full 35.0% of the sample reported dissatisfaction with the amount of money they were able to save and invest each year. Over half of the respondents (55.5%) agreed that they could not save as much as they would like to save. Only 35.2% perceived that they would probably have a financially secure retirement.

For out of ten respondents (43.0%) reported satisfaction with their present standard of living. Combining categories revealed that 20.4% tended to disagree that their total income was enough to meet normal monthly living expenses. Only one-fourth of the respondents perceived that they had a sound plan that should enable them to achieve their financial goals and a full 30.8% agreed that no matter how fast their income goes up, they never seem to get ahead.

SUBJINDX

These subjective aspects of the respondents' financial situation were combined into a single measure for each respondent, the perceived attribute index (SUBJINDX). The responses to the items discussed above were included in the single variable (Appendix H) with each individual perceived attribute equally weighted. This single measure of all the perceived attributes was utilized in the empirical test of the model.

The index was computed for respondents (N = 403) with complete responses to the individual perceived attributes. The index ranged from a low score of 1.0 to a high of 4.0. Using raw data, the mean was determined to be 2.7 with a standard deviation of 0.7, indicating that

the majority of scores on this index fell between 2.0 and 3.4.

Evaluated Attributes of the Financial Domain

Specific aspects of the financial situation were assessed using the following three major standards of comparison: past financial experiences, peer financial reference groups, and financial expectations five years in the future. These evaluated attributes of cash management, credit management, capital accumulation, risk management, retirement/estate planning, and general management corresponded to the six conceptual areas of personal finance utilized in the objective attribute group of the conceptual model.

Past Financial Experiences Five Years Ago

Without exception, the respondents reported that compared to five years ago every aspect of their financial situation had improved. The majority reported that compared to five years ago, total income had increased (80.6%), financial assets had increased (71.3%), total financial situation had increased (63.8%), retirement "nest egg" had increased (51.6%), and standard of living had increased (53.3%).

Past Financial Experiences Two Years Ago

The responses for the past financial experiences attribute based on the standard of comparison, "compared to two years ago," produced a more varied distribution. However, the largest group of respondents was still located in the "increased" category for the following: total amount of income had increased (73.7%), total financial situation had increased (54.3%), and standard of living had increased (47.6%). In addition, the largest group of respondents also reported that compared

to two years ago ability to meet usual monthly living expenses had increased (45.8%) and property insurance coverage had increased (49.8%). The largest group of respondents also reported that compared to two years ago, total consumer debt owed had increased (36.5%).

In contrast, the largest group of respondents evaluated the following attributes as having remained the same compared to two years ago: amount they were able to save and invest had remained the same (41.1%), ability to meet unexpected expenses had remained the same (46.5%), how often they worry about monthly debt repayment had remained the same (46.6%), and use of credit cards had remained the same (43.8%).

PASTINDX

The evaluated attributes of the respondents' financial situation compared to five years ago and compared to two years ago were combined into a single measure for each respondent, the PASTINDX. The responses to the items discussed above were included in the single variable (Appendix I) with each past financial experience reference point equally weighted. This single measure of past financial experiences was utilized with the PEERINDX and the IN5INDX to make up the evaluated attribute group in the empirical test of the model.

The PASTINDX was computed for respondents (N = 466) with complete responses to the individual evaluated attributes based on the standard of comparison, past financial experiences. The index ranged from a low score of 1.1 to a high of 3.0. Using raw data, the mean was determined to be 2.4 with a standard deviation of 0.4, indicating the majority of the scores on this index fell between 2.0 and 2.8.

In general it can be said that the majority of the respondents felt that their financial situation had improved over the situation they experienced five years and two years ago. Exceptions to this finding were indicated in the areas of amount saved and invested, ability to meet unexpected expenses, amount of worry about debt repayment, and use of credit cards, which had generally remained the same since two years ago.

Peer Financial Reference Groups

Based on the standard of comparison, peer financial reference groups, the majority of respondents evaluated various aspects of their financial situation as "about the same" as their peers. Ability to meet a financial emergency of $500 to $1,000 compared to people worked with was reported about the same by 51.9%, likelihood of having a financially secure retirement compared to friends was reported about the same by 56.0%, amount of debt compared to other people with similar incomes was reported about the same by 45.7%, disability coverage compared to other people the same age was reported about the same by 59.9%, and standard of living compared to friends was reported about the same by 60.5%. Only one exception appeared; the majority of respondents (58.4%) evaluated their financial situation as "more desirable" than their parents' financial situation at the same age.

PEERINDX

The evaluated attributes of the respondents' financial situation compared to peer financial reference groups were combined into a single measure for each respondent, the PEERINDX. The responses to the items

discussed above were included in the single variable (Appendix J) with each peer financial reference group variable equally weighted. This single measure of peer financial reference groups was utilized with the PASTINDX and the IN5INDX to make up the evaluated attribute group in the empirical test of the model.

The index was computed for respondents (N = 475) with complete responses to the individual evaluated attributes based on the standard of comparison, peer financial reference groups. The index ranged from a low score of 1.0 to a high of 3.0. Using raw data, the mean was determined to be 2.1 with a standard deviation of 0.5, indicating that the majority of the scores on this index fell between 1.6 and 2.6.

In general it can be said that the respondents evaluated various aspects of their financial situation as comparable to those in their peer reference groups. The only exception appeared when the respondents were asked to compare their financial situation to the situation their parents' experienced at the same age. The majority evaluated their situation as more desirable than the one experienced by their parents.

Financial Expectations Five Years in the Future

For all variables except one, the respondents reported that they expect their financial situation to probably be better five years in the future. The largest group of respondents reported that in five years they expect total income will probably be better (77.2%), ability to save and invest will probably be better (62.2%), ability to meet large emergency expenses will probably be better (57.9%), retirement "nest egg" will probably be better (66.1%), amount of debt will probably be

better (53.7%), total financial situation will probably be better (70.7%), and standard of living will probably be better (49.5%). The only exception was that the largest group of respondents (61.4%) expected that their insurance coverage will probably not be better, but will be the same in five years.

IN5INDX

The evaluated attributes of the respondents' financial situation expected five years in the future were combined into a single measure for each respondent, the IN5INDX. The responses to the items discussed above were included in the single variable (Appendix K) with each financial expectation for the future equally weighted. This single measure of the financial situation expected in five years was utilized with the PASTINDX and the PEERINDX to make up the evaluated attribute group in the empirical test of the model.

The index was computed for respondents (N = 491) with complete responses to the individual evaluated attributes based on the standard of comparison, financial expectation five years in the future. The index ranged from a low score of 1.0 to a high of 3.0. Using raw data, the mean was determined to be 2.5 with a standard deviation of 0.5, indicating that the majority of the scores on this index fell between 2.0 and 3.0.

In general it can be said that the majority of respondents expect their financial situation to improve during the next five years. The only exception to this finding was in the expectation for insurance coverage to be the same five years in the future, rather than better.

Personal Characteristics

The respondents were fairly equally divided between male (49.7%) and female (50.3%), but were predominately white (85.1%). Only 14.9% of the respondents were non-white. The majority (91.7%) had at least a high school degree, with 74% of those respondents having had additional education or training. Nearly three-fourths of the respondents (73.8%) and 65.7% of their spouses were employed full-time.

WELLINDX

The "Index of Well-Being" (Campbell, Converse, & Rodgers, 1976) was utilized in this study to provide a single measure of a respondent's perception of general well-being and life satisfaction. The index was computed for respondents (N = 483) with complete responses for the eight semantic-differential items on the instrument and the life satisfaction item. The responses to the eight semantic-differential items were summed and the sum divided by 8. The response to the single item asking, "How satisfied are you with your life as a whole these days?" was multiplied by 1.1 (to parallel the weighting used by Campbell et al.) and added to the average of the semantic differential items to create a single variable, WELLINDX, for each respondent.

The index ranged from a low score of 2.1 to a high of 14.7. Using raw data, the mean was determined to be 11.6 with a standard deviation of 2.3, indicating that the majority of the scores on this index fell between 9.3 and 13.9.

Conceptual Model for the Measurement of Financial Well-Being

Entering all of the variables into the regression model produced an R^2 of .71015, meaning that 71% of the variance in financial well-being could be explained by the linear combination of all of the predictor variables in the following groups: personal characteristics, objective attributes, perceived attributes, and evaluated attributes. With an F ratio of 15.76, this R^2 was considered statistically significant at the .01 level (df 51,454).

The empirical test of Porter's Conceptual Model of Financial Well-Being explains a greater proportion of the variance in financial well-being than any of the research studies cited in previous literature. Davis and Helmick (1985) were only able to explain between 33% and 46% of the variance in financial satisfaction in their research which utilized objective, subjective, and reference-point variables. Godwin and Carroll (1985) were only able to explain 36% of the variance in husbands' satisfaction and 32% of wives' satisfaction with family financial management. Hafstrom and Dunsing (1973) were only able to explain 40% of homemakers' satisfaction with family level of living for "typical families" and 39% of the variance for "disadvantaged families." The results of the test for a measurement of financial well-being that is a function of personal characteristics, objective, perceived, and evaluated attributes proved significant.

The two sub-problems of this study were to determine which of the groups of attributes and which individual attributes significantly explained variance in perceived financial well-being. The discussion

that follows presents the results for each attribute group as well as the individual variables within each group that significantly explained variance in the dependent variable.

Objective Attributes

The empirical test of the model established that the objective attribute group contributed significantly to the explanation of the variance in the dependent variable. Thus, this study validates the importance of objective attributes as a component of the measurement of financial well-being.

Even though no individual variables in the objective attribute group emerged as significant predictors of financial well-being at the .05 level, the presence of the entire group in the measurement was significant at the $p < .01$ level (df 40,454). Variations in objective measures such as income, stage of the financial life cycle, marital status, home ownership, paying or receiving alimony or child support, number of children in the household, number of others for whom the household is substantially responsible for financial support, responsibility for managing and handling financial management tasks, and financial decision making, as well as the practice of selected financial management behaviors, significantly explained variance in perceived financial well-being.

The objective attributes of the financial situation as measured in this study support previous research findings (Godwin & Carroll, 1985; Hafstrom & Dunsing, 1973; Hira, 1986; Jeries & Allen, 1986; Wilhelm, Iams, & Ridley, 1987; Williams, 1985) which established the importance

of objective measures of the financial domain in the measurement of financial well-being. Improved financial management skills, cash management strategies, and futuristic planning styles may help people avert financial difficulties and increase perceived financial well-being.

Perceived Attributes

The empirical test of the model established that the perceived attribute group contributed significantly to the explanation of the variance in the dependent variable. Thus, this study validates the importance of perceived attributes as a component of the measurement of financial well-being.

The individual variable SUBJINDX, created by combining all of the perceived attributes into a single variable, produced a significant t of .0000, emerging as the most significant single predictor of financial well-being. The presence of this variable as the perceived attribute group of the model was significant at the $p < .01$ level (df 1,454).

Subjective, value-related perceptions of the financial situation provide insights into the variability of self-reported levels of financial well-being. Both positive and negative perceptions of individual aspects of the financial situation influence overall perceived financial well-being. Dissatisfaction with the amount of income, standard of living, savings/investments, and retirement "nest egg," contribute to lower perceived levels of financial well-being. In addition, worrying about repaying debts and being able to meet financial emergencies contribute to the variance in financial well-being.

The perceived attributes of the financial situation as measured in this study support previous research findings (Godwin & Carroll, 1985; Hafstrom & Dunsing, 1973; Hira, 1986; Jeries & Allen, 1986; Wilhelm, Iams, & Ridley, 1987; Williams, 1985) which established the importance of subjective measures of the financial domain in the measurement of financial well-being.

Evaluated Attributes

The empirical test of the model established that the evaluated attribute group contributed significantly to the explanation of the variance in the dependent variable. Thus, this study validates the importance of evaluated attributes as a component of the measurement of financial well-being. The presence of the evaluated attribute group in the model was significant at the $p < .01$ level (df 3,454).

It was observed that none of the three individual variables in this group were not significant at the .05 level; however the PEERINDX, created by combining all of the evaluated attributes based on the standard of comparison peer financial reference groups into a single variable, produced a significant t of .0584.

Since the majority of respondents believed that their financial situation had improved during the past five years and expected it to continue to improve during the next five years, these standards of comparison were not significant individual variables in explaining variance in financial well-being. However, the group of evaluated attributes as a whole was a significant component in the measurement of financial well-being.

The evaluated attributes of the financial situation as measured in this study support previous research findings (Davis & Helmick, 1985) that reference-point variables need to be included with objective and subjective measures to explain greater variance in reported financial well-being. The evaluated attributes in this model expand the reference-point variables utilized previously beyond just "perceived change in financial condition over time" and "desire for financial improvement." It is obvious that including peer financial reference groups is essential to the measurement.

Personal Characteristics

The empirical test of the model established that including a group of personal characteristics contributed significantly to the explanation of the variance in the dependent variable. Thus, this study validates the importance of personal characteristics as a component of the measurement of financial well-being. The presence of this group in the model was significant at the $p < .01$ level (df 7,454).

Gender, race, educational attainment, and employment status were included as personal characteristics investigated in the study. In addition, an "Index of Well-Being" (WELLINDX) was utilized to evaluate perceptions of life in general. The individual variable WELLINDX produced a significant t of .0058, emerging as the second most significant single predictor of financial well-being. EMP1, another individual variable in the personal characteristics group, emerged as the third most significant predictor of financial well-being. EMP1, a dummy-coded categorical variable representing respondents who reported a

full-time employment status, produced a significant t of .0235. EMP1 has a negative beta coefficient, meaning that for every one standard deviation of change in employment status, there is a negative change of -.1226 standard deviation in financial well-being.

One's satisfaction with life overall has not been utilized as a factor to help explain one's perceived level of financial well-being in previous research studies. However, this study has shown that how one feels about his/her life in general significantly helps to explain variance in perceived financial well-being.

This chapter has presented a discussion of the results of the empirical test of a measurement of financial well-being as a function of personal characteristics, objective, perceived, and evaluated attributes of the financial domain. The chapter began with a discussion of the dependent variable, financial well-being. Second, a summary of the findings for each attribute group was reported. The chapter concluded with a discussion of the significance of each group to the conceptual model and the significance of selected individual variables to the measurement of financial well-being.

Chapter VI

Summary, Conclusions, Recommendations, and Implications

A summary of the purpose, problem, design, and findings of this research study are presented in this chapter. Conclusions based on the findings are discussed; recommendations for future research are suggested.

Purpose of the Research

Research in the area of financial well-being has historically been conducted piecemeal. Chronologically, objective measures of financial well-being, such as demographic characteristics, socioeconomic status, and financial management behaviors, were investigated first. Second, subjective measures were utilized to evaluate the role of individual perceptions of the financial situation on well-being. More recently, reference-point variables have been entered into research questions to determine additional variance in levels of financial well-being.

Based on a review of the literature, it is logical to assert that a sense of financial well-being depends not only upon objective and subjective measures of the financial situation, but on how a person perceives objective attributes of the financial situation after comparing those attributes against certain standards of comparison. Standards of comparison include individual time horizons which correspond to the reference-point variables that have been utilized in previous financial well-being research.

Objective attributes are defined as quantitative indicators of the financial situation such as income and family size. Perceived

attributes, such as satisfaction with standard of living or satisfaction with savings and investments, are value-related indicators of the objective attributes. Evaluated attributes are an individual's assessment of financial attributes when judged against standards of comparison such as aspirations, expectations, reference group levels, and past financial experiences. For example, an individual's assessment of the amount of money currently being saved and invested as compared to the amount saved and invested two years ago is an evaluated attribute. A sense of financial well-being should not be measured only with an objective attribute, income, but also measured by the perception of the adequacy of that income for achieving financial goals, such as saving for retirement. An individual's perception of income adequacy is based in part on the income and savings level experienced in the past and expected in the future.

Personal characteristics, the sum total of an individual's values, goals, and personal disposition, reflect a global sense of well-being. It is logical that this influences an individual's perception of well-being in any of the domains of life at any given point in time. Measuring this psychological outlook on life at the same time that a measurement of financial well-being is taken provides yet another possible factor for explaining a proportion of the variance in financial well-being.

The literature suggests that relationships exist among these various components of financial well-being. However, a conceptual model that incorporates all of these components into a single measure of

financial well-being has not been accepted in the field. Further, a measurement of financial well-being as a function of these variables has not been empirically tested.

Statement of the Problem

The problem of this study was to conceptualize and test a measurement of financial well-being as a function of personal characteristics, objective attributes, perceived attributes, and evaluated attributes of the financial domain. There were two sub-problems of this study:

1) Which of the following groups of attributes significantly explain variance in perceived financial well-being: personal characteristics, objective attributes, perceived attributes, or evaluated attributes?

2) Which individual attributes significantly explain variance in perceived financial well-being?

Research Design

This study was designed to empirically test a model of financial well-being as a function of personal characteristics, objective attributes, perceived attributes, and evaluated attributes of the financial domain. The proposed conceptual model of financial well-being (Figure 2), adapted from the Campbell, Converse, and Rodgers (1976) "Model of Life Satisfaction," was operationalized on the basis of theoretical and empirical considerations.

To empirically test this model and the relationships suggested, an instrument was developed and data were collected from Virginia citizens

(N = 1,500) with a mail survey conducted from October, 1989 through January, 1990 and applied to the model. From a random sample of 1,450 Virginia citizens (50 were undeliverable), 529 questionnaires were returned. Elimination of the unusable questionnaires resulted in 506 useable returns, or 34.9%. The "major financial decision maker" in the household was requested to complete the questionnaire.

Summary of Research Findings

By comparing selected demographic characteristics from the sample with statistics available on the general population of Virginia citizens, it was determined that the findings can be generalized to citizens of that state with relative accuracy. The gender, ethnicity, housing tenure, educational attainment, and age of the sample were very similar to that of Virginia citizens. As might be expected with any mail survey, respondents were more highly educated and typically reported a higher household income. Further, the random selection and size of the data base was sufficient to allow generalization to other populations. Further, the population studied was not restricted to a small, non-random sample of a homogeneous group which has been cited as a problem of previous research attempts.

The instrument development, data collection, and analysis were conducted to validly and reliably measure the variables specified by the conceptual framework. An empirical test supported the conceptual model and the use of personal characteristics, objective, perceived, and evaluated attributes of the financial domain in the measurement of financial well-being.

Dependent Variable, Financial Well-Being

The dependent variable, financial well-being, was measured using an adaptation of Cantril's self-anchoring striving scale (1965) to establish the respondents' perception of their financial situation. A frequency distribution of the respondents' self-reported sense of financial well-being is varied, but slightly skewed to the right indicating more positive levels of satisfaction were reported.

Full Regression Equation

Entering all of the variables into the regression model produced an R^2 of .71015, meaning that 71% of the variance in financial well-being was explained by the linear combination of all of the predictor variables in the following groups: personal characteristics, objective attributes, perceived attributes, and evaluated attributes. With an F ratio of 15.76, this R^2 was considered statistically significant at the .01 level (df 51,454).

Significance of Attribute Groups in the Model

The empirical test of the model established that all four of the attribute groups investigated, personal characteristics, objective attributes, perceived attributes, and evaluated attributes, were significant at the $p < .01$ level in the explanation of the variance in the dependent variable, financial well-being. Thus, this study validates the importance of including all of the groups studied into the conceptual model and measurement of financial well-being.

Significance of Individual Attributes

The individual variable SUBJINDX, created by combining all of the

perceived attributes into a single variable, produced a significant t of .0000, emerging as the most significant single predictor of financial well-being. The individual variable WELLINDX produced a significant t of .0058, emerging as the second most significant single predictor of financial well-being. EMP1, another individual variable in the personal characteristics group, emerged as the third most significant predictor of financial well-being. This dummy-coded categorical variable representing respondents who reported a full-time employment status, produced a significant t of .0235. EMP1 has a negative beta coefficient, meaning that for every one standard deviation of change in employment status, there is a negative change of -.1226 standard deviation in financial well-being.

Conclusions

The following conclusions were derived from the results of this research:

1) The methodology utilized in this empirical test of the measurement of financial well-being was an improvement over methodologies utilized in previous research and reduced measurement error.

Objective, subjective, and reference-point variables were researched simultaneously using a model-driven instrument designed specifically for this purpose. The sample was randomly selected and large enough to reduce sampling error relative to the variance in the measured variables. The instrument was designed to include multiple indicators for the independent variables to reduce random measurement error.

Multiple regression was used to analyze the data, reducing systematic error. Attempts were made to reduce biased results due to multicollinearity of variables utilized in the regression analysis.

2) Porter's Conceptual Model of Financial Well-Being is superior to existing conceptual frameworks.

The inclusion of personal characteristics, objective, perceived, and evaluated attributes in the model explained 71% of the variance in financial well-being. The regression of these attribute groups on financial well-being produced an R^2 of .71015 which was statistically significant at the $p < .01$ level (df 51,454). The empirical test of the model established that personal characteristics, objective attributes, perceived attributes, and evaluated attributes were all significant at the $p < .01$ level in the explanation of the variance in the dependent variable, financial well-being.

3) Results of the sample description support the representativeness of the population on which this study was based. Therefore, results can reasonably be generalized to other similar populations.

A comparison of selected demographic variables was made between the sample and the population of Virginia citizens. The results suggest that the findings from this survey can be generalized to citizens of the Commonwealth of Virginia with relative accuracy. The gender, ethnicity, housing tenure, educational attainment, age, and income of the sample were very similar to that of Virginia citizens.

4) The SUBJINDX (perceived attribute index), the WELLINDX ("Index of Well-Being"), and EMP1 (dummy-coded categorical variable representing respondents who reported a full-time employment status) were the most significant individual attributes in explaining variance in financial well-being.

With the alpha level (α) set at .05, three individual variables were significant in explaining variance in the dependent variable, financial well-being. The SUBJINDX (perceived attribute index) variable produced a significant t of .0000. The WELLINDX ("Index of Well-Being") variable produced a significant t of .0058. EMP1, a dummy-coded categorical variable representing respondents who reported a full-time employment status produced a significant t of .0235.

Recommendations for Future Research

Based on the delimitations and limitations of this study, the following recommendations are suggested for further research in the area of financial well-being.

1) Replications of the research study utilizing personal or telephone interviews are recommended.

One weakness of this study was that it relied on a method of respondent self report for vital data. Since there was no check to confirm the information, the possibility of error existed. Collecting data through personal or telephone interviews in future replications of this study could reduce error and confirm the results of this study.

2) Replications of the research with other populations is recommended.

Another limitation of the study was that the data were collected from residents with income in one state, Virginia. This restricts the generalizability of the findings to other populations. Replication of this study with populations in other states would increase the generalizability of the results.

3) Replications of this research should strive to increase the usable return rate.

A relatively low response rate was expected to be a limitation of this study. The 34.9% usable response rate confirmed this limitation, which reduced the generalizability of the research results due to the fact that little is known about 65.1% of the population who may differ significantly from the respondents. Recommendations for further research would include the following suggestions for increasing the return rate: provide greater incentives for response, shorten instrument length, and utilize a fourth, certified mailing to non-respondents.

4) The reliability of the individual measures and indexes used in this research study should be evaluated.

The validity and reliability of the measures used in this empirical test have not been adequately assessed. Determining the reliability of the individual measures and indexes used, as well as conducting repeated trials with the measures in future research efforts are recommended.

5) Research results suggest that additional concern levels of the financial domain should be included in the empirical test of a measure of financial well-being.

In this study, the concern levels in the financial domain were delimited to include five areas of personal finance which have significance for most people: cash management, credit management, risk management, capital accumulation, and retirement/estate planning, as well as a general financial management category. The addition of other concern levels such as tax management in future research could improve the overall measure of financial well-being.

6) Results suggest that other forms of objective attributes should be included in the empirical measure of financial well-being.

This study was delimited to the following objective attributes: income, stage of the financial life cycle, marital status, number of children, and certain financial management behaviors. An attempt to collect quantifiable objective attributes such as liquidity ratio, housing expenditure ratio, debt safety ratio, non-mortgage debt to income ratio, and savings ratio was made during the pilot test. However, it was determined that asking for this personal financial information substantially reduced the useable return rate. A recommendation for future research would be to collect other forms of objective attributes in order to provide additional insights and increase the amount of variance in financial well-being explained by the objective attributes.

7) Future research endeavors are recommended to improve the list of financial management behaviors that were utilized as objective attributes in this study.

A Delphi technique utilized with experts in the field to identify all of the behaviors important to financial success is recommended. Factor analysis would aid in the classification of these behaviors into conceptual areas of personal finance. If perceived and evaluated attributes were written to correspond with these specific behaviors, then an analysis of which conceptual areas of personal finance could be conducted to determine which areas significantly explain variance in perceived financial well-being.

8) Results suggest that other forms of perceived attributes should be included in the empirical measure of financial well-being.

The perceived attributes in this study were delimited to income adequacy, level of living, net worth, general financial management, cash management, credit management, risk management, capital accumulation, and retirement/estate planning. A recommendation for future research would be to collect other forms of perceived attributes such as financial security and tax management in order to provide additional insights and increase the amount of variance in financial well-being explained by these attributes.

9) Expanding the evaluated attribute group to include other standards of comparison could provide additional insights and increase the amount of variance in financial well-being

explained by these attributes.

Campbell et al. (1976) suggest that the standard of comparison or frame of reference used to make judgments for evaluated attributes is difficult to define and probably depends on multiple criteria considered simultaneously. For purposes of simplification, the evaluated attributes for this study were delimited to the respondent's perception of the current financial situation judged against the following standards of comparison: financial experiences during the past five years, peer financial reference groups, and expectations of the financial situation five years in the future. Expanding these standards of comparison to include broader time horizons in the past and future might provide greater insights into financial well-being.

10) Expanding the personal characteristic group to include other characteristics could provide additional insights and increase the amount of variance in financial well-being explained by this group.

This study was delimited to the following personal characteristics: ethnicity, gender, educational attainment, and employment status. Adding other variables to the list of personal characteristics investigated such as health status, job security, and marital satisfaction could provide additional insights and increase the amount of variance in financial well-being explained by personal characteristics.

11) The levels of perceived financial well-being reported by respondents in each of the three financial life cycle stages

should be analyzed to determine if differences exist among the stages.

Utilizing the financial life cycle with formation, accumulation, and preservation/distribution stages provides insight into the financial well-being of individuals as they progress along a continuous sequence of family-status stages with the financial tasks, problems, and challenges inherent in each. A recommendation for future research is to analyze the results further according to financial life cycle stage.

12) Results suggest that including financial ratio analysis as measures of the objective attribute group has implications for financial counselors and planners.

In the pre-test of this research project, collecting the data necessary to compute selected financial ratios reduced return rate significantly. However if this information could be collected, financial ratio analysis could provide a way for financial counselors to alert clients to potential financial management problem areas regardless of the client's perception or evaluation of the financial situation. Clients could possibly be heading for bankruptcy long before they perceive any problems in their financial situation.

Implications

The following are five implications of this research:

1) The empirical test of this measurement suggests that perceived financial well-being can now be measured more accurately. This measurement, a function of personal characteristics, objective, perceived, and evaluated attributes of the financial

domain, is an improvement over previous measures.

The practical benefits of this measurement lie in its holistic nature. The sum total of an individual's values, goals, and global sense of well-being enter the measurement in addition to observable indicators of the financial situation. The measurement is further strengthened by value-related qualitative indicators and assessments of the financial situation based upon selected standards of comparison. A sense of financial well-being depends not only upon objective and subjective measures of the financial situation, but on an individual's (a) perception of life in general, (b) perception of objective attributes of the financial situation after comparing those attributes against selected standards of comparison, and (c) perhaps other factors.

2) Porter's Conceptual Model of Financial Well-Being should be adopted as the conceptual framework of financial well-being for use in the education of professionals in financial management.

The Campbell, Converse, and Rodgers (1976) "Model of Life Satisfaction" has been well accepted by researchers and experts in the study of quality of life. This empirical test verifies that an adaptation of their model which also expands the financial domain is significant in explaining financial well-being. Porter's Conceptual Model of Financial Well-Being should now serve as the basis for presenting financial management information to professionals as the use of this model provides a holistic approach to financial management.

3) Educational programs should focus on perceptions and

evaluations of the financial domain as well as financial management behaviors.

This study has shown that perceived financial well-being is a function of personal characteristics, objective attributes, perceived attributes, and evaluated attributes of the financial domain. Focusing educational information and programs solely on financial management behaviors will not affect perceived financial well-being as greatly as information and programs developed to include all of the significant attribute groups.

Implications also exist for both financial counseling and financial planning education. The significance of personal characteristics, perceived attributes, and evaluated attributes of the financial situation can no longer be ignored when preparing professionals to work with clients in the financial area. Simply evaluating a client's financial situation based on objective attributes such as credit use or lack of emergency funds does not provide information on the client's perceptions of their situation. If a client does not perceive a problem with their situation, it will be difficult to facilitate a change in behavior. Thus, evaluating a client's subjective perceptions and assessments of their situation compared to their financial peers will provide a holistic approach to financial management.

Professionals who strive to help people increase their sense of financial well-being need to be cognizant of the pattern of relationships among personal characteristics, objective, perceived, and evaluated attributes of financial well-being. Educational information

that includes all the significant attributes of financial well-being should be provided by the Virginia Cooperative Extension Service, educators, financial service companies, and financial planners and counselors.

4) The Cooperative Extension Service should utilize research results such as these, when planning and conducting programming in the economic well-being issue area.

This research can make a distinct contribution to Cooperative Extension efforts to increase family financial well-being. These results suggest areas of concern for individuals and families that should be addressed by educational programs and informational resources.

5) This empirically tested model of financial well-being provides a base for future research and theory development.

Replications of this measurement of financial well-being will help to determine systematic patterns and will then allow these patterns to be formalized into theoretical statements (Reynolds, 1971). Since much research in family financial management has been atheoretical to date, this study provides both a conceptual framework and model to guide future research, education, and counseling.

Further research in the area of financial well-being will help identify the most critical areas of financial management that concern individuals and families. Through research, better educational opportunities can be made available at the most appropriate periods of the family life cycle to minimize concerns and maximize well-being for individuals and families.

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Appendixes

Appendix A

Pilot Test Cover Letter and Instrument

VIRGINIA TECH

August 23, 1989

Dear VPI Colleague and Co-worker:

We need your help! Never before has there been so much discussion about the financial situation of the American family. The rapid change in the financial services industry, an often unstable and fast changing economy, and an increasing personal responsibility for achieving financial goals (such as retirement planning), makes it very difficult for most people to make good financial choices.

The "Financial Practices of Virginia Citizens" project is sponsored by Virginia Cooperative Extension Service. The purpose is to collect data from a broad base of Virginia citizens regarding their household financial management attitudes and practices. The information gained will be used by Cooperative Extension to plan, market, and implement financial management educational programs for the citizens of Virginia.

Your household is one of a small number selected from Virginia Tech employees being asked to provide valuable information on financial matters. You were drawn in a random sample from all Tech employees to participate in a pilot test of this research project. It is very important that each questionnaire be completed and returned. In order to obtain an accurate picture of your household, we would like the questionnaire to be completed by the person who is mostly responsible for the financial management of your household.

Have you ever wondered how your financial situation compares to other people who have similar family circumstances? If you will help us gather accurate financial information about your household, we will return to you a customized "Personal Financial Report." This computer printout of your individual situation will provide a comparison to other Virginia citizens who respond to this pilot test and the state-wide research project and will offer recommendations on how you could improve your financial situation.

You may be assured of complete confidentiality. The questionnaire does not have any identification number and you will receive no follow-up letters. However, if you wish to receive a "Personal Financial Report" after the research study is complete, you will need to put your name and address on the last page of the questionnaire.

We would welcome your suggestions on ways we might improve or clarify the wording of our questionnaire. Your input is very important now so that we may make changes before our state-wide data collection is accomplished.

We would be most happy to answer any questions you might have. Please call 231-8515. Thank you for your assistance.

Sincerely,

N. M. Porter
Project Director

FINANCIAL PRACTICES

OF

VIRGINIA CITIZENS

CONDUCTED BY VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
AND THE VIRGINIA COOPERATIVE EXTENSION SERVICE

Throughout this questionnaire you are asked questions about various topics including different aspects of personal financial management. Regardless of your family situation or your financial situation, we are interested in your opinions. Consider your day-to-day use of money as well as major financial decisions about your home, insurance, investments, and future plans for retirement. In responding to the questions, consider your own personal financial management style.

Your name or responses will never be revealed in any way. In fact, due to the confidential nature of the sample selection, the research team does not know your identity. *No follow-up requests for information will be sent to you. Please* ***help us*** *by completing the questionnaire and returning it in the enclosed postage paid envelope.* ***Thank you*** *for your cooperation.*

We would like to know how you feel about your financial situation. Please indicate the extent to which you agree or disagree with the following statements by circling the letters of your response that correspond to the following scale:

D = DISAGREE
TD = TEND TO DISAGREE
TA = TEND TO AGREE
A = AGREE
NA = NOT APPLICABLE

A- 1. I am satisfied with my present level of living, that is, the goods and services that I can purchase like my housing, food, transportation, and recreation.	D	TD	TA	A	NA
A- 2. My total income is enough for me to meet my monthly living expenses.	D	TD	TA	A	NA
A- 3. A husband and wife should share equally in managing the family finances.	D	TD	TA	A	NA
A- 4. I am certain that my estate will be passed on to people according to my wishes.	D	TD	TA	A	NA
A- 5. I have developed a sound plan that should enable me to achieve my financial goals.	D	TD	TA	A	NA
A- 6. I have enough savings and reserve funds to maintain my present lifestyle if I lost my income for a period of 3 to 6 months.	D	TD	TA	A	NA
A- 7. A husband should be responsible for making major family financial decisions.	D	TD	TA	A	NA
A- 8. I am not too concerned about the total amount I have to repay on my debts each month, such as on credit cards, car payments, and other loans.	D	TD	TA	A	NA
A- 9. I would be able to handle a financial emergency that would cost $500 to $1000.	D	TD	TA	A	NA
A-10. I am satisfied with the amount of money that I am able to save and invest each year.	D	TD	TA	A	NA
A-11. My personal property is adequately insured.	D	TD	TA	A	NA
A-12. The saying, "a woman's place is in the home" is still basically true and should remain so.	D	TD	TA	A	NA

D = DISAGREE
TD = TEND TO DISAGREE
TA = TEND TO AGREE
A = AGREE
NA = NOT APPLICABLE

A-13. I probably will have a financially secure retirement.	D	TD	TA	A	NA
A-14. I am worried about the total amount of money I owe, such as on credit cards, car payments, and other loans.	D	TD	TA	A	NA
A-15. I can't save as much as I would like to save.	D	TD	TA	A	NA
A-16. Married couples should consider all economic resources as being owned equally by both members of the couple.	D	TD	TA	A	NA
A-17. No matter how fast my income goes up, I never seem to get ahead.	D	TD	TA	A	NA
A-18. A husband or wife should not feel uncomfortable if their spouse earns a larger salary than he/she does.	D	TD	TA	A	NA
A-19. I don't worry about being able to meet my normal monthly living expenses.	D	TD	TA	A	NA
A-20. I would have trouble borrowing $1,000 cash if I needed it.	D	TD	TA	A	NA
A-21. A family's financial decisions can be made just as well by either the man or the woman.	D	TD	TA	A	NA
A-22. I usually spend all I want and manage to have money left over at the end of the month.	D	TD	TA	A	NA
A-23. I am protected from risks that could cause financial losses for me or my family.	D	TD	TA	A	NA
A-24. I have a legal will that is current.	D	TD	TA	A	NA
A-25. It is equally important for women as well as men to learn about managing money.	D	TD	TA	A	NA
A-26. I have a sufficient amount of life insurance on myself.	D	TD	TA	A	NA
A-27. I am satisfied with the financial arrangements I have made for my children's education.	D	TD	TA	A	NA

How are you getting along financially today compared to the past? Please circle the number of the answer which closely responds to your situation.

Compared to five years ago.....	DECREASED	REMAINED THE SAME	INCREASED
B- 1. the total amount of income I have has	1	2	3
B- 2. my level of living, the goods and services that I can purchase, like my housing, transportation, etc. has	1	2	3
B- 3. my financial assets have	1	2	3
B- 4. my total financial situation has	1	2	3
B- 5. my savings for retirement have	1	2	3

Compared to two years ago.....	DECREASED	REMAINED THE SAME	INCREASED
B- 6. my ability to meet my usual monthly living expenses has	1	2	3
B- 7. the amount that I am able to save and invest has	1	2	3
B- 8. my ability to meet unexpected expenses has ..	1	2	3
B- 9. the total consumer debt that I owe has	1	2	3
B-10. the total amount of income I have has	1	2	3
B-11. how often I worry about the amount of money I am required to pay on my monthly debts has ..	1	2	3
B-12. the property insurance coverage I have has ..	1	2	3
B-13. my level of living, the goods and services that I can purchase, has	1	2	3
B-14. my total financial situation has	1	2	3
B-15. my friends think my financial situation has ..	1	2	3

How do you feel you are getting along financially compared to other people you know? Please circle the number of the answer which closely responds to your situation.

Compared to.....	LESS DESIRABLE	ABOUT THE SAME	MORE DESIRABLE
C- 1. most of my friends, my level of living is ...	1	2	3
C- 2. other people my age, my life, health, and disability insurance coverage is	1	2	3
C- 3. other people I know with similar incomes, the amount of debt that I owe is	1	2	3
C- 4. my friends, the likelihood that I will be able to have a financially secure retirement is ...	1	2	3
C- 5. people I work with, my ability to meet a financial emergency of $500 to $1000 is	1	2	3
C- 6. my parents' financial situation when they were my age, my financial situation is	1	2	3

What do you expect your financial situation to be like five years from now? Please circle the number of the answer that closely responds to how you feel.

In five years I expect.....	PROBABLY BE WORSE	BE THE SAME	PROBABLY BE BETTER
D- 1. my total amount of income will	1	2	3
D- 2. my level of living will	1	2	3
D- 3. my ability to save for retirement will	1	2	3
D- 4. the amount of debt I have will	1	2	3
D- 5. my ability to save and invest will	1	2	3
D- 6. my ability to meet large emergency expenses will	1	2	3
D- 7. my total financial situation will	1	2	3
D- 8. my insurance coverage will	1	2	3
D- 9. my estate planning will	1	2	3

E. We are trying to obtain information that will enable us to help you determine your financial "well-being." We believe that you should only compare yourself to others who are in similar financial situations. Considering that you will not fit any of the categories exactly, please read the following descriptions of the stages---

1 **Formation Stage** - Household is being established...children, if any, are financially dependent on the family...basic needs of food, clothing, shelter, etc. are being met...possessions are being accumulated, but are often purchased with credit so that what you owe is greater than what you own...most valuable thing owned is often the home...little retirement or estate planning is done except for contributions that are made by employer or those required by the government.

2 **Accumulation Stage** - Lifestyle is set...major financial costs of life are behind you, such as educating children, purchasing home, etc....what you own is now more than what you owe...for the first time there seems to be extra income available for saving and investing...planning and preparing for retirement becomes very important.

3 **Preservation/Distribution Stage** - Retirement of at least one individual within household means that income, savings, and investments need to be managed carefully so that they will last a lifetime...what you own has reached a lifetime peak...investments may be producing income to live on...debts have been reduced...planning for the distribution of your assets to other people has become very important.

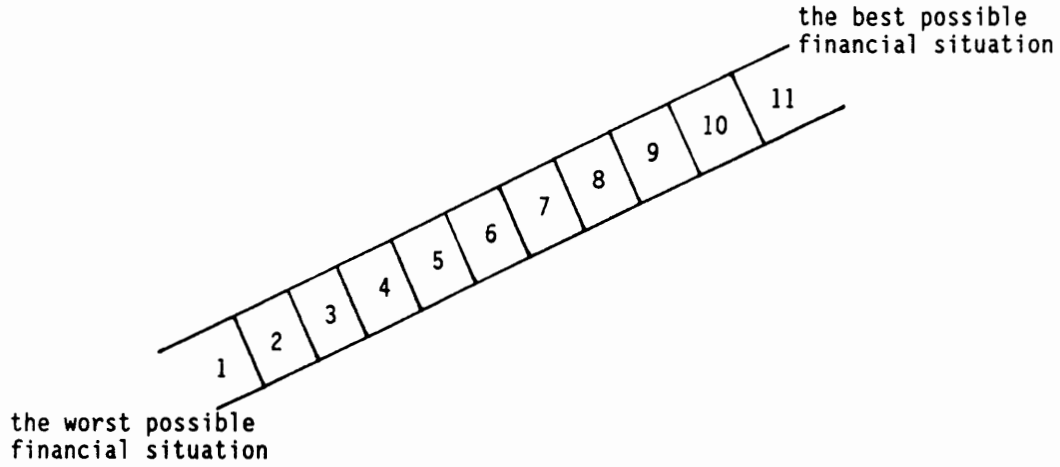
Which of the above stages of the "financial life cycle" most closely describes your situation? (Please circle the number of the stage)

1 FORMATION STAGE

2 ACCUMULATION STAGE

3 PRESERVATION/DISTRIBUTION STAGE

F- 1. Suppose that a person who is entirely satisfied with his financial situation would be at the top of the illustrated ladder, and a person who is extremely dissatisfied with his financial situation would be at the bottom of the illustrated ladder. Where would you put yourself on the ladder at the present stage of your life in terms of how satisfied you are with your own financial situation? Please circle the number of the step where you would place yourself.



F- 2. What is your perception regarding the adequacy of your family income? (Please circle the number of your response)

1 NOT AT ALL ADEQUATE
2 CAN MEET NECESSITIES ONLY
3 CAN AFFORD SOME OF THE THINGS I WANT
4 CAN AFFORD ABOUT EVERYTHING I WANT
5 CAN AFFORD EVERYTHING I WANT AND STILL SAVE MONEY

Here are some words and phrases which we would like you to use to describe how you feel about your present life. For example, if you think your present life is very "boring," put an X in the box right next to the word "boring." If you think it is very "interesting," put an X in the box right next to the word "interesting." If you think it is somewhere in between, put an X where you think it belongs. Put an X in <u>one</u> box on every line.

I think my life is:

G- 1. BORING	☐	☐	☐	☐	☐	☐	☐	INTERESTING
G- 2. ENJOYABLE	☐	☐	☐	☐	☐	☐	☐	MISERABLE
G- 3. USELESS	☐	☐	☐	☐	☐	☐	☐	WORTHWHILE
G- 4. FRIENDLY	☐	☐	☐	☐	☐	☐	☐	LONELY
G- 5. FULL	☐	☐	☐	☐	☐	☐	☐	EMPTY
G- 6. DISCOURAGING	☐	☐	☐	☐	☐	☐	☐	HOPEFUL
G- 7. DISAPPOINTING	☐	☐	☐	☐	☐	☐	☐	REWARDING
G- 8. BRINGS OUT THE BEST IN ME	☐	☐	☐	☐	☐	☐	☐	DOESN'T GIVE ME MUCH CHANCE

G- 9. How satisfied are you about your life <u>as a whole</u> these days? Please <u>circle</u> the number that closely responds to how you feel about your life.

1 2 3 4 5 6 7

Completely Dissatisfied — Completely Satisfied

G-10. Suppose you were to sell all of your major possessions (including your home), turn all of your investments and other assets into cash, and pay all of your debts. Would you be in debt, break even, or have something left over? (Please <u>circle</u> the number of your response.)

1 BE IN DEBT
2 BREAK EVEN
3 HAVE SOMETHING LEFT OVER

In order to determine the financial situation of our respondents and create an accurate "Personal Financial Report" for you, it is important to collect certain pieces of financial information. ***If any of the following categories do not apply to you, please draw a line through the answer space. If your balance is zero in any category, please put -0- in the answer space.***

Your answers are completely confidential and cannot be traced back to you.

Please answer the following questions based on your income for an AVERAGE MONTH. (Your pay stub(s) may help you to be more accurate.)

$_____ What is the total monthly gross income of all the earners in your household? (Include income from all sources such as Social Security, pensions, interest, rent, support payments, trusts, etc.)

$_____ What is the total amount of monthly "take-home" pay after income taxes and Social Security taxes are deducted. (Please do not subtract money that is deducted for employee benefits, or that you voluntarily have deducted from your pay, such as savings or payments to your credit union.)

$_____ What is the total for all of your monthly living expenses including monthly debt payments for which you are responsible. Please estimate all expenses and remember periodic payments for insurance and taxes that must be paid at various times during the year. Do not include the amount you save each month.

In order that we may accurately assess your financial situation, please indicate the AVERAGE MONTHLY amount your household PUT IN savings and investment accounts in 1988 AND the total value of each. (Remember to include all accounts in your answer.)

MONTHLY CONTRIBUTION IN 1988		PRESENT TOTAL VALUE IN ACCOUNT
$_____	Savings account(s)	$_____
$_____	Certificates of deposit	$_____
$_____	Money market accounts	$_____
$_____	Investments (stocks, bonds, mutual funds, etc.)	$_____
$_____	Retirement funds (IRA, Keogh, and/or contributions to pensions)	$_____

In order to have a complete evaluation of the things you own (assets), please estimate as closely as possible, the PRESENT TOTAL OR VALUE of the following items.

$_____	Checking account(s)
$_____	Home and other real estate
$_____	Automobile(s), other vehicles, RV(s), etc.
$_____	Cash value of life insurance
$_____	Personal possessions (furniture, clothing, appliances, etc.)
$_____	Other (jewelry, collections, art, guns, silver, etc.)

Use of credit is a second major concern for many people. Please indicate the monthly payment you typically make on these debts and the total balance due.

AVERAGE MONTHLY PAYMENT		PRESENT TOTAL BALANCE OWED
$_____	Mortgage(s) on primary home	$_____
$_____	Home equity loan(s)	$_____
$_____	Auto loan(s)	$_____
$_____	Other bank/credit union loan(s)	$_____
$_____	Installment loan(s)	$_____
$_____	Credit card(s)/store card(s)	$_____
$_____	Personal loan(s)	$_____
$_____	Education loan(s)	$_____
$_____	Loan(s) on life insurance	$_____
$_____	Second home, RV, time share loans	$_____
$_____	Other liabilities (medical bills, garnishments, back alimony, etc.)	$_____

I. We would like to know which of the following financial management strategies and tools you and/or your spouse have. Please circle appropriate number.

FINANCIAL MANAGEMENT PRACTICE	NEITHER HAS	I HAVE	MY SPOUSE HAS	BOTH HAVE
1. life insurance	0	1	2	3
2. basic health insurance (include Medicare)	0	1	2	3
3. long-term disability insurance	0	1	2	3
4. written will	0	1	2	3
5. legal agreement to transfer part of my estate	0	1	2	3
6. contributions made by employer in retirement plan	0	1	2	3

We would like to know who is primarily responsible for making the following financial decisions in your household. Please circle the number of your response.

FINANCIAL DECISIONS	BOTH HUSBAND AND WIFE	HUSBAND PRIMARILY	WIFE PRIMARILY	NOT APPLICABLE
7. Amount to be saved and/or invested	1	2	3	4
8. Total amount of debts	1	2	3	4
9. Amount of insurance coverage	1	2	3	4
10. Retirement and estate plans	1	2	3	4
11. Employment status of second income provider	1	2	3	4

I-12. Does your household have automobile insurance? (Please circle the number.)
1 NO
2 YES

I-13. Does your household have homeowner's or renter's insurance? (Please circle)
1 NO
2 YES

J- 1. The Virginia Cooperative Extension Service has a number of useful resources on a variety of topics in family financial management. How interested would you be in receiving additional information on family financial management from the Extension Service? (Please circle the number which corresponds to how you feel.)

1 VERY INTERESTED

2 SOMEWHAT INTERESTED

3 NOT INTERESTED

J- 2. If you wanted information and/or education on family financial management from the Cooperative Extension Service, how would you prefer to get it? (Please circle all that apply.)

1 PAMPHLETS AND BOOKLETS
2 MAGAZINES
3 NEWSLETTERS
4 AUDIO CASSETTE TAPES
5 VIDEOTAPES
6 TELEVISION
7 TOUCH SCREEN INTERACTIVE VIDEO IN PUBLIC LOCATION
8 LEARN-BY-MAIL PROGRAM
9 SMALL GROUP MEETINGS HELD WHERE YOU WORK
10 SMALL GROUP MEETINGS HELD IN THE EVENINGS
11 FROM A PERSON WHO WOULD WORK ONE-ON-ONE WITH YOU
12 OTHER (PLEASE DESCRIBE) _____

_____
_____
_____
_____
_____
_____

J- 3. With whom would you feel the most comfortable in talking confidentially about your family financial situation? (Please circle all that apply.)

1 FAMILY MEMBER
2 FRIEND
3 RELIGIOUS LEADER
4 BANKER
5 INSURANCE AGENT
6 ACCOUNTANT
7 LAWYER
8 FINANCIAL PLANNER
9 EXTENSION AGENT
10 TRAINED VOLUNTEER IN FAMILY FINANCIAL MANAGEMENT
11 EMPLOYEE ASSISTANCE PERSONNEL
12 OTHER (PLEASE DESCRIBE) _____

_____
_____
_____
_____
_____
_____

J- 4. Who do you feel could competently help you with your concerns on family financial management matters? (Please circle all that apply.)

1 FAMILY MEMBER
2 FRIEND
3 RELIGIOUS LEADER
4 BANKER
5 INSURANCE AGENT
6 ACCOUNTANT
7 LAWYER
8 FINANCIAL PLANNER
9 EXTENSION AGENT
10 TRAINED VOLUNTEER IN FAMILY FINANCIAL MANAGEMENT
11 EMPLOYEE ASSISTANCE PERSONNEL
12 OTHER (PLEASE DESCRIBE) _____

_____
_____
_____
_____
_____
_____

The following questions are necessary only for us to be able to describe the people who responded to our survey.

K- 1. Your sex. (Circle number of your answer)

1 MALE
2 FEMALE

K- 2. Your marital status. (Please circle)

1 NEVER MARRIED
2 DIVORCED AND REMARRIED
3 MARRIED
4 SEPARATED
5 DIVORCED AND PRESENTLY UNMARRIED
6 WIDOWED

K- 3. What is the highest level of education YOU have completed? (Please circle)

1 LESS THAN HIGH SCHOOL
2 HIGH SCHOOL DEGREE
3 TRADE/VOCATIONAL TRAINING
4 SOME COLLEGE (NO DEGREE)
5 BACHELORS DEGREE
6 GRADUATE OR PROFESSIONAL DEGREE

K- 4. What is the highest level of education YOUR SPOUSE has completed? (Please circle)

1 NOT APPLICABLE
2 LESS THAN HIGH SCHOOL
3 HIGH SCHOOL DEGREE
4 TRADE/VOCATIONAL TRAINING
5 SOME COLLEGE (NO DEGREE)
6 BACHELORS DEGREE
7 GRADUATE OR PROFESSIONAL DEGREE

K- 5. Your race. (Please circle)

1 BLACK (AFRICAN AMERICAN)
2 WHITE (CAUCASIAN)
3 HISPANIC (SPANISH-AMERICAN)
4 NATIVE AMERICAN (AMERICAN INDIAN)
5 ORIENTAL
6 OTHER--SPECIFY _____

K- 6. YOUR age in years _____

K- 7. Your SPOUSE'S age in years _____

K- 8. Your employment status. (Please circle)

1 FULL-TIME
2 PART-TIME
3 UNEMPLOYED
4 FULL-TIME STUDENT
5 RETIRED

K- 9. Your spouse's employment status. (Please circle)

1 NOT APPLICABLE
2 FULL-TIME
3 PART-TIME
4 UNEMPLOYED
5 FULL-TIME STUDENT
6 RETIRED

K-10. If employed for money income, how would you describe YOUR occupation?

1 Professional/manager
2 Teacher/administrator
3 Sales/clerical
4 Skilled craftsman/worker
5 Semi-skilled operator/worker
6 Unskilled worker
7 Service worker
8 Full-time homemaker
9 Currently retired
10 Not employed

K-11. If your SPOUSE is currently employed for money income, how would you describe his/her occupation?

1 Not applicable
2 Professional/manager
3 Teacher/administrator
4 Sales/clerical
5 Skilled craftsman/worker
6 Semi-skilled operator/worker
7 Unskilled worker
8 Service worker
9 Full-time homemaker
10 Currently retired

K-12. How many ADULTS, including yourself, live in your household?_____

K-13. How many CHILDREN live in your household?_____

K-14. Are there other adults or children for whom you are financially responsible for at least 50% of their support? (Please circle your response)

1 NO
2 YES IF YES, HOW MANY? ____

K-15. Have you or your spouse been married before? (Please circle)

1 NO
2 YES

K-16. Does either spouse have children from a previous marriage for whom they are either partially or totally responsible financially? (Please circle)

1 NO
2 YES

K-17. Are you or your spouse PAYING alimony or child support? (Please circle)

1 NO
2 YES

K-18. Do you or your spouse RECEIVE alimony or child support? (Please circle)

1 NO
2 YES

K-19. In which Virginia county or city do you reside? _____

If you have any questions about this survey or the research project, please feel free to contact or call:

N. M. Porter
Human Resources Annex
VPI & SU
Blacksburg, VA 24061
(703) 231-8515

Thank you for taking the time to answer these questions. Your responses will help us to understand the financial situations and problems that individuals and families are having these days. If you would like us to send you a "Personal Financial Report" based on the information you have given us, please put your name and address below.

_____
Name

_____
Street Address

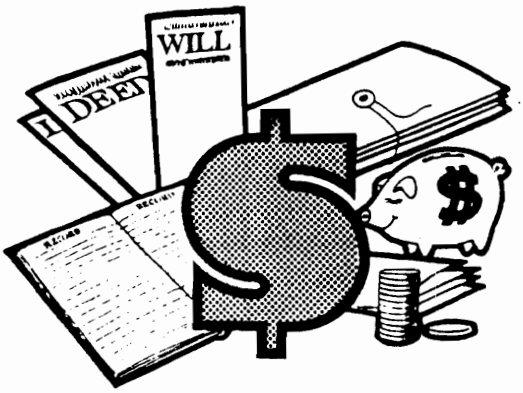
_____
City State Zip Code

Appendix B

Test Instrument

Financial Practices and Attitudes

of Virginia Citizens



Conducted By

Virginia Polytechnic Institute and State University

and The Virginia Cooperative Extension Service

*Please **help us** by having the major financial decision maker in your household complete this survey and return it in the enclosed postage paid envelope. Regardless of your family situation or your financial situation, we are interested in your opinions. **Your name or responses will never be revealed.** In fact, due to the **confidential nature of the sample selection,** the research team **does not know your identity. Thank you** for your **cooperation.***

Put an X in one box on every line to describe how you feel about your life.

I think my life is:

A- 1.	BORING	☐	☐	☐	☐	☐	☐	☐	INTERESTING
A- 2.	ENJOYABLE	☐	☐	☐	☐	☐	☐	☐	MISERABLE
A- 3.	USELESS	☐	☐	☐	☐	☐	☐	☐	WORTHWHILE
A- 4.	FRIENDLY	☐	☐	☐	☐	☐	☐	☐	LONELY
A- 5.	FULL	☐	☐	☐	☐	☐	☐	☐	EMPTY
A- 6.	DISCOURAGING	☐	☐	☐	☐	☐	☐	☐	HOPEFUL
A- 7.	DISAPPOINTING	☐	☐	☐	☐	☐	☐	☐	REWARDING
A- 8.	BRINGS OUT THE BEST IN ME	☐	☐	☐	☐	☐	☐	☐	DOESN'T GIVE ME MUCH CHANCE

A- 9. How satisfied are you about your life as a whole these days? Please circle the number that responds to how you feel about your life.

1 2 3 4 5 6 7

Completely Dissatisfied — Completely Satisfied

A-10. I could benefit from additional information and/or education in the following family financial management areas. (Circle the number of ALL that apply.)

1 BUDGETING (GOAL SETTING, RECORD KEEPING)
2 CHECKING ACCOUNTS, SAVING ACCOUNTS, MONEY MARKET ACCOUNTS
3 CREDIT
4 TAXES
5 INSURANCE
6 INVESTMENT ALTERNATIVES
7 RETIREMENT/ESTATE PLANNING
8 OTHER (PLEASE DESCRIBE)_____

Using a scale of "1" to indicate not typical of yourself to "5" to indicate very typical of yourself, respond to each of the following statements about financial practices. Circle the number of your response.

		NOT TYPICAL OF YOURSELF				VERY TYPICAL OF YOURSELF
B- 1.	I have a weekly or monthly budget that I follow.	1	2	3	4	5
B- 2.	I have an overall plan that will enable me to reach my financial goals.	1	2	3	4	5
B- 3.	My checking account pays me interest.	1	2	3	4	5
B- 4.	I usually do not pay the total balance due on my credit card, but instead just make a partial payment.	1	2	3	4	5
B- 5.	I never write bad checks or ones with insufficient funds.	1	2	3	4	5
B- 6.	In the recent past, I have received overdue notices because of late or missed payments.	1	2	3	4	5
B- 7.	I regularly set money aside for savings.	1	2	3	4	5
B- 8.	I often spend more money than I have.	1	2	3	4	5
B- 9.	I do not deduct something on my taxes unless I have a receipt.	1	2	3	4	5
B-10.	Overall, I am more in debt than this time last year.	1	2	3	4	5
B-11.	In the past year I made a financial contribution to a private retirement program, such as an IRA or 401-k.	1	2	3	4	5
B-12.	I usually fill out my own income tax forms.	1	2	3	4	5
B-13.	I have trouble meeting monthly health care expenses, including premiums for health insurance.	1	2	3	4	5
B-14.	In the recent past, I have obtained cash advances to pay money toward other credit balances.	1	2	3	4	5
B-15.	I often make financial decisions without much analysis.	1	2	3	4	5
B-16.	I have some specific financial goals for the future (for example, to buy a new car in two years).	1	2	3	4	5
B-17.	This year, I invested some money in stocks, bonds, or mutual funds.	1	2	3	4	5
B-18.	I rarely discuss my personal financial matters with family or friends.	1	2	3	4	5
B-19.	I have a legal, written will.	1	2	3	4	5

		NOT TYPICAL OF YOURSELF				VERY TYPICAL OF YOURSELF
B-20.	My auto is adequately insured.	1	2	3	4	5
B-21.	I usually itemize my income tax deductions.	1	2	3	4	5
B-22.	I have a homeowner's or renter's insurance policy.	1	2	3	4	5
B-23.	Compared to a year ago, my use of credit cards has increased.	1	2	3	4	5

C- 1. Rank the top TWO techniques/strategies through which you think you learn most easily. Place a 1 by your first choice and a 2 by your second choice in the appropriate spaces.

_____ VISUAL (television, video tapes, motion pictures, graphs, tables, charts, photographs)

_____ PRINT (reading, writing)

_____ AUDITORY (lectures, audiotapes, records)

_____ INTERACTIVE (group discussion, panel discussion, question-answer, interview)

_____ MOVEMENT (role playing, physical movement, physical games)

_____ TOUCH (drawing, painting, sculpturing, project construction, model building)

D- 1. *With whom would you be willing to CONFIDENTIALLY DISCUSS your family financial situation? (Circle the number of your response.)*

1 = WOULD BE WILLING
2 = WOULD NOT BE WILLING

		WOULD BE WILLING	WOULD NOT BE WILLING
1	FAMILY MEMBER	1	2
2	FRIEND	1	2
3	RELIGIOUS LEADER	1	2
4	BANKER	1	2
5	INSURANCE AGENT	1	2
6	ACCOUNTANT	1	2
7	LAWYER	1	2
8	EMPLOYEE ASSISTANCE PERSONNEL AT WORKPLACE	1	2
9	CREDIT/BUDGET COUNSELOR	1	2
10	STOCKBROKER	1	2
11	EXTENSION AGENT	1	2
12	COMMUNITY VOLUNTEER TRAINED IN FAMILY FINANCIAL MANAGEMENT	1	2
13	FINANCIAL PLANNER	1	2
14	OTHER (PLEASE DESCRIBE)_____		

D- 2. *Rate your preferences for the following ways of receiving information on family financial management. (Circle the response to indicate your preferences.)*

P = PREFER
N = NOT PREFER

1	PAMPHLETS OR BOOKLETS	P	N
2	NEWSPAPER ARTICLES OR MAGAZINES	P	N
3	AUDIO CASSETTE TAPES	P	N
4	VIDEO TAPES	P	N
5	TELEVISION PROGRAMS	P	N
6	TOUCH-SCREEN INTERACTIVE VIDEO IN PUBLIC LOCATION	P	N
7	LEARN-BY-MAIL PROGRAM	P	N
8	SMALL GROUP MEETINGS WHERE YOU WORK	P	N
9	SMALL GROUP MEETINGS IN THE EVENINGS	P	N
10	SMALL GROUP MEETINGS DURING THE DAY	P	N
11	SMALL GROUP MEETING ON SATURDAY	P	N
12	FROM A PERSON WHO WOULD PROVIDE ONE-ON-ONE ADVICE TO YOU	P	N
13	A FREE 800-NUMBER	P	N
14	OTHER (PLEASE DESCRIBE)_____		

Circle the number of the correct response to each of the following questions.

E- 1. Who is responsible for managing and handling financial management tasks?

1 I AM RESPONSIBLE
2 DONE BY MY SPOUSE (OR ANOTHER)
3 DIVIDED WITH SPOUSE (OR ANOTHER)
4 SHARED WITH SPOUSE (OR ANOTHER)

E- 2. Who is responsible for making major financial decisions?

1 I AM RESPONSIBLE
2 DONE BY MY SPOUSE (OR ANOTHER)
3 DIVIDED WITH SPOUSE (OR ANOTHER)
4 SHARED WITH SPOUSE (OR ANOTHER)

E- 3. Suppose you sold all of your major possessions (including your home), turned all of your investments and other assets into cash, and paid all of your debts. Would you be in debt, break even, or have something left over?

1 BE IN DEBT
2 BREAK EVEN
3 HAVE SOMETHING LEFT OVER

E- 4. What is your perception regarding the adequacy of your family income?

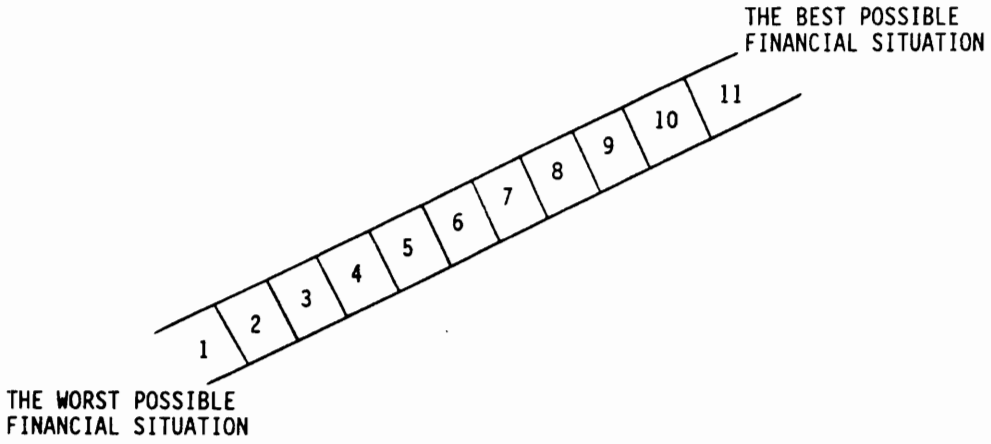
1 NOT AT ALL ADEQUATE
2 CAN MEET NECESSITIES ONLY
3 CAN AFFORD SOME OF THE THINGS I WANT
4 CAN AFFORD ABOUT EVERYTHING I WANT
5 CAN AFFORD EVERYTHING I WANT AND STILL SAVE MONEY

For each of the following statements, circle the response to indicate the extent to which you agree or disagree using the following scale:

D = DISAGREE
TD = TEND TO DISAGREE
TA = TEND TO AGREE
A = AGREE
NA = NOT APPLICABLE

F- 1. I am satisfied with my present standard of living, that is, the things that I purchase such as housing, food, transportation, and recreation.	D	TD	TA	A	NA
F- 2. My total income is enough for me to meet my monthly living expenses.	D	TD	TA	A	NA
F- 3. I have developed a sound plan that should enable me to achieve my financial goals.	D	TD	TA	A	NA
F- 4. I have enough savings and reserve funds to maintain my present lifestyle if I lost my income for a period of 3 to 6 months.	D	TD	TA	A	NA
F- 5. I am concerned about the total amount I have to repay on my debts each month, such as on credit cards, car payments, and other loans.	D	TD	TA	A	NA
F- 6. I would be able to handle a financial emergency that would cost $500 to $1000.	D	TD	TA	A	NA
F- 7. Both spouses should share equally in managing and handling the family finances.	D	TD	TA	A	NA
F- 8. A husband should be responsible for making most major family financial decisions.	D	TD	TA	A	NA
F- 9. I am satisfied with the amount of money that I am able to save and invest each year.	D	TD	TA	A	NA
F-10. My home, car, and other personal property is adequately insured.	D	TD	TA	A	NA
F-11. I probably will have a financially secure retirement.	D	TD	TA	A	NA
F-12. I cannot save as much as I would like to save.	D	TD	TA	A	NA
F-13. No matter how fast my income goes up, I never seem to get ahead.	D	TD	TA	A	NA
F-14. I do not worry about being able to meet my normal monthly living expenses.	D	TD	TA	A	NA
F-15. I would have trouble borrowing $2,000 cash if I needed it.	D	TD	TA	A	NA
F-16. I have a legal will that is current and up to date.	D	TD	TA	A	NA
F-17. Financial decisions can be made just as well by either men or women.	D	TD	TA	A	NA
F-18. I have a sufficient amount of life insurance on myself.	D	TD	TA	A	NA

G- 1. Suppose that a person who is entirely satisfied with his financial situation would be at the top of the illustrated ladder, and a person who is extremely dissatisfied with his financial situation would be at the bottom of the illustrated ladder. Where would you put yourself on the ladder at the present stage of your life in terms of how satisfied you are with your own financial situation? Please circle the number of the step where you would place yourself.



G- 2. Which of the following stages of the "financial life cycle" most describes your situation? You may not fit into one category exactly, however, please circle the number of the stage that is most like you.

1 **FORMATION STAGE** - Household is being established...children, if any, are financially dependent on the family...basic needs of food, clothing, shelter, etc. are being met...possessions are being accumulated, but are often purchased with credit so that what you owe is greater than what you own...most valuable thing owned is often the home...little retirement or estate planning is done except for contributions that are made by employer or those required by the government.

2 **ACCUMULATION STAGE** - Lifestyle is set...major financial costs of life are behind you, such as educating children, purchasing home, etc....what you own is now more than what you owe...for the first time there seems to be extra income available for saving and investing...planning and preparing for retirement becomes very important.

3 **PRESERVATION/DISTRIBUTION** - Retirement of at least one individual within household means that income, savings, and investments need to be managed carefully so that they will last a lifetime...what you own has reached a lifetime peak...investments may be producing income to live on...debts have been reduced...planning for the distribution of your assets to other people has become very important.

How are you getting along financially today compared to the past? Please circle the number of the answer which responds to your situation.

	DECREASED	REMAINED THE SAME	INCREASED
Compared to five years ago.....			
H- 1. my total income has	1	2	3
H- 2. my financial assets have	1	2	3
H- 3. my total financial situation has	1	2	3
H- 4. my retirement "nest egg" has	1	2	3
H- 5. my standard of living, the things that I purchase, such as housing, food, transportation, and recreation, has	1	2	3

	DECREASED	REMAINED THE SAME	INCREASED
Compared to two years ago.....			
H- 6. my ability to meet my usual monthly living expenses has	1	2	3
H- 7. the amount that I am able to save and invest has....	1	2	3
H- 8. my ability to meet unexpected expenses has	1	2	3
H- 9. the total consumer debt that I owe has	1	2	3
H-10. the total amount of income I have has	1	2	3
H-11. how often I worry about the amount of money I am required to pay on my monthly debts has	1	2	3
H-12. the property insurance coverage I have has	1	2	3
H-13. my standard of living, the things that I purchase, such as housing, food, transportation, and recreation, has	1	2	3
H-14. my total financial situation has	1	2	3
H-15. my use of credit cards has.....	1	2	3

How do you feel you are getting along financially compared to other people you know? Please circle the number of the answer which responds to your situation.

	LESS DESIRABLE	ABOUT THE SAME	MORE DESIRABLE
Compared to.....			
H-16. people I work with, my ability to meet a financial emergency of $500 to $1000 is	1	2	3
H-17. my friends, the likelihood that I will be able to have a financially secure retirement is	1	2	3
H-18. my parents' financial situation when they were my age, my financial situation is	1	2	3
H-19. other people I know with similar incomes, the amount of debt that I owe is	1	2	3
H-20. other people my age, my life, health, and disability insurance coverage is	1	2	3
H-21. most of my friends, my standard of living, the things I purchase, such as housing, food, transportation, and recreation, is	1	2	3

What do you expect your financial situation to be like five years from now? Please circle the number of the answer that closely responds to how you feel.

	PROBABLY BE WORSE	BE THE SAME	PROBABLY BE BETTER
In five years I expect.....			
H-22. my total amount of income will	1	2	3
H-23. my ability to save and invest will	1	2	3
H-24. my ability to meet large emergency expenses will....	1	2	3
H-26. my retirement "nest egg" will	1	2	3
H-25. the amount of debt I have will	1	2	3
H-28. my total financial situation will	1	2	3
H-29. my insurance coverage will	1	2	3
H-25. my standard of living, the things I purchase, such as housing, food, transportation, and recreation, will	1	2	3

The following questions are necessary only for us to be able to describe the people who responded to our survey. ***Information reported on this survey is completely confidential.***

I- 1. Your sex. (Circle the number of your choice.)

1 MALE
2 FEMALE

I- 2. Your race. (Circle one)

1 BLACK (AFRICAN-AMERICAN)
2 WHITE (CAUCASIAN)
3 HISPANIC (SPANISH-AMERICAN)
4 NATIVE AMERICAN (AMERICAN INDIAN)
5 ORIENTAL
6 OTHER--SPECIFY _____

I- 3. Your marital status. (Circle one)

1 NEVER MARRIED
2 DIVORCED AND REMARRIED
3 MARRIED
4 SEPARATED
5 DIVORCED AND PRESENTLY UNMARRIED
6 WIDOWED

I- 4. Has your SPOUSE been married before? (Circle one)

1 NO
2 YES

I- 5. Are you or your spouse PAYING alimony or child support? (Circle one)

1 NO
2 YES

I- 6. Do you or your spouse RECEIVE alimony or child support? (Circle one)

1 NO
2 YES

I- 7. What is the highest level of education YOU have completed? (Circle one)

1 LESS THAN HIGH SCHOOL
2 HIGH SCHOOL DEGREE
3 TRADE/VOCATIONAL TRAINING
4 SOME COLLEGE (NO DEGREE)
5 BACHELORS DEGREE
6 GRADUATE OR PROFESSIONAL DEGREE

I- 8. What is the highest level of education your SPOUSE has completed? (Circle one)

1 NOT APPLICABLE
2 LESS THAN HIGH SCHOOL
3 HIGH SCHOOL DEGREE
4 TRADE/VOCATIONAL TRAINING
5 SOME COLLEGE (NO DEGREE)
6 BACHELORS DEGREE
7 GRADUATE OR PROFESSIONAL DEGREE

I- 9. YOUR employment status. (Circle one)

1 FULL-TIME EMPLOYMENT
2 PART-TIME EMPLOYMENT
3 UNEMPLOYED
4 FULL-TIME HOMEMAKER
5 STUDENT
5 RETIRED

I-10. Your SPOUSE'S employment status. (Circle one)

1 NOT MARRIED, NOT APPLICABLE
2 FULL-TIME EMPLOYMENT
3 PART-TIME EMPLOYMENT
4 UNEMPLOYED
5 FULL-TIME HOMEMAKER
6 STUDENT
7 RETIRED

I-11. If employed for money income, how would you describe YOUR occupation? (Circle one) If you are not employed, circle number 1.

1 NOT CURRENTLY EMPLOYED FOR MONEY INCOME
2 HIGH EXECUTIVES, OWNERS OF LARGE BUSINESSES, MAJOR PROFESSIONALS
3 BUSINESS MANAGERS, OWNERS OF MEDIUM-SIZE BUSINESSES, PROFESSIONALS
4 ADMINISTRATIVE PERSONNEL, SMALL BUSINESS OWNERS, SEMI-PROFESSIONALS
5 CLERICAL AND SALES WORKERS, TECHNICIANS, OWNERS OF VERY SMALL BUSINESSES
6 SKILLED MANUAL EMPLOYEES
7 MACHINE OPERATORS AND SEMI-SKILLED EMPLOYEES
8 UNSKILLED EMPLOYEES

I-12. If your SPOUSE is currently employed for money income, how would you describe his or her occupation? (Circle one) If this question is not applicable to you, OR, if your spouse is not employed, circle number 1.

1 NOT APPLICABLE OR SPOUSE NOT CURRENTLY EMPLOYED
2 HIGH EXECUTIVES, OWNERS OF LARGE BUSINESSES, MAJOR PROFESSIONALS
3 BUSINESS MANAGERS, OWNERS OF MEDIUM-SIZE BUSINESSES, PROFESSIONALS
4 ADMINISTRATIVE PERSONNEL, SMALL BUSINESS OWNERS, SEMI-PROFESSIONALS
5 CLERICAL AND SALES WORKERS, TECHNICIANS, OWNERS OF VERY SMALL BUSINESSES
6 SKILLED MANUAL EMPLOYEES
7 MACHINE OPERATORS AND SEMI-SKILLED EMPLOYEES
8 UNSKILLED EMPLOYEES

I-13. Which of the following ranges of income represents your household's TOTAL ANNUAL GROSS INCOME? (Please consider ALL sources of income from all contributing adults, such as wages, salaries, tips, Social Security, pensions, interest, dividends, trusts, child support, alimony, welfare, etc.) (Circle one)

1	LESS THAN $10,000	9	$45,000 to $49,999
2	$10,000 to $14,999	10	$50,000 to $54,999
3	$15,000 to $19,999	11	$55,000 to $59,999
4	$20,000 to $24,999	12	$60,000 to $64,999
5	$25,000 to $29,999	13	$65,000 to $69,999
6	$30,000 to $34,999	14	$70,000 to $74,999
7	$35,000 to $39,999	15	$75,000 to $79,999
8	$40,000 to $44,999	16	$80,000 AND ABOVE

I-14. How many ADULTS, including yourself, live in your household?_____

I-15. How many CHILDREN live in your household?_____

I-16. Are there OTHER adults or children for whom you are substantially responsible for their financial support? (Circle your response AND fill in the blank if appropriate)

1 NO
2 YES If so, HOW MANY? _____

K-17. YOUR age in years _____

K-18. Your SPOUSE'S age in years _____

K-19. Do you currently own or rent your home? (Circle one)

1 OWN
2 RENT
3 OTHER (SPECIFY _____)

K-20. In which Virginia county _____ **OR** city _____ do you reside?

Is there anything else you would like to tell us about your personal financial practices and attitudes? If so, please use this space for that purpose.

THANK YOU for taking the time to answer these questions. Your responses will help us to better understand the financial management attitudes and practices of Virginians. Please return your completed questionnaire in the enclosed pre-addressed, POSTAGE PAID envelope.

If you have any questions about this survey or the research project, please feel free to contact or call:

N. M. Porter
Family Financial Program Study
Extension Distribution Center
112 Landsdowne Street
Blacksburg, VA 24060-9984
(703) 231-5686

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, and September 30, 1977, in cooperation with the U.S. Department of Agriculture. James F. Johnson, Acting Director, Virginia Cooperative Extension Service, and Acting Vice Provost for Extension, Virginia Polytechnic Institute and State University, Blacksburg, Virginia; Clinton V. Turner, Administrator, 1890 Extension Program, Virginia State University, Petersburg, Virginia.

Appendix C

Instrument Items Divided Into Objective, Perceived, and Evaluated Attributes

Objective Attributes		Perceived Attributes		Evaluated Attributes	
#[a]	Instrument Item	#[a]	Instrument Item	#[a]	Instrument Item
Cash Management		**Cash Management**		**Cash Management**	
18.	I have a weekly or monthly budget that I follow.	78.	I have enough savings and reserve funds to maintain my present lifestyle if I lost my income for a period of 3 to 6 months.	100.	**Compared to two years ago,** my ability to meet my usual monthly living expenses has .....
20.	My checking account pays me interest.	80.	I would be able to handle a financial emergency that would cost $500 to $1000.	102.	**Compared to two years ago,** my ability to meet unexpected expenses has .....
22.	I never write bad checks or ones with insufficient funds.	88.	I don't worry about being able to meet my normal monthly living expenses.	110.	**Compared to** people I work with, my ability to meet a financial emergency of $500 to $1000 is .....
23.	In the recent past, I have received overdue notices because of late or missed payments.			118.	**In five years I expect** my ability to meet large emergency expenses will ...
Credit Management		**Credit Management**		**Credit Management**	
21.	I usually do not pay the total balance due on my credit card, but instead just make a partial payment.	79.	I am concerned about the total amount I have to repay on my debts each month, such as on credit cards, car payments, and other loans.	103.	**Compared to two years ago,** the total consumer debt that I owe has .....
25.	I often spend more money than I have.	89.	I would have trouble borrowing $2,000 cash if I needed it.	105.	**Compared to two years ago,** how often I worry about the amount of money I am required to pay on my monthly debts has .....
27.	Overall, I am more in debt than this time last year.			109.	**Compared to two years ago,** my use of credit cards has .....
31.	In the recent past, I have obtained cash advances to pay money toward other credit balances.			113.	**Compared to** other people I know with similar incomes, the amount of debt that I owe is .....
40.	Compared to a year ago, my use of credit cards has increased.			123.	**In five years I expect** my standard of living, the things I purchase, such as housing, food, transportation, and recreation will ....
Capital Accumulation		**Capital Accumulation**		**Capital Accumulation**	
24.	I regularly set money aside for savings.	83.	I am satisfied with the amount of money that I am able to save and invest each year.	96.	**Compared to five years ago,** my financial assets have .....
34.	This year, I invested some money in stocks, bonds, or mutual funds.	86.	I can't save as much as I would like to save.	101.	**Compared to two years ago,** the amount that I am able to save and invest has .....
				117.	**In five years I expect** my ability to save and invest will .....

[a]Variable Number

Appendix C. (continued)

Objective Attributes		Perceived Attributes		Evaluated Attributes	
#[a]	Instrument Item	#[a]	Instrument Item	#[a]	Instrument Item
Risk Management		**Risk Management**		**Risk Management**	
30.	I have trouble meeting monthly health care expenses, including premiums for health insurance.	84.	My home, car, and other personal property is adequately insured.	106.	**Compared to two years ago,** the property insurance coverage I have has .....
37.	My auto is adequately insured.	92.	I have a sufficient amount of life insurance on myself.	114.	**Compared to** other people my age, my life, health, disability insurance coverage is .....
39.	I have a homeowner's or renter's insurance policy.			119.	**In five years I expect** my retirement "nest egg" will .....
Retirement/Estate Planning		**Retirement/Estate Planning**		**Retirement/Estate Planning**	
28.	In the past year I made a financial contribution to a private retirement program, such as an IRA or 401-k.	85.	I probably will have a financially secure retirement.	98.	**Compared to five years ago,** my retirement "nest egg" has .....
36.	I have a legal, written will.	90.	I have a legal will that is current and up to date.	111.	**Compared to** my friends, the likelihood that I will be able to have a financially secure retirement is .....
				119.	**In five years I expect** my retirement "nest egg" will .....
General Management		**General Management**		**General Management**	
19.	I have an overall plan that will enable me to reach my financial goals.	75.	I am satisfied with my present standard of living, that is, the goods and services that I can purchase like my housing, food, transportation, and recreation.	95.	**Compared to five years ago,** my total income has .....
32.	I often make financial decisions without much analysis.	76.	My total income is enough for me to meet my monthly living expenses.	97.	**Compared to five years ago,** my total financial situation has .....
33.	I have some specific financial goals for the future (for example, to buy a new car in two years).	77.	I have developed a sound plan that should enable me to achieve my financial goals.	99.	**Compared to five years ago,** my standard of living, the things that I purchase, such as housing, food, transportation, and recreation has .....
35.	I rarely discuss my personal financial matters with family or friends.	87.	No matter how fast my income goes up, I never seem to get ahead.	104.	**Compared to two years ago,** the total amount of income I have has .....
71.	Who is responsible for managing and handling financial management tasks?	73.	Suppose you sold all of your major possessions (including your home), turned all of your investments and other assets into cash, and paid all of your debts. Would you be in debt, break even, or have something left over?	107.	**Compared to two years ago,** my standard of living, the things that I purchase, such as housing, food, transportation, and recreation has .....
72.	Who is responsible for making major financial decisions?	74.	What is your perception regarding the adequacy of your family income?	108.	**Compared to two years ago,** my total financial situation has .....
				112.	**Compared to** my parents' financial situation when they were my age, my financial situation is .....
				115.	**Compared to** most of my friends, my standard of living, the things I purchase such as housing, food, transportation, and recreation is .....
				116.	**In five years I expect** my total amount of income will .....
				120.	**In five years I expect** the amount of debt I have will .....
				121.	**In five years I expect** my total financial situation will .....

[a]Variable Number

Appendix D

Cover Letter for First Instrument Mailing

VIRGINIA COOPERATIVE EXTENSION SERVICE

VIRGINIA TECH

VIRGINIA STATE

October 10, 1989

Dear Virginia Citizen:

Personal finance issues are more important than ever. Use of credit is increasing. Banks are charging fees for their services. Food and health care prices are rising. More people are leasing cars now rather than buying them. Clearly, Virginians are being challenged in financial decision making.

We need your help! Your household is one of a small number being asked to provide information on financial management attitudes and practices. Your name was selected as part of a random sample of the entire state. It is very important that each questionnaire be completed and returned. In order to obtain an accurate picture of your household, we would like the questionnaire to be completed by the person who is primarily responsible for financial decision making.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. We will use it to check your name off the mailing list when your questionnaire is returned. Your name will never be associated with either the responses or the results.

The "Financial Attitudes and Practices of Virginia Citizens" project is co-sponsored by Virginia Polytechnic Institute and State University and the Virginia Cooperative Extension Service. The results of this research will be used by Cooperative Extension to develop financial management educational programs for Virginians. In addition, faculty at Virginia Tech will incorporate the information gained into the education and training of future financial management professionals.

We will be most happy to answer any questions you have. Please write or call. Either the project director, N. M. Porter, or I will answer your questions. The telephone number is (703) 231-5686.

Thank you for your assistance.

Sincerely,

Jim Johnson
Acting Director
Virginia Cooperative
Extension Service

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Appendix E

Postage-Paid Return Envelope

Cooperative Extension Service
U. S. Department of Agriculture
Virginia Polytechnic Institute
and State University
Blacksburg, Virginia 24060

OFFICIAL BUSINESS
PENALTY FOR PRIVATE
USE $300

NO POSTAGE
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IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 9 BLACKSBURG, VA.

POSTAGE WILL BE PAID BY U.S. DEPARTMENT OF AGRICULTURE

FAMILY FINANCIAL PROGRAM STUDY
EXTENSION DISTRIBUTION CENTER
112 LANDSDOWNE STREET
BLACKSBURG, VA. 24060-9984

Appendix F

Postcard Follow-Up

VIRGINIA COOPERATIVE EXTENSION SERVICE

VIRGINIA TECH

VIRGINIA STATE

October 17, 1989

Dear Virginia Citizen:

Recently you received a survey about your financial practices and attitudes. As part of a small group of citizens asked to help, your answers will contribute to the development of future money management education programs.

If you have already returned the survey, THANK YOU for your help.

If you have not yet returned the survey, PLEASE complete and return it soon.

With best regards and appreciation,

Jim Johnson, Acting Director, VCES

Virginia Cooperative Extension Service programs, activities, and employment opportunities are available to all people regardless of race, color, religion, sex, age, national origin, handicap, or political affiliation. An equal opportunity/affirmative action employer.

An Educational Service of the Virginia Polytechnic Institute and State University and Virginia State University, Virginia's Land-Grant Institutions, with U.S. Department of Agriculture and Local Governments Cooperating.

Appendix G

Cover Letter for Second Instrument Mailing

VIRGINIA COOPERATIVE EXTENSION SERVICE

VIRGINIA TECH

VIRGINIA STATE

October 31, 1989

Dear Virginia Citizen:

About three weeks ago I sent you a questionnaire asking about your financial practices and attitudes. Unfortunately, we have not yet received your response.

Virginia Polytechnic Institute and State University and the Virginia Cooperative Extension Service are co-sponsoring this study to gain insights into the financial practices and attitudes of Virginia citizens. The results will be used to develop financial management education programs specifically designed for Virginians. In addition, faculty at Virginia Tech will incorporate the information gained into the education and training of future financial management professionals.

I am writing to you again because of the importance of each questionnaire to the study. Your name was drawn through a random selection process in which every household in Virginia had an equal chance of being chosen. In order for the survey results to be truly representative of all Virginia residents, it is essential that each person selected return their questionnaire.

You may be assured of complete confidentiality. The questionnaire has an identification number only for follow-up mailings such as this one. Your name will never be associated with either the answers you provide to the questionnaire, or the findings of the total study.

In the event that your questionnaire has been misplaced, another copy is enclosed. Please help us by having the major financial decision maker in your household complete the survey this week and return it in the enclosed postage paid envelope. Your cooperation is greatly appreciated.

Sincerely,

Jim Johnson
Acting Director
Virginia Cooperative
Extension Service

Virginia Cooperative Extension Service is an Educational Service of the Virginia Polytechnic Institute and State University and Virginia State University, Virginia's Land-Grant Institutions, with U.S. Department of Agriculture and Local Governments Cooperating. Programs, activities, and employment opportunities are available to all people regardless of race, color, religion, sex, age, national origin, handicap, or political affiliation.
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Appendix H

Perceived Attribute Instrument Items Combined Into Index (SUBJINDX)

#[a]	Instrument Item					
Cash Management						
78.	I have enough savings and reserve funds to maintain my present lifestyle if I lost my income for a period of 3 to 6 months.	D	TD	TA	D	NA[b]
80.	I would be able to handle a financial emergency that would cost $500 to $1000.	D	TD	TA	A	NA
88.	I don't worry about being able to meet my normal monthly living expenses.	D	TD	TA	A	NA
Credit Management						
79.	I am concerned about the total amount I have to repay on my debts each month, such as on credit cards, car payments, and other loans.	D	TD	TA	D	NA
89.	I would have trouble borrowing $2,000 cash if I needed it.	D	TD	TA	A	NA
Capital Accumulation						
83.	I am satisfied with the amount of money that I am able to save and invest each year.	D	TD	TA	A	NA
86.	I can't save as much as I would like to save.	D	TD	TA	A	NA

[a] Variable number
[b] D = Disagree, TD = Tend to Disagree, TA = Tend to Agree, A = Agree, NA = Not applicable

Appendix H. (continued)

#[a]	Instrument Item					
Retirement/Estate Planning						
85.	I probably will have a financially secure retirement.	D	TD	TA	A	NA[b]
General Management						
75.	I am satisfied with my present standard of living, that is, the goods and services that I can purchase like my housing, food, transportation, and recreation.	D	TD	TA	A	NA
76.	My total income is enough for me to meet my monthly living expenses.	D	TD	TA	A	NA
77.	I have developed a sound plan that should enable me to achieve my financial goals.	D	TD	TA	A	NA
87.	No matter how fast my income goes up, I never seem to get ahead.	D	TD	TA	A	NA

[a] Variable number
[b] D = Disagree, TD = Tend to Disagree, TA = Tend to Agree, A = Agree, NA = Not applicable

73. Suppose you sold all of your major possessions (including your home), turned all of your investments and other assets into cash, and paid all of your debts. Would you be in debt, break even, or have something left over?

    1 = BE IN DEBT
    2 = BREAK EVEN
    3 = HAVE SOMETHING LEFT OVER

74. What is your perception regarding the adequacy of your family income?

    1 = NOT AT ALL ADEQUATE
    2 = CAN MEET NECESSITIES ONLY
    3 = CAN AFFORD SOME OF THE THINGS I WANT
    4 = CAN AFFORD ABOUT EVERYTHING I WANT
    5 = CAN AFFORD EVERYTHING I WANT AND STILL SAVE MONEY

Appendix I

Evaluated Attribute Instrument Items Combined Into Past Financial Experience Index (PASTINDX)

Compared to five years ago.....	DECREASED	REMAINED THE SAME	INCREASED
95. my total income has	1	2	3
96. my financial assets have	1	2	3
97. my total financial situation has	1	2	3
98. my retirement "nest egg" has	1	2	3
99. my standard of living, the things that I purchase, such as housing, food, transportation, and recreation has	1	2	3

Compared to two years ago.....	DECREASED	REMAINED THE SAME	INCREASED
100. my ability to meet my usual monthly living expenses has	1	2	3
101. the amount that I am able to save and invest has	1	2	3
102. my ability to meet unexpected expenses has	1	2	3
103. the total consumer debt that I owe has	1	2	3
104. the total amount of income I have has ..	1	2	3
105. how often I worry about the amount of money I am required to pay on my monthly debts has	1	2	3
106. the property insurance coverage I have has	1	2	3
107. my standard of living, the things that I purchase, such as housing, food, transportation, and recreation has	1	2	3
108. my total financial situation has	1	2	3
109. my use of credit cards has	1	2	3

Appendix J

Evaluated Attribute Instrument Items Combined Into Peer Reference Group Index (PEERINDX)

Compared to.....	LESS DESIRABLE	ABOUT THE SAME	MORE DESIRABLE
110. people I work with, my ability to meet a financial emergency of $500 to $1000 is	1	2	3
111. my friends, the likelihood that I will be able to have a financially secure retirement is	1	2	3
112. my parents' financial situation when they were my age, my financial situation is	1	2	3
113. other people I know with similar incomes, the amount of debt that I owe is	1	2	3
114. other people my age, my life, health, disability insurance coverage is	1	2	3
115. most of my friends, my standard of living, the things I purchase such as housing, food, transportation, and recreation is	1	2	3

Appendix K

Evaluated Attribute Instrument Items Combined Into Financial Expectation Five Years in the Future Index (IN5INDX)

	PROBABLY BE WORSE	BE THE SAME	PROBABLY BE BETTER
In <u>five</u> years I expect.....			
116. my total amount of income will	1	2	3
117. my ability to save and invest will	1	2	3
118. my ability to meet large emergency expenses will	1	2	3
119. my retirement "nest egg" will	1	2	3
120. the amount of debt I have will	1	2	3
121. my total financial situation will	1	2	3
122. my insurance coverage will	1	2	3
123. my standard of living, the things I purchase, such as housihng, food, transportation, and recreation will	1	2	3

Vita

Nancy M. Porter was born March 27, 1952 and attended elementary and secondary school in the Athens Area school system, graduating in 1970. In 1974, the Bachelor of Science, with a major in home economics education, was granted by Mansfield State College. Porter pursued graduate work on a part-time basis at Mansfield University, earning a Master of Science in Home Economics Education in May, 1985.

Porter began her teaching career in 1975, at Towanda Area High School, Towanda, Pennsylvania. She served as a teacher of home economics for students in grades nine through twelve for one year, then transferred to Towanda Area Middle School where she taught students in grades five through eight for nine years.

In 1985, Porter began a two year teaching term in the Consumer Relations area, at Delta State University, in Cleveland, Mississippi. In 1987, Porter enrolled in Virginia Polytechnic Institute and State University to pursue a Ph.D. in Family Resource Management, and received the Dorothy I. Mitstifer Fellowship from the American Home Economics Association. Porter is a Certified Home Economist with memberships in the American Council on Consumer Interests, the Association for Financial Counseling and Planning Education, Kappa Omicron Phi, and Phi Kappa Phi. Porter accepted an appointment as Family Resource Management Extension Specialist with the Clemson University Cooperative Extension Service to begin July, 1990.

Nancy M. Porter